ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Patrons

Dr. Suresh M
Professor
Vihaya College of Pharmacy

Guest

Dr. G. Viajaya Kumar
KGR Institute of science and technology
Dr. D.Sucharitha, Director AERF
Dr.Siva Prasad Panda, Assoc.Prof. Klu
Dr.P Rajeswari, Assoc.Prof. Klu

Organizing committee

Mr.UMA SANKAR GORLA, ASST.PROF., M.PHARM, Klu
Dr.ALAVALA RAJASEKHAR REDDY, ASST.PROF., Ph.D
Mr.ALLA NARAYANA RAO, ASST.PROF., M.PHARM, Klu
Mr.B NAGA RAJU, ASST.PROF., M.PHARM, Klu
Ms.K SREE TEJA, ASST.PROF., Pharm-D, Klu

Advisory Committee

Dr.Vinay Baradwaj Tatipamila, ASST.PROF., Ph.D
Dr. S. Chakradhar Goud, Professor, Shri JJT University
Yashodha Krishna**,** Research Scholar SJJT University
Veda Prakash, KCEA, Armoor

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Message

A very warm welcome to all of you. Thank you all for accepting our invitation and joining us for this event. It is my pleasure to open this national Conference, on "Distributional implications of the crisis and policy responses". We got flooded with requests to participate in this conference. Clearly, this massive interest not only reflects the exceptionally high level of the speakers, but also shows the importance – even more, the urgency – of the theme of this conference.

The year 2018 is very special to NATIONAL LEVEL CONFERENCE ON GLOBAL CHANGES IN BIOSCIENCES AND PHARMACY NLCGCBP-2017. This is the National Level Conference, and so the conference also provides us with the opportunity to celebrate the new innovations and technologies in the field of management. The conference theme, Impact and Vision: Reaching New Heights, has been carefully chosen to mark such a milestone of our society. We are privileged to be co-chairs of this important conference.

Dr. Suresh M
Professor
Vihaya College of Pharmacy

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Message

AERF aims to educate researchers for the future to build and maintain quality oriented research related to Engineering, Management, Pharmacy and other domains as well. We believe these researchers,, contribute to make a difference to their Colleges and Universities and to the world around them. In our endeavours, we draw upon reserves of goodwill among the quality oriented research, its reputation among researchers,, and a potential student, commitment is the key strength to AERF.

The future holds tremendous promise for our organization we look forward to being recognized as one of the premier research organization which meets the quality standards across the globe. To achieve this goal, the organization is following a three-pronged approach: connect, nurture, and grow. We will:

CONNECT proactively with the worlds of practice and policy, with academic work nationally and globally, with our research work, and with the local community.
NURTURE a high performance work environment by emphasizing and supporting a climate of autonomy, stretch, and team work.

GROW our capacity, but do so in a thoughtful and strategic manner, aiming to have an impact commensurate with our ambitions, and ensuring that we maintain and upgrade the quality of our people and our experience.

Dr. D. Sucharitha
Director – AERF

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Index

S.No	Title & Author Details	Page No.
1001	**Evaluation of In vitro anti-urolithiatic activity *of Strobilanthes crispa*** A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy	**25**
1002	**Evaluation of anti-inflammatory activity of aqueous extract of Mimusops hexandra** **A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy**	**26**
1003	**Evaluation of wound healing activity of Indigofera, pomegranate and fenugreek herbal ointment blend** A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy	**27**
1004	**Evaluation of Anti Inflammatory Activity of *Amrtadi Chooranam* by Formalin Induced Paw Odema Method in Albino Rats** A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy	**28**
1005	**Evaluation Of Anti Diabetic Activity, CNS Activity And Antioxidant Activity Of Methanolic Extract Of *Mimusops Elengi*** A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy	**29**
1006	**Evaluation Of Anti-Urolithiatic Activity Of Ethanol Extract Of (Roots) Against Experimentally Induced Renal Calculi In Rats *Strobilanthes Ciliatus*** A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy	**30**
1007	**Evaluation of anti-epileptic activity of *Bougainvillea spectabilis* leaf extracts of on experimental models of epilepsy in mice** A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy	**31**
1008	**Evaluation of the anti–depressant activity of *Bougainvillea* peruviana in male rats** A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy	**32**
1009	**Evaluation Of Antipsychotic Activity Of Ethanolic Extract Of Mimusops Hexandra On Wistar Albino Rat** A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy	**33**
1010	**Evaluation Of Cardio Protective Activity Of Ethanolic Extract Of *Mimusops Angel* On Isoproterenol Induced Myocardial Infarction In Rats** A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy	**34**
1011	**Phytochemical Constituents Like Epigallocatechin-3-Gallate, Kaempferol And Resveratrol In Obesity** A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy	**35**
1012	**In-Vitro Biological Activity, Qualitative And Quantitative Phytochemical Analysis Of Different Plant Parts Of Citrus Plant Species** A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy	**36**
1013	**By Using Flaky Tail Mouse Model Phytochemical Screening And Anti-Psoriatic Evaluation On Citrus Sinensis Peel Extracts** A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy	**37**
1014	**Effect Of *Mahonia Aquifolium Leaf Extract Ointment 5 % In* Treatment Of Psoriasis** A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy	**38**

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

1015	***Effect of*** **Topical Application Of 5% *Mahonia Aquifolium* (Oregon Grape) Extract Ointment In Treatment Of Psoriasis** A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy	39
1016	**Formulation And In-Vitro Evaluation Of Niosomes Of Aceclofenac** A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy	40
1017	**Formulation And In-Vitro Evaluation Of Liposomes Of Valacyclovir** A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy	41
1018	**Formulation And Evaluation Of Carvedilol Fast Dissolving Tablets** A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy	42
1019	**Formulation And Evaluation Of Solid Dispersion Of Clonazepine** A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy	43
1020	**Formulation And Evaluation Of Zidovudine Nanoparticles** A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy	44
1021	**Formulation And In-Vitro Evaluation Of Pro Niosomes Of Acyclovir** A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy	45
1022	**Formulation and Evaluation of lamuvudine Nanosponges by double emulsion technique Method** A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy	46
1023	**Consequences Of High Temperature Frying Of Spinacia Oleracea Leaves In Soyabean Oil On Chlorophylls, Tocopherols And Carotenoids Composition.** V. Suresh Babu, V Aparna, G. Kalyani	47
1024	**Effectiveness Of Whole Cinnamon And/Or Aqueous Extracts Of Cinnamon In Metabolic Syndrome** V. Suresh Babu, V Aparna, G. Kalyani	48
1025	**Phytochemical Constituents Like Epigallocatechin-3-Gallate, Kaempferol And Resveratrol In Obesity** V. Suresh Babu, V Aparna, G. Kalyani	49
1026	**By Using Flaky Tail Mouse Model Phytochemical Screening And Anti-Psoriatic Evaluation On Citrus Sinensis Peel Extract** V. Suresh Babu, V Aparna, G. Kalyani	50
1027	**Effect of Topical Application Of 5% *Mahonia Aquifolium* (Oregon Grape) Extract Ointment In Treatment Of Psoriasis** V. Suresh Babu, V Aparna, G. Kalyani	51
1028	**Method Development And Validation Of Simultaneous Estimation Of Artemether And Lumefantrine By RP-HPLC** V. Suresh Babu, V Aparna, G. Kalyani	52
1029	**Evaluation of anti-arthritic activity of borassus flabellifer l., by freund's complete adjuvant induced polyarthritis** V. Suresh Babu, V Aparna, G. Kalyani	53
1030	**Stability Indicating Method Development And Validation Of Dutasteride By Rp-Hplc In Pharmaceutical Dosage Form** V. Suresh Babu, V Aparna, G. Kalyani	54
1031	**Studies on nootropic activity of methanolic extract of fruit of aegle marmelos** V. Suresh Babu, V Aparna, G. Kalyani	55
1032	**Novel Analytical Method Development And Validation For Simultaneous Estimation Of Didanosine And Stavudine**	56

	V. Suresh Babu, V Aparna, G. Kalyani	
1033	**Novel Method Development And Validation For Simlutaneous Estimation Of Abacavir And Lamivudine In Bulk And Tablet Dosage Forms** V. Suresh Babu, V Aparna, G. Kalyani	**57**
1034	**RP-HPLC Method Development And Validation Of Dexlansoprazole In Bulk And Pharmaceutical Dosage Forms** V. Suresh Babu, V Aparna, G. Kalyani	**58**
1035	**Rapid RP-HPLC Method Development And Validation For The Estimation Of Deflazacort In Bulk And Pharmaceutical Dosage Forms** V. Suresh Babu, V Aparna, G. Kalyani	**59**
1036	**RP-HPLC Method Development And Validation For Simultaneous Estimation Of Terazosin And Doxazosin In Bulk And Pharmaceutical Dosage Forms** V. Suresh Babu, V Aparna, G. Kalyani	**60**
1037	**In-Vitro Protective Aptitude Of Spathodea Campanulata Against Mycobacterium Tuberculosis H37rv Strain** V. Suresh Babu, V Aparna, G. Kalyani	**61**
1038	**Drug Carriers For Anti-Diabetics: A Focus On Various Novel Strategies** V. Suresh Babu, V Aparna, G. Kalyani	**62**
1039	**Green Synthesis Of Nanoparticles: An Innovation For Novel Drug Delivery** V. Suresh Babu, V Aparna, G. Kalyani	**63**
1040	**Dual Release Bilayered Tablets: An Overview** V. Suresh Babu, V Aparna, G. Kalyani	**64**
1041	**Liquisolid Technique: A Novel Approach For Dosage Form Design** R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy	**65**
1042	**Mouth Dissolving Tablets: An Overview** R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy	**66**
1043	**Nanotechnology: Modern Method For Solubility Enhancement** R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy	**67**
1044	**Orodispersible Tablets: A New Trend In Drug Delivery** R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy	**68**
1045	**Novel Approaches For Drugs Targeting To Brain** R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy	**69**
1046	**Recent Approaches In Herbal Drug Standardization** R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy	**70**
1047	**Recent Approaches In Herbal Drug Standardization** R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy	**71**
1048	**Influence Of Different Polymer Viscosity Grade On Drug Release** R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy	**72**
1049	**Traditional Medicine (Ayurveda) – Inspired Approaches To Drug Discovery** R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy	**73**
1050	**Hepatoprotective activity of *Psidium guajava* Linn. unripe fruit peel extract** R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy	**74**

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

1051	**Evaluation of anti ulcer activity of *Terminalia belerica* fruit extracts** R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy	**75**
1052	***In-vitro* Anti-Inflammatory screening on methanolic fruit pulp and leaf exatracts of *Limonia Acidissima* by HRBC (Human Red Blood Cell) membrane stabilization model** R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy	**76**
1053	**Evaluation of Nephroprotective activityof *Hibiscus rosasinensis* leaf extracts against gentamicicn induced nephrotoxicity in rats** R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy	**77**
1054	**Hepatoprotective activity of fruit pulp extract of *Litchi Chinensis Sonner* on carbon tetrachloride induced Hepatotoxicity in Albino rats** R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy	**78**
1055	**"Phytochemical Screening And Evaluation Of Antimicrobial Activity Of Aqueous Leaf Extract Of *Santalum Album* Linn"** R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy	**79**
1056	**Evaluation of anti diabetic activity of Terminalia chebula fruits on streptozotocin induced Diabetic Rats** R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy	**80**
1057	**A study on evaluation of *In-vitro* Anthelmintic activity of methanol extract of *Teprosia Purpurea. Linn*** R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy	**81**
1058	**Anticonvulsant activity of fruit and leaf extract of *Emblica Officinalis* against Strychnine induced convulsions in Albino Mice** R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy	**82**
1059	**Ameliorative Effect of Ferulic acid on Scopolamine-induced Dementia in Rats** R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy	**83**
1060	**Phytochemistry, anti-asthmatic and antioxidant activities of *anchomanes dalzielii* leaf extract** R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy	**84**
1061	**Effect of Vanillic acid on dexamethasone-induced insulin resistance in mice** Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi	**85**
1062	**LC-PDA-ORD Bioassay of S-(+) and R-(-) Colchicine on Rat Dried Blood Spots: Application to a Pharmacokinetic Study** Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi	**86**
1063	**Anticancer activity of synthetic (±)-kusunokinin and its derivative (±)-bursehernin on human cancer cell lines** Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi	**87**
1064	**Inhibitory effect of Quercetin on angiogenesis in a streptozotocin-induced diabetic rat model** Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi	**88**
1065	**Effect of *Olea europaea* leaves extract on streptozotocin induced diabetes in male albino rats** Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi	**89**
1066	**Quercetin nanoparticles attenuates scopolamine induced spatial memory deficits and pathological damages in rat** Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi	**90**
1067	**Protective role of *Emblica* officinalis leaf and *Cola acuminata* seed**	**91**

	extracts against scopolamine-induced cognitive dysfunction Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi	
1068	**Cognitive effects of *Psoralea corylifolia* against streptozotocin-induced neurodegeneration in mice** Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi	**92**
1069	**Of Cooperation and Conflict: UNCLOS and Ocean Governance in the Indian Ocean and the South China Sea** Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi	**93**
1070	**Monitoring micro- and nanoplastic interaction with microalgae using spectroscopic tools** Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi	**94**
1071	**Fate and effects of microplastics in the shrimp *Palaemon varians*** Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi	**95**
1072	**Antimicrobial activity of bacteria isolated from the sea cucumber *Stichopus vastus*** Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi	**96**
1073	**From Discovery to Production: *Microascus brevicaulis* strain LF580 as a case study** Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi	**97**
1074	**The potent antimicrobial activity of brominated compounds extracted from the marine sponge *Lamellodysidea* sp.** Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi	**98**
1075	**A case study to describe the putative associated bacterial core community on a marine diatom** Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi	**99**
1076	**Biogeography and population structure of the key marine zooplankton *Calanus finmarchicus* revealed by molecular tools** Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi	**100**
1077	**Sponges bring life or destruction? to shallow and deep reef ecosystems** Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi	**101**
1078	**Unraveling the DOM uptake and assimilation in sponges: A guide for cell separation and stable isotope identification for spongeholobionts in coral reef ecosystems** Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi	**102**
1079	**In Vitro Anti-coagulant activity of hydroalcoholic extract of *Annona Cosmoses* fruit peel** **Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi**	**103**
1080	**In Vivo Antioxidant activity of *Piper guineense* leaf extracts.** Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi	**104**
1081	**Comparative studies of In Vitro Antidiabetic activity of various leaf extracts.** Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi	**105**
1082	**Antibacterial activity of crude extracts of some plant leaves.** Ch. Himatha Reddy, V Aparna, G. Kalyani	**106**
1083	**Anticancer Activities of Apple Extracts and Genistein in Human Breast Cancer Cells** Ch. Himatha Reddy, V Aparna, G. Kalyani	**107**
1084	**Cardioprotective Activity of Alcoholic Extract of *Ilex paraguariensis* in**	**108**

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

	Ischemia-Reperfusion Induced Myocardial Infarction in Rats Ch. Himatha Reddy, V Aparna, G. Kalyani	
1085	**Anti-inflammatory activity of the leaf extracts of *Annona squamonsa* Linn.** Ch. Himatha Reddy, V Aparna, G. Kalyani	**109**
1086	**Antiulcer Activity of Ethanolic Extract of *Evolvulus* alsinoides Leaves on *Albino* Rats** **Ch. Himatha Reddy, V Aparna, G. Kalyani**	**110**
1087	**Preparation And In-Vitro Evaluation Of Fe_3o_4 Encapsulated By Alginate Loaded Carmofur Nanoparticles For The Treatment Of Ovarian Cancer** Ch. Himatha Reddy, V Aparna, G. Kalyani	**111**
1088	**Formulation, Characterization And Evaluation Of Polymer-Assisting Formulation Of Azithromycin Using Solvent Evaporation Method** Ch. Himatha Reddy, V Apana, G. Kalyani	**112**
1089	**Formulation And Evaluation Of Simvastatin Mucoadhesive Nanoparticles** Ch. Himatha Reddy, V Aparna, G. Kalyani	**113**
1090	**Formulation And Evaluation Of Niosomal Suspension Of Cefalexin** Ch. Himatha Reddy, V Aparna, G. Kalyani	**114**
1091	**Formulation And Evaluation Of Esomeprazole Delayed Release Pellets Using Different Polymers** Ch. Himatha Reddy, V Aparna, G. Kalyani	**115**
1092	**Formulation And Evaluation Of Delayed Release Capsules Of Pantoprazole Made Of Different Enteric Polymers** Ch. Himatha Reddy, V Aparna, G. Kalyani	**116**
1093	**Formulation and Evaluation Of Controlled Release Matrix Tablets Of Minocycline Using Different Polymers** Ch. Himatha Reddy, V Aparna, G. Kalyani	**117**
1094	**Formulation And Characterization Of Deflazocort Raw Material** **Ch**. Himatha Reddy, V Aparna, G. Kalyani	**118**
1095	**Formulation And Evaluation Of Bilayer Matrix Tablets Of Dicloxacillin And Omeprazole As An Oral Modified Release Dosage Form For Treatment Of Peptic Ulcer** Ch. Himatha Reddy, V Aparna, G. Kalyani	**119**
1096	**Formulation And Evaluation Of Capsule In Capsule Dosage Form With Mini Tablets For The Treatment Of Ulcer** Ch. Himatha Reddy, V Aparna, G. Kalyani	**120**
1097	**Preliminary Studies on Anticoagulant Activity of *Terminalia tomentosa* Bark Extracts** Ch. Himatha Reddy, V Aparna, G. Kalyani	**121**
1098	**Development and validation of bioanalytical method for the determination of Dolutegravir in human plasma by RP-HPLC** Ch. Himatha Reddy, V Aparna, G. Kalyani	**122**
1099	**Cytotoxic and Antioxidant Activity of Methanolic Extract from *Terminalia Pallida* Leaves** Ch. Himatha Reddy, V Aparna, G. Kalyani	**123**
1100	**A Spectroscopic method development and validtion for estimation of Metoprolol Succinate in its pharmaceutical dosage forms by formation ion-pair complex**	**124**

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

	Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy	
1101	**Formulation and Evaluation of Tolnaftate Loaded Nanosponges for Topical Delivery** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	**125**
1102	**RP-HPLC method development and validation for simultaneous estimation of Atorvastatin and Ezetimibe in bulk and pharmaceutical dosage forms** Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy	**126**
1103	**Design, synthesis and in-vitro evaluations of 6-pyridyl-imidazo[1,2-*a*]pyridine-3-sulfonamide as an inhibitor of TNF-α production** Ch. Himatha Reddy, V Aparna, G. Kalyani	**127**
1104	**Design, synthesis and evaluation of 1,2,4-triazolo[1,5-*a*]pyrimidines as anti-tubercular agents** Ch. Himatha Reddy, V Aparna, G. Kalyani	**128**
1105	**Method Development And Validation Of Simultaneous Estimation Of Artemether And Lumefantrine By Rp-Hplc** Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy	**129**
1106	**Novel Analytical Method Development And Validation For Simultaneous Estimation Of Didanosine And Stavudine** Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy	**130**
1107	**Anticonvulsant Potential Of Ethanolic Extract And Aqueous Fraction Isolated From *Schrebera Swietenoids*** **Ch. Himatha Reddy, V Aparna, G. Kalyani**	**131**
1108	**Green Synthesis Of Silver Nanoparticle Using *Barleria Noctiflora* And Its Antidiabetic Activity** Ch. Himatha Reddy, V Aparna, G. Kalyani	**132**
1109	**Phytochemical, *In Vitro* Antioxidant Activity On The Bark Of *Soymida Febrifuga*** Ch. Himatha Reddy, V Aparna, G. Kalyani	**133**
1110	**RP-HPLC Method Development And Validation Of Dexlansoprazole And Clopidogrel In Bulk And Pharmaceutical Dosage Forms** Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy	**134**
1111	**Hepato-Protectant Activity Of Leaf Extract Of Caesalpinia Coriaria (Jacq.) Willd.** Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy	**135**
1112	**Role Of Natural Products In Drug Discovery And Development** Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy	**136**
1113	**FORMULATION AND EVALUATION OF POLYHERBAL ANTI-INFLAMMATORY TABLETS** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	**137**
1114	**Protective Effect Of A*lstonia Scholaris* On Paracetamol Induced Hepatotoxicity In Rats** Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy	**138**
1115	**Phytochemical Screening And Anti-Oxidant Activity Of Aerial Parts *Hugonia Mystax*** Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy	**139**
1116	**Evaluation Of Anti-Inflammatory Activity Of *Leaf Exttracts Of Caesalpinia Coriaria***	**140**

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

	Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy	
1117	**Nephroprotective Activity Of Bark Of *Soymida Febrifuga*** Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy	**141**
1118	**Hepatoprotective Activity On Fruits Of *Balanites Roxburghii*** Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy	**142**
1119	**Investigation Of Preliminary Phytochemical Constituents And Antibacterial Activity Of Herbal Formulation** Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy	**143**
1120	**Antidiabetic and Antihyperlipidemic Activities of the Latex Extract of *Aloe megalacantha* Baker (Aloaceae) in azadirachta indica Induced Diabetic Model** Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy	**144**
1121	**Antidiabetic activity and phytochemical screening of extracts of the leaves of *Ajuga remota* Benth on alloxan-induced diabetic mice** A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna	**145**
1122	**Antidiabetic Activity of *Vinca rosea* Extracts in Alloxan-Induced Diabetic Rats** A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna	**146**
1123	**Antidiabetic activity of extracts of *Anacardium occidentale* Linn. leaves on diabetic rats** A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna	**147**
1124	**Antioxidant and antidiabetic activities of methanolic extract of *Cinnamomum cassia*** A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna	**148**
1125	**Anti-inflammatory activity of the leaf extracts of *Gendarussa vulgaris* Nees** A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna	**149**
1126	**Anti-inflammatory activity of aqueous extract of *Mirabilis jalapa* Linn. Leaves** A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna	**150**
1127	**Antihypertensive Activity of the Total Alkaloids from the Leaves of Moringa oleifera** A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna	**151**
1128	**Assessment of the antihypertensive and vasodilator effects of ethanolic extracts of some Colombian medicinal plants** A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna	**152**
1129	**Antihypertensive Activity of the Aqueous Extract of *Retama raetam* Forssk. Leaves in Spontaneously Hypertensive Rats** A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna	**153**
1130	**Comparative Study of the Antihypertensive Activity of Marrubium Vulgare and of the Dihydropyridine Calcium Antagonist Amlodipine in Spontaneously Hypertensive Rat** A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna	**154**
1131	**Effect of *Azadirachta indica* leaf extract on serum lipid profile changes in normal and streptozotocin induced diabetic rats** A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna	**155**
1132	**Screening and characterization of L-asparaginase producing microorganisms from tulsi (*Ocimum sanctum* L.)**	**156**

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

	A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna	
1133	**Ethnopharmacology of Phyllanthus emblica** A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna	**157**
1134	**Antidiabetic effect of *Ficus religiosa* extract in streptozotocin-induced diabetic rats** A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna	**158**
1135	**The Impact Of Diet And Lifestyle In Relation To Long-Term Weight Gain In Women And Men** A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna	**159**
1136	**Prescribing Pattern Of Drugs For Various Cardiovascular Conditions With Diabetes In A Tertiary Care Hospital** A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna	**160**
1137	**Home Medicines Review In The Elderly** A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna	**161**
1138	**Anticancer Activity Of The Selective Leaves Extracts On Lung Cancer** A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna	**162**
1139	**Management of Weight Gain in Pregnancy** A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna	**163**
1140	**Anticancer Activities Of Natural Substances** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**164**
1141	**Evaluation Study Of Antibiotics Use Prescribed In A Tertiary Care Hospital** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**165**
1142	**Anticancer Potential Of Extracts Of Grangea Maderaspatana Against Mcf-7 Breast Cancer Cell Line** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**166**
1143	**Effect Of Medicinal Plants For Anti-Obesity Activity** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**167**
1144	**Evaluation Of Anti-Obesity Activity Of Stereospermum Suaveolens By Progesterone Induced Obesity On Albino Mice** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**168**
1145	**Evaluation On Dispensing Of Similar Brand Name /Genereic Name Drug In Prescription** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**169**
1146	**The Risks Factors Linked To Use Of Alcohol And Alcoholism** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**170**
1147	**The Role Of The Clinical Pharmacist In Management Of Medication Cost In Cardiology Practice** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**171**
1148	**Potential Drug Interactions In Patients Admitted To Cardiology Wards Of A Indian Hospital** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**172**
1149	**Evaluation Of Treatment For Patients With Congestive Heart Failure By Cardiologists Versus Noncardiologists** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**173**
1150	**Activity of Quinones from Teak (*Tectona grandis*) on Fungal Cell Wall Stress** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**174**

1151	**Contraceptive pills dispensing and counseling and assessing hormonal imbalance provided by community pharmacists in different states in INDIA: A simulated patient study** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	175
1152	**In Vitro Antioxidant Activity And Hptlc Finger Print Analysis Of Phytocompounds Of Catharanthus Roseus.** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	176
1153	**In Vitro Antioxidant And Antibacterial Activity Of Flower Extracts And Phytochemical Investigation Of Tiliacora Acuminate** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	177
1154	**Evaluation Of Antipsychotic Activity Of Ethanolic Extract Of Mimusops Hexandra On Wistar Albino Rat** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	178
1155	**Evaluation Of Antipsychotic Activity Of Ethanolic Extract Of Mimusops Angel On Wistar Albino Rat** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	179
1156	**Cheminformatics study used for structure-based design and different Web services and desktop applications used for structure-based design** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	180
1157	**Potential of Natural anti-obesity agents and analyze their mechanisms.** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	181
1158	**Cheminformatics and its Applications on the study of Modern Drug Discovery** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	182
1159	**Modern Computational approaches in target identification, Lead identification in drug discovery** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	183
1160	**Therapeutics, phytochemical and pharmacological studies of Alsi (Linum usitatissimum Linn): An important Drug which is having medicinal value.** G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	184
1161	**Evaluation Of Antioxidant Activity Of Cadaba Indica Lam Extracts For Phenolic And Flavonoid Contents With Various Solvents.** G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	185
1162	**In Vitro Evaluation Of Antioxidant Activity Of Aerial Part Of Maerua Apetala. Roth (Jacobs) (Capparaceae)** G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	186
1163	**Total Phenolic, flavonoid contents and in vitro antioxidant activity of leaf of Sesuvium portulacastrum. L (Aizoaceae)** G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	187
1164	**Total Phenolics And Flavonoids Antioxidant Acvity Of Salicornia Brachiata Roxb.Leaf Extracts (Chenopodiaceae)** G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	188
1165	**Medicinal plants possessed antioxidant and free radical scavenging effects** G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	189
1166	**Formulation and Evaluation of Transdermal Patches of Terbutaline Sulphate** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	190

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

1167	**Fabrication and Evaluation of Transdermal Patches of carvedilol** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	191
1168	**Formulation and Evaluation of Microcapsules of Diclofenac Sodium** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	192
1169	**Formulation and Evaluation of Buccal tablets of Nifediine** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	193
1170	**Formulation and Evaluation of Mucoadhesive Buccal tablets of Lignocaine** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	194
1171	**Formulation and Evaluation of Fast release enteric-coated tablets of Celecoxib** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	195
1172	**Formulation and Evaluation of Mucoadhesive bccal tablets of Pentazocine** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	196
1173	**Formulation and Evaluation of Acyclovir Niosomes** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	197
1174	**Formulation and Evaluation of Zidovudine Niosomes** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	198
1175	**Formulation And In-Vitro Evaluation Of Liposomes Of Valacyclovir** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	199
1176	**Formulation And Evaluation Of Metoprolol Succinate Fast Dissolving Tablets** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	200
1177	**Formulation and Evaluation of Ofloxacin Nanosponges by Solvent Evopration technique Method** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	201
1178	**Formulation And Evaluation Of Sustained Release Matrix Tablets Of Nifedipine** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	202
1179	**Formulation And Evaluation Of Floating Tablet Of Captopril** **G. Chakravarthi, A. Rajasekhar Reddy, V Aparna** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	203
1180	**Formulation And Evaluation Of Sustained Microcapsules Of Ibuprofen** **G. Chakravarthi, A. Rajasekhar Reddy, V Aparna** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	204
1181	**Comparative Studies for Nateglinide Gastro Retentive Controlled Release Tablets** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	205
1182	**Formulation And Evaluation Of Atenolol And Atorvastatin Sublingual Tablets** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	206
1183	**Development And Characterization Of Newer Floating Film Bearing 5-Fluorouracil As A Drug** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	207
1184	**Anti Diabetic Activity Of Roots Of Michelia Champaca** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	208
1185	**Role Of Kinases In Cancer Development And Development Of Cancer Therapy Through Kinase Inhibotirs.**	209

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

	G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	
1186	**Enhancement Of Dissolution Properties Of Olmesartan Medoxomil By Solid Dispersion Technique** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**210**
1187	**Synthesis, Antibacterial and Antimitotic Activity of Some New Pyrido[2,3-d] Pyrimidines** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**211**
1188	**Preliminary Phytochemical Screening, Biological Evaluation, Hand Wash Formulation And Evaluation For *Couroupita Guianensis* Abul Flowers** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**212**
1189	**Determination Of Antimicrobial Activity And Estimation Of Phenolic Compounds In A *Glycyrrhiza Uralensis* Plant Roots By Spectrophotometer.** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**213**
1190	**Synthesis And Antimicrobial Activity Of Novel Chalcones Containing 4-Nitrophenyl** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**214**
1191	**Protective Effect Of *Tridax Procumbens* On Urolithiasis - Calcium Oxolate Induced Stress** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**215**
1192	**Wound Healing Activity Of Fruits Of Cuminum Cyminum** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**216**
1193	**Influence Of Aqueous Extract Of *Allium Sativum* On Pharmacodynamics And Pharmacokinetics Of Gliclazide In Rats And Rabbits** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**217**
1194	**Formulation Development And Evaluation Of Dry Suspension Of Itopride (Ready For Reconstiution)** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	**218**
1195	**Formulation Development And Evaluation Of Lamotrigine Generic Suspension Formulation** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	**219**
1196	**An Observational Study on Medication Adherence and Medication Compliance to Insulin Therapy Type II Diabetic Patients in Tertiary care hospital** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**220**
1197	**An Observational Study on Medication Adherence and Medication Compliance to Anti-hypertensive therapy in teritiary care hospital** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**221**
1198	**An Observational Study on Medication Adherence and Medication Compliance to Thyroid replacement therapy in teritiary care hospital** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**222**
1199	**An Observational Study on Medication Adherence and Medication Compliance to captopril therapy in teritiary care hospital** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**223**
1200	**ABC and VED Analysis of the Pharmacy Store of a Tertiary Care Teaching, Research and Referral Healthcare Institute of Andhra**	**224**

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

	Pradesh. G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	
1201	**Prescription Pattern and Drug Utilization Analysis in Patients with Unstable angina** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**225**
1202	**HML and SME Analysis of the Pharmacy Store of a Tertiary Care Teaching and Research Institute of Andhra Pradesh.** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**226**
1203	**A Prospective Observational Study of Adverse Drug Reactions Of Anti-Neoplastic Agents In Different Stage Of Cancer** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**227**
1204	**Evaluation of In vitro anti-urolithiatic activity *of Bacillus sphearicus*** R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	**228**
1205	**Evaluation of anti-inflammatory activity of aqueous extract of polyherbal formulation** R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	**229**
1206	**Evaluation of wound healingand microbial activity of plyherbal extract.** R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	**230**
1207	**Evaluation of Anti Inflammatory Activity of Aityardi Chooranam by Formalin Induced Paw Odema Method in Albino Rats** R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	**231**
1208	**Evaluation Of Anti Diabetic Activity, Cns Activity And Antioxidant Activity Of Methanolic Extract Of *Mimusops Hexandra*** R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	**232**
1209	**Evaluation of the anti–depressant activity of** *polyherbal formulation* **in male rats** R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	**233**
1210	**Evaluation Of Antipsychotic Activity Of Ethanolic Extract Of Mimusops Hexandra On Wistar Albino Rat** R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	**234**
1211	**Preparation and evaluation of Telmisartan microparticles for targeted drug delivery** R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	**235**
1212	**Comparative *In Vitro* Drug Release Study Of Ciprofloxacin Gel** R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	**236**
1213	**Design And Evaluation Of Controlled Release Tablets Of Losartan Potassium** R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	**237**
1214	Antimicrobial, Analgesic And Anti-Inflammatory Activity Of **Quinoxaline Derivatives** R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	**238**
1215	**Anticancer activity of novel quinoline-thiazole molecules** R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	**239**
1216	**Studies on the application of Quercetin nanoparticles as supplement for cancer therapy** R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	**240**
1217	**Method development and validation of residual solvents in sumatriptan succinate by using gas chromatography** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	**241**

1218	**Development and validation of stability indicating RP-HPLC assay method of sildenafil** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	242
1219	**Design and implementation of adverse drug reactions reporting system in Vijayawada based private hospital** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	243
1220	**RIC clinical trials: opportunities and challenges** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	244
1221	**A market survey on a leading brand of various OTC segments** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	245
1222	**Monitoring of Adverse Drug Reactions in wards of a Govt. hospital** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	246
1223	**Pharmacoeconomic analysis of statin tablets by *in-vitro* methods** V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	247
1224	**Applying Pharmacoeconomics in Indian Health Care System** K. Venkata Gopaiah, A. Rajasekhar Reddy, G. Kalyani	248
1225	**Treatment of Cancer by Nanobiotechnology** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	249
1226	**Spectrophotometric and liquid chromatographic determination of fenofibrate and vinpocetine and their hydrolysis products** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	250
1227	**Fenofibrate raw materials: HPLC methods for assay and purity and an NMR method for purity** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	251
1228	**Method development and validation of Fenofibrate by HPLC using human plasma** R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	252
1229	**Validated spectrophotometric determination of Fenofibrate in formulation** R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	253
1230	***In vitro* and *in vivo* evaluation of tegaserod maleate pH-dependent tablets** R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	254
1231	**Neuroprotective potentials and efficacy on neurodegenerative disorders of standardized dried fruit extract of *Aegle marmelos* in various experimental models** R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	255
1232	**Anti alzheimer activity of standardized dried fruit extract of *Aegle marmelos* in various experimental models** G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	256
1233	**Drug-Loaded PLGA microspheres for pulmonary delivery** G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	257
1234	**Design, synthesis and biological evaluation as anticancer agents** G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	258
1235	**UV-spectroscopic method development and validation for simultaneous estimation of Doxylamine succinate and Pyridoxine hydrochloride in bulk and pharmaceutical dosage form** G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	259
1236	**Simple liquid chromatographic method for simultaneous estimation of azithromycin, fluconazole and ornidazole in bulk and pharmaceutical**	260

	dosage forms B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	
1237	**RP-HPLC method for pyridoxine hydrochloride and doxylamine succinate soft gelatin capsules** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	**261**
1238	**Formulation and evaluation of tacrolimus transdermal gel** **B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool**	**262**
1239	**UV-Spectrophotometric method development and validation for simultaneous estimation of Azithromycin and Cefpodoxime in bulk and pharmaceutical dosage form** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	**263**
1240	**Neuroprotective Effects Of Ferrulic Acid** **G. Chakravarthi, A. Rajasekhar Reddy, V Aparna**	**264**
1241	**Neuroprotective activity of Ethanolic Extract of Sapindus laurifolia on LPS induced Neuroinflammation** **G. Chakravarthi, A. Rajasekhar Reddy, V Aparna**	**265**
1242	**Effects of Chlrogenic acid on memory deficits and brain oxidative stress in streptozotocin-induced diabetic mice** G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	**266**
1243	**Neuroprotective effect of Conessinin on elevated oxidative stress induced Alzheimers'disease in rats** G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	**267**
1244	**Preclinical evaluation of Fluvastatin for treatment of osteoporosis in ovariectomized rats** G. Chakravarthi, A. Rajasekhar Reddy, V Aparna	**268**
1245	**Formulations of Cinnamic acid Nanoparticles for Brain Diseases** **B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool**	**269**
1246	**Neuroprotective Effect of Green Synthesized Iron Oxide Nanoparticles Using Aqueous Extract of Biophytum reinwardtii Plant in the Management of Alzheimer's Disease** B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool	**270**
1247	**Neuroprotective effect of isolated fraction from *Sapindus laurifolia* extract in hippocampal neuronal HT22 cells** Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy	**271**
1248	**Neuroprotective effect of isolated fraction of *Biophytum sensitivum* on recognition memory impairment and the elevated oxygen stress in rat model of Alzheimer's disease** Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy	**272**
1249	**An Evaluation Of The Protective Role Of Escitalopram In Streptozotocin-Induced Diabetic Neuropathy** Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy	**273**
1250	**Anti- Convulsant Profile Of Aqueous Extract Of Mitragyna Inermis In Experimental Animals** Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy	**274**
1251	**In Vitro Antioxidant and free Radical Scavenging activity of the Ethanolic extract of Aesculus hippocastanum** Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy	**275**
1252	**Evaluation of Anti Cataractogenic Activity of Zinc oxide Nanoparticles in Corticosteroid Induced Cataract**	**276**

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

	Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy	
1253	**Evaluation of anti cataractogenic activity of of Biophytum Reinwardtii on olanzapine induced cataract on isolated goat lens** Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy	**277**
1254	**Evaluation of Anti-Inflammatory and AntiBacterial Activities of Different Solvent Extracts of Ehretia laevis Roxb** Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy	**278**
1255	**Treatment of Alzheimer Disease with Anti-Oxidants** Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy	**279**
1256	**Treatment of Alzheimer Disease with Anti-Oxidants** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**280**
1257	**Evaluation of Antioxidant potentials and Antiasthmatic activity of Strychnos nux vomica seed extract** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**281**
1258	**Hepatoprotective activity of Dipteracanthus patulus extract against Paracetamol induced Hepatotoxicity in rats** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**282**
1259	**Phytochemical Investigation and Pharmacognostical Studies of Gmelina arborea Roots** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**283**
1260	**Study and evaluation of Preliminary Phytochemicals and Antioxidant activity of Calocybe indica** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**284**
1261	**Evaluation of Anti-inflammatory and Antinociceptive activity of Coriander sativum Leaves** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**285**
1262	**Analgesic and antiulcer activity of the Ethanolic leaf extract of Cleome gynandra** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**286**
1263	**Phytochemical Screening and Anthelmintic Activity of Eupatorium odoratum of leave extracts** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**287**
1264	**Antiulcer Activity of *Cassia angustifolia* Bark Extract in Rats.** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**288**
1265	**Hepato-Protective Activity of Launaea Intybacea aqueous extract on Paracetomol Induced Hepato-Toxicity in Albino Rats** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**289**
1266	**Hepatoprotective Activity of Stem and Leaves extracts of Boerhaavia diffusa Against Carbon Tetra Chloride Induced Hepatotoxicity in Rats.** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**290**
1267	**Anti-Mycobacterial Effect of Leaf Extract of Centella asiatica** G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi	**291**
1268	**Anti-inflammatory Activity of Acorus calamus Linn. Leaves Ethanolic Extract in Albino Rats** A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna	**292**
1269	**Anti-Depressant Activity of Citrullus vulgaris Seeds in Experimentally Induced Depression in Mice** A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna	**293**

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

1270	**Neuroprotective effect of salvianolate on cerebral ischaemia-reperfusion injury in rats by inhibiting the Caspase-3 signal pathway** A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna	**294**
1271	**An Alternative Approach to the Synthesis of Parvistone C** A.Rama Krishnam Raju[a] and Venkateswa Rao Anna[a*]	**295**
1272	**Dehydrative annulation strategy for the construction of octahydroindolizidine framework: A diastereo selective total synthesis of (6*R*, 8a*S*) - octahydroindolizin-6-ol.** J. Subba Rao[a] and Venkateswa Rao Anna[a*]	**296**
1273	**A new strategy for accessing (S)-1-(furan-2-yl)pent-4-en-1-ol: a key precursor of Ipomoeassin family of compounds and C1–C15 domain of halichondrins** J. Subba Rao[a] and Venkateswa Rao Anna[a*]	**297**
1274	**Synthesis of 2-hydroxy-3-alkyl-2-phenyl-2,3-dihydroquinazolin-4(1H)-one via molybdenum hexacarbonyl mediated CO gas- and ligand free carbonylative reactions.** J. Subba Rao[a] and Venkateswa Rao Anna[a*]	**298**
1275	**I2–DMSO promoted metal free oxidative cyclization for the synthesis of substituted Indoles and pyrroles** A.Rama Krishnam Raju[a] and Venkateswa Rao Anna[a*]	**299**
1276	**A concise stereoselective total synthesis of decarestrictine J** A.Rama Krishnam Raju[a] and Venkateswa Rao Anna[a*]	**300**
1277	**Synthesis, Characterization and Antibacterial Activity of Binuclear Chromium(II) Complexes of New Schiff Base Ligand Derived from Amino Acids** V.Hari Nath Babu[a] and Venkateswa Rao Anna[a*]	**301**
1278	**Green Synthetic Protocol for (*E*)-1-Aryl-3-(2-morpholinoquinolin-3-yl)prop-2-en-1-ones and Their Antimicrobial Activity** Relangi Siva Subrahmanyam [a] and Venkateswa Rao Anna[a*]	**302**
1279	**Stability-indicating reversed-phase HPLC method for the separation and estimation of related impurities of Cilnidipine in pharmaceutical formulations** K.Bikshal Babu[a] and Venkateswa Rao Anna[a*]	**303**
1280	**Synthesis, Biological Evaluation and Molecular properties of Novel Imidazole Derivatives as Antibacterial agents** T.Nageswara Rao [a] and Venkateswa Rao Anna[a*]	**304**
1281	**Differential growth and photoluminescence of ZnS nanocrystals with variation of surfactant molecules** Anindita Chatterjee*, Amiya Priyam, Subhash C Bhattacharya, Abhijit Saha	**305**
1282	**A short and concise route to total synthesis of Dendrodolide L** Anindita Chatterjee & Venkata Reddy Regalla	**306**
1283	**A novel synthesis of chromone based unnatural $$\upalpha $$-amino acid derivatives** Anindita Chatterjee* & Venu Kandula	**307**
1284	**Pure and copper doped cellulose micrifibres- A case study** Anindita Chatterjee* & G Kiran Kumar	**308**
1285	**Highly Efficient Synthesis of 2, 4-Disubstituted Oxazoles Through Palladium/Copper Comediated Direct Arylation Reaction** Anindita Chatterjee* & Venkat Swamy Puli	**309**

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

1286	**An Efficient Method for the Preparation of N-Formamides using Propylphosphonic Anhydride (T3P®)** Anindita Chatterjee* & Ramakrishna Gudipati	**310**
1287	**Microwave-assisted synthesis, characterization, and biological evaluation of phenylacrylamide derivatives of triazoles derived from oxazolones** Anindita Chatterjee* & Vukoti Kiran Kumar	**311**
1288	**Highly efficient synthesis of 2,4-disubstituted oxazoles via palladium/copper co-mediated direct arylation reaction** Anindita Chatterjee	**312**
1289	**Sonochemical synthesis of 2, 4-disubstituted quinolines catalysed by Phosphosulfonic acid (PSA) under solvent-free conditions** Anindita Chatterjee & Nanda Kumar Yellapu	**313**
1290	**Antibacterial effect of ultrafine nanodiamond against gram-negative bacteria *Escherichia coli*** Anindita Chatterjee & Elena Perevedentseva	**314**
1291	**A comparative study about Reduction of nitro group instantly in presence of $NaBH_4$ and catalytic amount of heterogeneous catalysts Pt/C, $PtCl_2$ and PtO_2** Prabhakar Yaddanapudi and K.R.S.Prasad*	**315**
1292	**Abstract of Synthesis, anticancer evaluation and molecular docking studies of fused benzoxazole derivatives:** Prabhakar. Y and K. R. S Prasad	**316**
1293	**Anti-fungal activities of extracts of some species of Mangrove plants towards some selected strains** Karnati Rajeswari* and T. Bhaskara Rao	**317**
1294	**CYTOGENETIC ACTIVITY STUDIES ON SOME MANGROVES OF KRISHNA–GODAVARI ESTUARY** T.BHASKARA RAO*, B.VENKATESWARA RAO	**318**
1295	**Synthesis and Bioactivity Evaluation of Cinnamic Acid Esters from Oxalis pes-caprace** T.BHASKARA RAO*, B.VENKATESWARA RAO	**319**
1296	**irst total synthesis of Three Anti-tyrosinase Activity Prenylated Flavanones from Dalea boliviana** B.Venkateswara Rao, K. Ramanjaneyulu*, T. Bhaskara Rao and T.Rambabu.	**320**
1297	**Excoecaria agallocha Linn (Euphrobiaceae) : An overview** Karnati Rajeswari and T. Bhaskara Rao	**321**
1298	**Aegiceras corniculatum Linn (Myrsinaceae)** Karnati Rajeswari and T. Bhaskara Rao	**322**
1299	**Ultrasound assisted Mizoroki-Heck coupling / C-H amination in a single pot: direct synthesis of indole derivatives** A. S. G. Prasad,a T. Bhaskara Rao,a	**323**
1300	**A new flavone from Excoecaria agallocha L** Karnati Rajeswari, T. Bhaskara Rao*	**324**
1301	**Antimicrobial Activities of Extracts of Some Species of Mangrove Plants and a New Compound Isolated Towards some Selected Strains** Karnati Rajeswari, T. Bhaskara Rao*	**325**
1302	**Ultrasound assisted faster and milder approach to 6Hpyrido[1,2a] quinazolin6imine derivatives as potential inhibitors of PDE4**	**326**

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

	A. S. G. Prasad, T. Bhaskara Rao,	
1303	**Ultrasound assisted synthesis of quinoline derivatives in the presence of SnCl2•2H2O as a precatalyst in water: evaluation of their antibacterial activities** A. S. G. Prasad, T. Bhaskara Rao,	**327**
1304	**Synthesis and Anticancer Evaluation of 2-{4-[5-(5-Substituted arylpyrimidin-2-yl)-1H-pyrazol-3-yl]- phenyl}thiazolo[4,5-b]pyridine Derivatives** Ch. P. Koteswara Raoa, T. Bhaskara Rao*,	**328**
1305	**Design, Synthesis and Molecular Docking Studies of Novel Pyrazole Benzimidazole Derivatives as Potent Antibacterial Agents** Srinivasa Rao Dasari, Nareshvarma Seelam*	**329**
1306	**Synthesis, Molecular Properties, and Biological Evaluation of Hybrid** 1,2,3-Triazolylpolyaza Heterocyclic Compounds Srinivasa Rao Dasari, Nareshvarma Seelam*	**330**
1307	**ıe-pot synthesis of novel *tert*-butyl-4-substituted phenyl-*1H*-1,2,3-triazolo piperazine/piperidine carboxylates, potential GPR119 agonists** Nagaraju K Bashetti, Nareshvarma Seelam*	**331**
1308	**Design, Synthesis and Molecular Modeling of Nonsteroidal Anti-inflammatory Drugs Tagged Substituted 1,2,3-Triazole Derivatives and Evaluation of Their Biological Activities** Srinivasa Rao Dasari, Nareshvarma Seelam*	**332**
1309	**Synthesis and Characterization of Compounds Potentially Related to the Janus Kinase Inhibitor Baricitinib** Srinivasa Rao Dasari, Nareshvarma Seelam	**333**
1310	**Synthesis, Antitubercular Activity, and Molecular Docking Studies of Novel 2-(4-Chlorobenzylamino)-4-(cyclohexylmethylamino)-pyrimidine-5-carboxamides** Srinu Bodige, Nareshvarma Seelam*	**334**
1311	**Synthesis and Anticancer Activity of Thiophene-2-carboxamide Derivatives and *In Silico* Docking Studies** Kali Charan, Nareshvarma Seelam*	**335**
1312	**Novel and Efficient Synthesis of Deuterium-Labeled Olopatadine-*d*6** Srinivas Endoori, Nareshvarma Seelam*	**336**
1313	**Design, synthesis, antitubercular and antibacterial activities of pyrrolo[3,2-b]pyridine-3-carboxamide linked 2-methoxypyridine derivatives and *in silico* docking studies** Srinu Bodige, Nareshvarma Seelam*	**337**
1314	**gn, synthesis and molecular docking studies of quinazolin-4-ones linked to 3-triazol hybrids as Mycobacterium tuberculosis H_{37}Rv inhibitors besides** PATAN RASVAN KHAN, P. HARI CHARAN*	**338**
1315	**Study of Bismuth Ferrite-Silver Ferrite Nanocomposite About Structure, Characterization, Magnetic Properties and Band Gap Evaluation** R V SATYADHAR REDDI, P. HARI CHARAN*	**339**
1316	**SYNTHESIS AND PHARMACOLOGICAL SCREENING OF NEW ISATIN-3- [N2 -(BENZIMIDAZOL-1-ACETYL)]HYDRAZONE** SRINIVAS PERABOINA, P. HARI CHARAN*	**340**

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

1317	**Design, Synthesis and Docking Studies of New Indazole Derivatives as Potent Cytotoxic and Antibacterial Agents** SRINIVAS PERABOINA, P. HARI CHARAN*	**341**
1318	**Design, molecular docking studies of oxaprozin linked to 4-thiazolidinone derivatives as a potent anticancer, analgesic and antiinflammatory agents** KISHORE BABU CHITTELA, P. HARI CHARAN*	**342**
1319	**A Facile Synthesis of Amide Derivatives of [1, 2, 4] Triazolo [4, 3-a] pyridine** KISHORE BABU CHITTELA, P. HARI CHARAN*	**343**
1320	**Synthesis and in-vitro studies of some new quinoline 1, 3, 4-thiadiazolo pyrimidin derivatives** KISHORE BABU CHITTELA, P. HARI CHARAN*	**344**
1321	**RP-HPLC Method Development and Validation for Nitroxynil in Active Pharmaceutical Ingredient Manufacturing** KISHORE BABU CHITTELA, P. HARI CHARAN*	**345**
1322	**Synthesis of (3-Aminophenyl)(morpholino) methanone from Benzotrichloride as Precursor** AYILEELA KANITHI, P. HARI CHARAN*	**346**
1323	**Facile Chemoselective Reduction of 3-Phenacylideneoxindoles and 2-Oxoacenaphthen-1-ylidene Ketones using the Hantzsch Ester** AYILEELA KANITHI, P. HARI CHARAN*	**347**
1324	**Design, Synthesis and Biological Evaluation of Novel Urea and Thiourea Bearing thieno[3,2-d]-pyrimidines as PI3 Kinase Inhibitors** AYILEELA KANITHI, P. HARI CHARAN*	**348**
1325	**Enhanced visible-light driven photolytic degradation of methylene blue by nickel doped nanocomposite** T. Kamakshi[1,3,**], G. Sunita Sundari[1], and Harikrishna Erothu[2]	**349**
1326	**SYNTHESIS OF DIASTEREOSELECTIVE NOVEL CHROMENE DERIVATIVES BY MEANS OF KNOEVENAGEL CONDENSATION** D. Navaneetha, HariKrishna Erothu*	**350**
1327	**Novel Multifunctional Hollow Fibers Fabricated From Nano Metal Oxide Doped Polymer Nanocomposite for Efficient Water Treatment** Subhakaran Singh Rajaputra, Anjaneyulu Yerramilli and Harikrishna Erothu*	**351**
1328	**Novel Multifunctional Hollow Fibers Fabricated From Nano Metal Oxide Doped polymer Nanocomposite for Efficient Water Treatment** Subhakaran Singh Rajaputra, Anjaneyulu Yerramilli and Harikrishna Erothu*	**352**
1329	**Solid polymer electrolyte for Battery Applications** K. Sravanthi[1], G. Sunita Sundari[1*], Harikrishna Erothu[2]	**353**
1330	**PMMA based Polymer Electrolytes for Battery Application** K. Sravanthi[1], G. Sunita Sundari[1] and Harikrishna Erothu[2*]	**354**
1331	**Polymer based Solar Cells for Improvements in Stability and Efficiency** Dr Harikrishna Erothu	**355**
1332	**P3HT based Polymeric Materials: Synthesis and Application for Organic Solar Cells** Dr Harikrishna Erothu*[1,2], Dr Mahfoudh Raïssi[2], Dr Eric Cloutet[2],	**356**

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

	Prof. Henri Cramail[2] and Prof. R. C. Hiorns[2]	
1333	**Polymer based Solar Cells for Improvements in Stability and Efficiency** Dr Harikrishna Erothu*	**357**
1334	**Organic Solar Cells based on P3HT: Stability and Efficiency Improvements** Dr.Harikrishna Erothu*[1,2], Mahfoudh Raïssi[2], Eric Cloutet[2], Henri Cramail[2] and R. C. Hiorns[2]	**358**
1335	**Removal of lead and fluoride from contaminated water using exhausted coffee grounds based bio-sorbent** A. Naga Babu a, K. Ravindhranath a,G.V. Krishna Mohan	**359**
1336	**Stability Indicating Hplc Method For The Quantification Of Cefixime, Ornidazole And Moxifloxacin In Solid Dosage Forms** Suresh Kumar Palacharla And G. V. Krishna Mohan*	**360**
1337	**Removal Of Fluoride From Water Using H_2o_2- Treated Fine Red Mud Doped In Zn- Alginate Beads As Adsorbent** A. Naga Babu A, K. Ravindhranath A,**G.V. Krishna Mohan** A, *	**361**
1338	**Removal Of Fluoride From Water Using H_2o_2- Treated Fine Red Mud Doped In Zn- Alginate Beads As Adsorbent** A. Naga Babu A, K. Ravindhranath A,G.V. Krishna Mohan A, *	**362**
1339	**Zirconium-Treated Fine Red Mud Impregnated in Zn-Alginate Beads as Adsorbent in Removal of Phosphate from Water** G.V. KRISHNA MOHAN*, A. NAGA BABU, K. KALPANA and K. RAVINDHRANATH	**363**
1340	**Experimental and statistical analysis of As(III) adsorption from contaminated water using activated red mud doped calcium-alginate beads** A. Naga Babua, and G. V. Krishna Mohan*	**364**
1341	**Removal of naphthol green B dye from polluted waters using hydrogen peroxide treated red mud** G. V. Krishna Mohan, A. Naga Babu, K. Kalpana and K. Ravindhranath*	**365**
1342	**Removal of Chromium (VI) from Polluted waters using Adsorbents derived from Chenopodium album and Eclipta prostrate Plant Materials** A. Naga Babu, G.V. Krishna Mohan* and K.	**366**
1343	**Removal of chromium (VI) from water using adsorbent derived from spent coffee grounds** G. V. Krishna Mohan1 • A. Naga Babu1 • K. Kalpana1 • K. Ravindhranath1	**367**
1344	**Removal of Lead from Water Using Calcium Alginate Beads Doped with Hydrazine Sulphate-Activated Red Mud as Adsorbent** A. Naga Babu, G. V. Krishna Mohan, K. Kalpana, and K. Ravindhranath	**368**

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation of In vitro anti-urolithiatic activity *of Strobilanthes crispa*

Paper ID - 1001

A Paper Presented by:A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present study was carried out for phytochemical extraction, preliminary phytochemical analysis, and in vitro antiurolithiatic studies on the aqueous extract (leaf) of *Strobilanthes crispa*. The results of preliminary phytochemical screening indicated the presence of saponin glycosides, tropane alkaloids and acidic compounds. Antiurolithiatic activity was studied as percentage inhibition of stones by nucleation, growth aggregation assays for aqueous extract at 100-500µg/ml cystone is taken as standard. The results indicated that AEBG showed a dose-dependent inhibition of crystal growth.

Keywords: In vitro, anti urolithiatic study, *Strobilanthes crispa*

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation of anti-inflammatory activity of aqueous extract of Mimusops hexandra

Paper ID - 1002

A Paper Presented by:A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Objectives: The present investigation was carried out to evaluate the anti-inflammatory activity aqueous extract of *Mimusops hexandra* (AEMH). Materials and methods: Mice (Swiss albino) of either sex and albino rats (wistar strain) of either sex were used for the study. In vitro anti-inflammatory activity was studied by albumin denaturation inhibition, antiproteinase action, membrane Stabilization action, heat induced haemolysis, hypotonicity-induced haemolysis, antilipoxygenase activity. Carrageenan induced Paw edema and Hot Plate Tests were used for in vivo study. Aspirin (100ug/ml), Diclofenac (100ug/ml), Indomethacin (100ug/ml) were used as standards. The results showed that AMEH has significant *in vitro* anti-inflammatory activity ($P<0.05$) at a dosage of 100,250 and 500 µg/ml .Within three hours of carragenan induced inflammation 500mg/kg showed prominent anti inflammatory activity. Latent period of pain was also increased in dose dependent manner.

Key Words: Indomethacin, Carragenan, Mimusops hexandra

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation of wound healing activity of Indigofera, pomegranate and fenugreek herbal ointment blend

Paper ID - 1003

A Paper Presented by:A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Aim of the present study was to assess the wound healing potential and antimicrobial activity of Indigofera suffriticosa, pomegranate and fenugreek extract formulations and their blend in excision, and dead space wound models in rats in comparison to a marketed ointment (gentamycin). The natural extracts were used in formulation of ointments alone or in a combination of three extracts at a total concentration of 11% w/w in medications. The percent of wound contraction in case of the blend and gentamycin (10 mg/kg) were 83.90–95.5%, 87.35–98.62%, 92.55–100%, 96.30–100%, and 91.35–100% from days 16 to 20, respectively. The blended formulation showed the highest wpound healing potency compared to other formulations and showed comparable results to the standard ointment. The histological studies of excision biopsy at day 24 showed healed skin structures with normal epithelisation, the restoration of adnexa and fibrosis within the dermis in all of the formulation- and gentamycin-treated groups while the control group had nopt showed any granulation. The formulations showed antimicrobial activity against *Candida, Staphylococcus aureus*, mucous membrane infections and *E. coli* topical infections. The study proved the wound healing potential and antimicrobial activity of the herbal extract.

Keywords: Wound healing, Indigofera, Pomegranate, fenugreek, Hydrophilic ointment,Herbal extract

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation of Anti Inflammatory Activity of *Amrtadi Chooranam* by Formalin Induced Paw Odema Method in Albino Rats

Paper ID - 1004

A Paper Presented by:A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Amrtadi chooranam is a poly herbal Ayurvedic medicinal formulation mentioned in "Ayurvedic system of pharmacopoeia" with indication for treatment of all types of vata diseases. The aim of the study is to evaluate the anti-inflammatory activity of the herbal medicine Amrtadi churnam by formalin induced paw edema method in albino rats. The animals are divided into three groups with six animals in each group. Group 1 is normal control ,group 2 and group 3 received the drugs Indomethacin (25mg/kg) in distilled water, Amrtadi chooranam (500mg/kg) in 2 % CMC p.o respectively one hour before the onset of inflammation in the animals. The mean increase in the volume of the paw odema is measured using a plethysmometer and the percent of inhibition is calculated .The results show that Amrtadi chooranam has significant anti-inflammatory activity ($P<0.05$) at a dosage of 500 mg/kg within three hours of formalin induced inflammation.

Keywords: Amrtadi chooranam, Ayurvedic, Anti inflammation, formalin

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation Of Anti Diabetic Activity, CNS Activity And Antioxidant Activity Of Methanolic Extract Of *Mimusops Elengi*

Paper ID - 1005

A Paper Presented by:A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Objective of the present study is to evaluate antidiabetic activity, CNS activity, antioxidant activity of methanolic extract of Mimusops hexandra. Materials & Methods: Male white Albino strain rats weighing 250–300 g were used for the experiment. Chemicals and reagents were purchased from local market Results: The results of anti-diabetic activity, CNS activity and antioxidant activity of Methanolic extract of *Mimusops hexandra* were significantly compared with the standard compounds. The extract show decreasing the blood glucose levels of diabetic induced rats. It shows better results on the CNS stimulating activity and DPPH free radical activity. Conclusion: The result of our study indicates that the Methanolic extract of *Mimusops hexandra* significantly decreased serum glucose level in hyperglycaemic animals. CNS activity, high DPPH free radical antioxidant activity. In this context, *Mimusops hexandra* can rightly be mentioned as a plant of considerable interest.

Key Words: Anti diabetic activity, Mimusops hexandra, Hyperglycemia

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation Of Anti-Urolithiatic Activity Of Ethanol Extract Of (Roots) Against Experimentally Induced Renal Calculi In Rats *Strobilanthes Ciliatus*

Paper ID - 1006

A Paper Presented by:A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present investigation was under taken to evaluate the anti-urolithiatic activity of ethanolic extract of *Strobilanthes ciliatus* leaves in experimental animals. *S.ciliatus* roots were evaluated for anti-urolithiatic activity . Urolithiasis is a common disorder with higher recurrence rate in men. Super saturation of crystals with imbalance between levels of promoters and inhibitors of stone formation results in urolithiasis. Current medical management of urolithiasis is either costly or not without side effects. Therefore, traditionally reported more effective and safer anti-urolithiatic medicinal plants need to be studied. Thus, this study was aimed to evaluate the anti-urolithiatic activity of ethanolic extract of *S.ciliatus* in male albino wistar rats. Ethylene glycol (0.75% v/v in drinking water; 28 days) induced urolithiasis preventive model were used to study the effect *S.ciliatus* dose (250 mg/kg) and. Cystone (650 mg/kg) was used as a standard. At the end of the treatment changes in various physical parameters, promoters, inhibitors, renal function markers in urine and serum samples and histopathology of kidneys were observed. All the treatments significantly prevented the rise in promoters like calcium, oxalate, uric acid, and inorganic phosphate and increased the levels of magnesium and citrate like inhibitors in various biological samples. Thus ethanolic extract of *S.ciliatus* roots have proved to be an effective drug in prevention of urolithiasis.

Key Words: Urolithiasis,Strobilanthes,promoters,inhibitors

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation of anti-epileptic activity of *Bougainvillea spectabilis* leaf extracts of on experimental models of epilepsy in mice

Paper ID - 1007

A Paper Presented by:A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

This study was aimed to examine the anti-epileptic activity of leaf extracts of *Bougainvillea spectabilis* in experimental models of epilepsy in Swiss albino mice. Materials and Methods: Petroleum ether leaf extract of *B.spaectabilis* (PLBS), methanolic LBS (MLBS), and aqueous LBS (ALBS) extracts of *B.spectabilis* leaves was initially evaluated against 6-Hz-induced seizure model; the potent extract was further evaluated against maximal electroshock (MES) and pentylenetetrazole (PTZ)-induced convulsions. Further, the potent extract was evaluated for its influence on Gamma amino butyric acid (GABA) levels in brain, to explore the possible mechanism of action. In addition, the potent extract was subjected to actophotometer test to assess its possible locomotor activity deficit inducing action. Results: In 6-Hz seizure test, the MLBS has alleviated 6-Hz-induced seizures significantly and dose dependently at doses 50, 100, 200, and 400 mg/kg. In contrast, PLBS and ALBS did not show any protection, only high dose of ALBS (400 and 800 mg/kg, p.o.) showed very slight inhibition. Based on these observations, only MLBS was tested in MES and PTZ models. Interestingly, the MLBS (50, 100, 200 and 400 mg/kg) has offered significant and dose-dependent protection against MES ($P < 0.01$) and PTZ-induced ($P < 0.01$) seizures in mice. Further, MLBS showed a significant increase in brain GABA levels ($P < 0.01$) compared to control and showed insignificant change in locomotors activity in all tested doses (100, 200 and 400 mg/kg). Interestingly, higher dose of MLPG (400 mg/kg, p.o.) and Diazepam (5 mg/mg, p.o.) have completely abolished the convulsions.

Key Words: Epilepsy, Bougainvillea spectabilis

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation of the anti–depressant activity of *Bougainvillea* peruviana in male rats

Paper ID - 1008

A Paper Presented by:A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present study was undertaken to evaluate anti-depressant activity of *B.peruviana*. **Materials and Methods:** Male Wistar rats were subjected to imipramine and herbal extract of BP for their antidepressant activity using Forced Swimming Test (FST), Reserpine Reversal Test (RRT), Haloperidol-Induced Catalepsy (HIC), and Pentobarbitone Sleeping Time (PST). **Results:** Administration of MS and imipramine revealed a statistically significant reduction in immobility time in FST, RRT, and protection against HIC, compared to the control group. However, there was no significant potentiation of PST. **Conclusion:** Our study demonstrated the potential antidepressant activity of MS.

Key Words: Antidepressant activity, Imipramine, *B.peruviana*

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation Of Antipsychotic Activity Of Ethanolic Extract Of Mimusops Hexandra On Wistar Albino Rat

Paper ID - 1009

A Paper Presented by: A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

An increased inclination has been observed for the use of herbal drugs in chronic and incurable diseases. Treatment of psychiatric diseases like Schizophrenia is largely palliative and more importantly a prominent adverse effect prevails with the majority of antipsychotic drugs, which are the extrapyramidal motor disorders. This study was a trial to evaluate the neuroleptic activity of the ethanolic extracts of Mimusops hexandra with different antipsychotic animal models. Two doses of the extract (100 and 200mg/kg) were used for this study with 5 different animal models. After that, the concentration of the dopamine neurotransmitter was estimated in two different regions of the brain viz. Frontal cortex and Striatum. The result of the study indicated a significant reduction of amphetamine induced stereotype and conditioned avoidance response for the extracts compared with the control group, but did not have any significant effect in phencyclidine induced locomotor activity and social interaction activity. However the extract showed minor signs of catalepsy compared to the control group. The study also revealed that the neuroleptic effect was due to the reduction of the dopamine concentration in the frontal cortex region of the rat brain. The results largely pointed out the fact that the extract may be having the property to alleviate the positive symptoms of Schizophrenia by reducing the dopamine levels of dopaminergic neurons of the brain. The estimation of dopamine in the two major regions of brain indicated the alteration of dopamine levels was the reason for the antipsychotic activity as demonstrated by the different animal models.

Keywords: Anti-psychotic, Mimusops hexandra, Neuroleptic

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation Of Cardio Protective Activity Of Ethanolic Extract Of *Mimusops Angel* On Isoproterenol Induced Myocardial Infarction In Rats

Paper ID - 1010

A Paper Presented by: **A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy**

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present study was designed to evaluate the cardio protective potential of ethanol extract of Mimusops angel is an evergreen tree with white, strongly perfumed flowers on isoproterenol-induced Myocardial Infarction (MI) in rats. Five groups of albino rats, each comprising of six animals, were selected for this study. Group I was given with normal saline, Group II rats was trated with isoproterenol (ISO) (85 mg/kg subcutaneously), and Group III rats were treated with propranolol 15 mg/kg as standard treatment. Groups IV and V rats were given EAS (250 mg/kg and 500 mg/kg, respectively) along with isoproterenol (80 mg/kg). At end of the study cardiac biomarkers like CK-MB and LDH were estimated to estimate cardio protection. EAS pre treated animals in various doses significantly decreased the levels of CK-MB and LDH when compared with ISO treated animal. It is further conformed by histopathological changes of heart. The study confirmed the cardio protective potential of ethanolic extract of Mimusops angel against isoproterenol-induced myocardial infarction in rats.

Keywords: Myocardial infarction, cardio protection, cardio biomarkers, isoprotere

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Phytochemical Constituents Like Epigallocatechin-3-Gallate, Kaempferol And Resveratrol In Obesity

Paper ID - 1011

A Paper Presented by:A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

From the past years, obesity has been one of the major public health issues worldwide. The main aim to prevent obesity could consist in the inhibition of the pancreatic lipase (PL). In is an attempt to find natural ant obesity agents, phenolic compounds (PCs) and plant extracts were investigated on PL activity. In the search for new molecules that could be used for the treatment of obesity, good perspectives have been opened up for polyphenols, a class of natural bioactive phytochemicals. Experimental and limited clinical trial evidence supports that some polyphenols such as Epigallocatechin-3-gallate, kaempferol, and resveratrol have potential benefit functions on obesity treatment. Plant extracts from green tea and grape seed also shown potent inhibitory effect. Selected PCs were then assayed in an in vitro model of simulated intestinal fat digestion, based on the lipolysis of triolein. This work therefore suggests that some PCs, at concentrations easily reached in the intestine following ingestion of tea beverages, fruits or vegetables, but also flavonoid-enriched supplements or functional food, are potential candidates for obesity prevention.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

In-Vitro Biological Activity, Qualitative And Quantitative Phytochemical Analysis Of Different Plant Parts Of Citrus Plant Species

Paper ID - 1012

A Paper Presented by:A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Qualitative and quantitative phytochemical and in vitro biological activity (antioxidant, anti-urease, and anticholinesterase) study of ethanol extracts from different parts of Citrus plant were performed using standard analysis methods and these studies revealed the presence of phenolics and tannins. Next to this a quantitative determination of total phenolics and tannins contents was performed. Using DPPH, FRAP, TEAC/ABTS and CUPRAC techniques the antioxidant activity of the extracts were assayed. Along with the above procedure the anti-urease and anticholinesterase activity of the extracts were examined using indophenols and Ellman methods, respectively. Which gives the detail study about the macerated leaf extract contained higher total phenolic and tannins contents than the other extracts. According to the results obtained from the antioxidant experiment, the macerated extract of leaves showed the strongest ABTS Scavenging and ferric reducing antioxidant power activity. The macerated leaves and Soxhlet radix extracts exhibited the strongest DPPH. Scavenging and cupric reducing antioxidant activity, respectively. Using the Soxhlet methods the young shoots extracts obtained showed the highest anticholinesterase activity. All extracts obtained from different parts of the plant were found to have very low anti-urease activity when compared to the anti-urease activity of standard compound. Therefore, ethanol extracts from plant's flowers, leaves and young shoots can be used as a natural antioxidant and anticholinesterase agent respectively, for the pharmaceutical and food industry in the future.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

By Using Flaky Tail Mouse Model Phytochemical Screening And Anti-Psoriatic Evaluation On Citrus Sinensis Peel Extracts

Paper ID - 1013

A Paper Presented by:A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Objective: The methanol and aqueous extract of *citrus sinensis* peels on flaky tail mouse model for anti-psoriatic activity. **Methods:** flaky tail test using Perry scientific tail model was used for the evaluation of anti-psoriatic activity. Aqueous extract and methanol extract of (100mg/kg) were tested in Swiss albino mice. Epidermal thickness and percentage orthokeratotic values Parameters were studied in the mouse tail test. **Results:** The extracts from the peels of *citrus sinensis* produced significant orthokeratosis (P<0.01) in the flaky tail test. In epidermal thickness, a significant reduction with respect to control was observed in groups treated with flucinolone acetonide and ethanol extract. Conclusion: From the above data, the extracts of *citrus sinensis* showed significant orthokeratosis on flaky tail test. To our knowledge, this is the first report on the anti-psoriatic effect of peels of *citrus sinensis.*

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Effect Of *Mahonia Aquifolium Leaf Extract Ointment 5 % In* Treatment Of Psoriasis

Paper ID - 1014

A Paper Presented by:A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Mahonia aquifolium leaf extract ointment 5 % was applied tropically twice daily for 3 months by 40 undiseased patients with psoriasis. Patients were classified to 4 groups according to the extension of psoriatic lesions on their skin. The efficacy of the treatment was determined by taking some comparative considerations like cleared, marked improvement, moderate improvement, and minimal or no improvement. In 20 out of 40 patients (50%) the results were good with cleared lesions. In 10 patients (25%) improvement was observed, and in 10 patients (25%) no improvement was observed. Lesions with less extinctive shows best results. The effectiveness of *Mahonia aquifolium* treatment could be attributed to its vitamin A and flavonoids contents. It is a cheap, safe and effective remedy for this chronic disabling skin disorder.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Effect of Topical Application Of 5% *Mahonia Aquifolium* (Oregon Grape) Extract Ointment In Treatment Of Psoriasis

Paper ID : 1015

A Paper Presented by:A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Mahonia aquifolium (Oregon grape)5% leaf extract ointment was topically applied twice daily for 3 months by 40 psoriasis diseased patients . Patients were classified to 4 groups according to extension of psoriatic lesions on their body. The efficacy of the treatment was determined by taking some comparative considerations criteria like, cleared, marked improvement, moderate improvement, and minimal or no improvement. In 20 out of 40 patients (50%), the result was good with cleared lessions. In 10 patients (25%) there was little improvement, and in 10 patients (25%) there was no improvement. The best results were obtained in localized less extensive lesions. The effectiveness of ***Mahonia aquifolium*** (**Oregon grape**) treatment could be attributed to its vitamin A and flavonoids contents. It is a cheap, safe and effective remedy for this chronic disabling skin disorder.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation And In-Vitro Evaluation Of Niosomes Of Aceclofenac

Paper ID : 1016

A Paper Presented by:A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present research work was to formulate and evaluate the site specific delivery of aceclofenac niosomes in order to overcome the problem of avoid the first pass metabolisam, improve the bioavailabilty of drugs and to produce a better therapeutic response. Niosomes of Aceclofenac were formulated by an thin film hydration method using different concentrations of drug, cholesterol and non ionic surfactant (Span 20). The formulations were evaluated from the various methods like vesicle shape, particle size, entrapment efficiency, drug content, compatibility studies and in-vitro drug release. Thin film hydration was found to be most satisfactory with respective to niosomes particle size, drug entrapment efficiency, in-vitro drug release and its release mechanism was followed by first order kinetics method R2 =0.9840. Keywords: Niosomes, Span 60, Aceclofenac, Cholesterol, Methanol, Diethyl ether.
Keywords: Niosomes, Span 60, Aceclofenac, Cholesterol, Methanol, Diethyl ether

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation And In-Vitro Evaluation Of Liposomes Of Valacyclovir

Paper ID : 1017

A Paper Presented by:A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present research work was to formulate and evaluate the site specific delivery of valacyclovir liposomes in order to overcome the problem of avoid the first pass effect, improve the bioavailabilty of drugs, reduced side effects and to produce a better therapeutic response valacyclovir liposomes were formulated by an ether injection method using different concentrations of drug, and phospholipids . The formulations were evaluated from the various methods like vesicle shape, particle size, entrapment efficiency, drug content, compatibility studies and in-vitro drug release. Thin film hydration was found to be most satisfactory with respective to liposomes particle size, drug entrapment efficiency, in-vitro drug release and its release mechanism was non ficikian diffusion mechanism.
Keywords: valacyclovir, Phospho lipids, Cholesterol, ethanol, Diethyl ether.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation And Evaluation Of Carvedilol Fast Dissolving Tablets

Paper ID : 1018

A Paper Presented by:A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Carvedilol is a Anti-hypertensive drugs which is insoluble in water, hence the drug may be slowly or incompletely absorbed in the gastrointestinal tract. So the rate of dissolution and therefore its bioavailability is low (bioavailability 23%). The drug release of carvedilol can be increased by formulating it into fast dissolving tablets, as these dosage forms disintegrate very rapidly into fine of drug particles resulting in higher surface area of drug. The present research work involves preparation, characterization and evaluation of sodium alginate as a super Disintegrant. The prepared sodium alginate was found to be free flowing properties revealed the formation of ester. In the present research work, 23 factorial design was used for optimization of level of independent variables (Starch Glutarate, sodium starch glycolate and kyron) on dependent variables (disintegration time and percent released in 10 minutes) in the formulation Carvedilol fast dissolving tablets with less experimentation. From the results it was concluded that Starch Glutarate, (5%), sodium starch glycolate (5%) and kyron (5%) were favourable for formulation of Carvedilol fast dissolving tablets. Therefore, starch glutarate a new modified starch was found to be a promising disintegrant in the formulation of fast dissolving tablets of poorly soluble drugs.
KEYWORDS: Poorly Soluble, Carvedilol, Starch Glutarate, kyron,sodium starch glycolate

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation And Evaluation Of Solid Dispersion Of Clonazepine

Paper ID : 1019

A Paper Presented by:A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The poor dissolution rate of water-insoluble drugs is still a major problem conforming the pharmaceutical industry. The most common method for improving the solubility is by increasing the surface area of the drug through micronization. But, in practice the effect of micronization is often disappointing, especially when the drugs are encapsulated or tablet. It is generally recognized that low solubility or dissolution rate often becomes a rate-limiting step in absorption of poorly water soluble drugs. Therefore, the enhancement of the dissolution rate of poorly water-soluble drugs after oral administration is one of the most challenging aspects of modern pharmaceutics. clonazepine (2- methyl- 4- (4- methyl- 1- piperazinyl) – 10H- thieno [2, b] [1, 5] benzodiazepine possess antipsychotic activity and exhibits very slight solubility in water and as a consequence it exhibit low bioavailability after oral administration Therefore, the improvement of clonazepine dissolution from its oral solid dosage forms is an important issue for enhancing its bioavailability and therapeutic efficacy. The purpose of present work is to improve the solubility of clonazepine by preparing its dispersion with polymer cyclodextrin using solvent evaporation technique.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation And Evaluation Of Zidovudine Nanoparticles

Paper ID : 1020

A Paper Presented by:A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The development of new delivery systems for the controlled release of drugs is active ingredient for predetermined rate and release of the active ingridients for prolonged period of time and extended period of time. Nan particle specially designed to release the drug in the of target sites. The main objective of this work was to prepare and characterize surface modified zidovudine entrapped low molecular weight eudragit rs 100 nanoparticles as potential drug delivery system for anti-HIV chemotherapy. The particle size and the surface morphology results revealed that zidovudine nanoparticles (SNPs) were size range 1-1000 nm. The drug entrapment efficiency was found to be near 95%. In vitro release studies revealed that the rate of drug release from SNP5 was 95% in 24 hours. Release of drug follows first order and show slowly release of the active ingridents release behavior. Peppas models shows that the drug follow non-Fickian transport as the value of n>0.5. The results suggest that eudragit rs 100 polymer based nanoparticulate formulations are potential means to achieve release of zidovudine for the prolonged period of time for effective therapy. The results showed that this method is reproducible easily.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation And In-Vitro Evaluation Of Pro Niosomes Of Acyclovir

Paper ID : 1021

A Paper Presented by:A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present research work was to formulate and evaluate the site specific delivery of acyclovir pro niosomes in order to overcome the problem of avoid the first pass metabolisam, improve the bioavailabilty of drugs and to produce a better therapeutic response. Pro Niosomes of Acyclovir were formulated by an ether injection method using different concentrations of drug, cholesterol and non ionic surfactant (Span 80). The formulations were evaluated from the various methods like vesicle shape, particle size, entrapment efficiency, drug content, compatibility studies and in-vitro drug release. Ether injection was found to be most satisfactory with respective to niosomes particle size, drug entrapment efficiency, in-vitro drug release.

Keywords: Niosomes, Span 80, Acyclovir, Cholesterol, Methanol, Diethyl ether.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation and Evaluation of lamuvudine Nanosponges by double emulsion technique Method

Paper ID : 1022

A Paper Presented by:A. Rajasekhar Reddy, G. Chakravarthi, Ch. Himatha Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Targeted drug delivery system is based on a method that delivers a certain amount of a therapeutic agent for a prolonged period of time to a targeted diseased area within the body. The purpose of present study was to formulate nanosponges of lamuvudine having bioavailability of 5% with half life 2hours and protein binding 95%.Nanosponges are targeted drug delivery systems applicable to solve the bioavailability problems by releasing the drug at specific target site. In this study, nanosponges are prepared by double emulsion technique method using different ratios of eudragirt rs 100 and Poly vinyl alcohol. The elevated characteristics can be estimated Particle size analysis and surface morphology of nanosponges were performed. The scanning electron microscopy of nanosponges showed that they were spherical in shape and spongy in nature. The particle size of the optimized formulations was in the range of 200-400nm and the drug entrapment efficiency was found to be in the range of 90.6 % to 95.8%. Among all the formulations prepared F5 were found to show the maximum drug release of 95.04%.

Keywords: Nanosponges, Lamuvudine, hyper cholesteremia, targeted drug delivery system, double emulsion solvent diffusion method.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Consequences Of High Temperature Frying Of Spinacia Oleracea Leaves In Soyabean Oil On Chlorophylls, Tocopherols And Carotenoids Composition.

Paper ID : 1023

A Paper Presented by: **V. Suresh Babu, V Aparna, G. Kalyani**

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Spinach is a superfood loaded with tons of nutrients in a low-calorie package and is one of the most consumed vegetable. This study revealed the effects of high temperature frying on the carotenoids, chlorophylls, and tocopherol contents of spinach leaves. Spinach leaves were thermally processed in the soya bean oil for 15, 30, 45, and 60 min at 200°C. Frying increased significantly the amount of α-tocopherol, β-carotene-5,6-epoxide, luteoxanthin, lutein, and its Z-isomers and chlorophyll *b′* isomer in spinachleaves. Based on this study there's considerable reduction in the levels of neoxanthin, violaxanthin, chlorophyll *b*, *b′* and chlorophyll *a* with increase of frying time. The rise of frying time increased all the phenolic contents in spinach leaves and fried soya bean oil samples. Frying effects, the chemical characteristics such as peroxide values, free fatty acids, conjugated dienes, conjugated trienes, and radical scavenging activity during this phase spinach leaves increased the stability of the frying oil.This study will be helpful to improve the quality of fried vegetable leaves or their products at high temperature frying in food industries.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Effectiveness Of Whole Cinnamon And/Or Aqueous Extracts Of Cinnamon In Metabolic Syndrome

Paper ID : 1024

A Paper Presented by:V. Suresh Babu, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Metabolic syndrome is associated with insulin resistance, elevated glucose and lipids, inflammation, decreased antioxidant activity, increased weight gain, and increased glycation of proteins.cinnamon's impact on insulin and blood sugar are pretty credible.Cinnamon lowers the blood sugar levels it curbs the blood sugar by lowering insulin resistance. This study investigated the effects of cinnamon on volunteers with cinnamon extract and/or cinnamon found that cinnamon cut cholesterol by about 18% and blood sugar levels by 24%. Components of cinnamon helps in decreasing and prevention of the signs and symptoms of metabolic syndrome, type 2 diabetes, and cardiovascularrelated diseases.Along with cinnamon supplementation regular diet and exercise also plays a vital role in decreasing the blood sugar and cholesterol.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Phytochemical Constituents Like Epigallocatechin-3-Gallate, Kaempferol And Resveratrol In Obesity

Paper ID : 1025

A Paper Presented by:V. Suresh Babu, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

From the past years, obesity has been one of the major public health issues worldwide. The main aim to prevent obesity could consist in the inhibition of the pancreatic lipase (PL). In is an attempt to find natural antiobesity agents, phenolic compounds (PCs) and plant extracts were investigated on PL activity. In the search for new molecules that could be used for the treatment of obesity, good perspectives have been opened up for polyphenols, a class of natural bioactive phytochemicals. Experimental and limited clinical trial evidence supports that some polyphenols such as Epigallocatechin-3-gallate, kaempferol, and resveratrol have potential benefit functions on obesity treatment. Plant extracts from green tea and grape seed also shown potent inhibitory effect. Selected PCs were then assayed in an in vitro model of simulated intestinal fat digestion, based on the lipolysis of triolein. This work therefore suggests that some PCs, at concentrations easily reached in the intestine following ingestion of tea beverages, fruits or vegetables, but also flavonoid-enriched supplements or functional food, are potential candidates for obesity prevention.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

By Using Flaky Tail Mouse Model Phytochemical Screening And Anti-Psoriatic Evaluation On Citrus Sinensis Peel Extract

Paper ID : 1026

A Paper Presented by:V. Suresh Babu, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Objective: The methanol and aqueous extract of *citrus sinensis* peels on flaky tail mouse model for anti-psoriatic activity. **Methods:** flaky tail test using Perry scientific tail model was used for the evaluation of anti-psoriatic activity. Aqueous extract and methanol extract (100mg/kg) were tested in Swiss albino mice. Epidermal thickness and percentage orthokeratotic values Parameters were studied in the mouse tail test. **Results:** The extracts from the peels of *citrus sinensis* produced significant orthokeratosis ($P<0.01$) in the flaky tail test. In epidermal thickness, a significant reduction with respect to control was observed in groups treated with flucinolone acetonide and ethanol extract. Conclusion: From the above data, the extracts of *citrus sinensis* showed significant orthokeratosis on flaky tail test. To our knowledge, this is the first report on the anti-psoriatic effect of peels of *citrus sinensis.*

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Effect of Topical Application Of 5% *Mahonia Aquifolium* (Oregon Grape) Extract Ointment In Treatment Of Psoriasis

Paper ID : 1027

A Paper Presented by: **V. Suresh Babu, V Aparna, G. Kalyani**

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Mahonia aquifolium (**Oregon grape**)5% leaf extract ointment was topically applied twice daily for 3 months by 40 psoriasis diseased patients. Patients were classified to 4 groups according to extension of psoriatic lesions on their body. The efficacy of the treatment was determined by taking some comparative considerations criteria like, cleared, marked improvement, moderate improvement, and minimal or no improvement. In 20 out of 40 patients (50%), the result was good with cleared lessions. In 10 patients (25%) there was little improvement, and in 10 patients (25%) there was no improvement. The best results were obtained in localized less extensive lesions. The effectiveness of ***Mahonia aquifolium*** (**Oregon grape**) treatment could be attributed to its vitamin A and flavonoids contents. It is a cheap, safe and effective remedy for this chronic disabling skin disorder.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Method Development And Validation Of Simultaneous Estimation Of Artemether And Lumefantrine By RP-HPLC

Paper ID : 1028

A Paper Presented by:V. Suresh Babu, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present research was aimed to develop and validate a novel method for the simultaneous estimation of Antimalarial drugs, Artemether and Lumefantrine using reverse phase HPLC. Chromatographic estimations were performed employing several trials and an optimized method was developed. A Kromasil Eternity C18 column made up of Stainless Steel has been used with dimensions 250mm x 4.6mm x 5 µm. Separation was performed in an Isocratic mode with Mobile phase consisting of Ammonium buffer solution: Methanol (50:50) ratio. A UV-Detector is used and the wavelength was set at 246 nm with flow rate of 1.0 mL/min and runtime of 8 minutes. The method was validated for Linearity, Accuracy, Precision, Ruggedness and Stability parameters. All validation parameters were observed to be under the acceptance limits and the method was found to be simple, accurate, precise for simultaneous estimation of drugs in pharmaceutical dosage forms.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation of anti-arthritic activitv of borassus flabellifer l., by freund's complete adjuvant induced polyarthritis

Paper ID : 1029

A Paper Presented by:V. Suresh Babu, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The prime focus of the present work was to evaluate anti-arthritic potential of ethylacetate extract of bark of *Borassus flabellifer* L (Arecaceae), by Freund's Complete Adjuvant (FCA) induced polyarthritis. The phytochemical analysis of the extract showed the presence of sterols, terpenoids, flavonoids, alkaloids and phenols. Arthritis was induced by injecting 0.1 ml of FCA into the subplantar region of the right hind paw of rats. Plethysmometer was used to measure the Paw volume by dislocation of the water column. Animals received diclofenac sodium as standard, extracts at dose of 50, 100 and 150 mg/kg B.W and vehicle (1% CMC) orally depending upon their respective grouping for 21 consecutive days from the day of FCA injection. On 21st day, rats were anaesthetized using diethyl ether and oedematous tissues were isolated from the injected hind paw and were assayed for hydroxyproline, hexosamine and total protein content. The extract showed dose-dependent percentage inhibition of arthritis (70.62%, 80.98% and 87.52%) when compared to standard (95.43%) after 21 days ($P<0.01$). The results concluded that ethylacetate extract of *B. flabellifer* L., possess a significant antiarthritic potential against adjuvant induced arthritis.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Stability Indicating Method Development And Validation Of Dutasteride By Rp-Hplc In Pharmaceutical Dosage Form

Paper ID : 1030

A Paper Presented by:V. Suresh Babu, V Aparna, G. Kalyani

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

A simple, precise and stability indicating reverse phase liquid chromatographic method was developed and validated for the determination of dutasteride in bulk drug and pharmaceutical dosage form. Chromatographic separation has been achieved using an Ascentis Express C18 column (250 mm × 4.6 mm, 5 µm) as the stationary phase, with an isocratic program of mobile phase at 60:40 proportions of water (pH adjusted to 3.5 with formic acid) and methanol at a flow rate of 1.0 ml/min, detection was performed at 248 nm using an UV detector. The optimized method was validated as per International Conference on Harmonization guidelines. Regression analysis showed good correlation (R^2 = 0.9996) with a linear curve at concentration range of 3-50 µg/ml. Dutasteride was subjected to forced degradation studies and the method was specific as it was free from degradants. The percentage recovery was in the range of 99.90–101.02%, for dutasteride from the pharmaceutical dosage form. The developed method showed accurate, precise, robust results with an LOD and LOQ of 0.53 and 1.68 µg/ml respectively.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Studies on nootropic activity of methanolic extract of fruit of aegle marmelos

Paper ID : 1031

A Paper Presented by:V. Suresh Babu, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present study explores the protective effect of methanolic extract of *Aegle marmelos L.* fruits on Scopalamine induced amnesia. The spatial memory was assessed by Morris water maze, and the whole brain total acetylcholinesterase (AchE), malondialdehyde,Superoxide dismutase was also estimated. The results of the study suggest that methanolic extract of *Aegle marmelos L.* fruit significantly reversed the Scopalamine induced spatial memory deficits and also inhibits the increase in AchE activity by Scopalamine. Results showing the amount of malondialdehyde, Superoxide dismutase, Transfer Latency time periods and Acetylcholine esterase levels found in the normal and extract treated groups. The methanolic extract of fruit of *Aegle marmelos L.* has protected rats from Scopalamine induced amnesia
Key Words: *Aegle marmelos L.*, Amnesia, Acetylcholinesterase, Malondialdehyde, Superoxide dismutase.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Novel Analytical Method Development And Validation For Simultaneous Estimation Of Didanosine And Stavudine

Paper ID : 1032

A Paper Presented by:V. Suresh Babu, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

A simple, precise and economical RP-HPLC method has been developed for the simultaneous estimation of didanosine and stavudine in pharmaceutical dosage form. The method was carried out on a Monolithic C18 (100 X 4.6 mm, 5 µm) column with a mobile phase consisting of 0.05 M phosphate buffer adjusted to pH 7.4 : methanol (70:30) at a flow rate of 1.0 ml/min. Detection was carried out at 246 nm. The retention time of didanosine and stavudine was 4.23 and 5.17 min, respectively. The developed method was validated for all parameters as per ICH guidelines. The method showed linearity at range of 0-40µg/mL and 0-20µg/mL and correlation coefficient of 0.99939 and 0.99968 respectively. The results suggested the developed method was precise, accurate, linear, robust and specific.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Novel Method Development And Validation For Simlutaneous Estimation Of Abacavir And Lamivudine In Bulk And Tablet Dosage Forms

Paper ID : 1033

A Paper Presented by:V. Suresh Babu, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The prime focus was to develop and validate a simple, accurate and novel RP-HPLC method for simultaneous estimation of Abacavir and Lamivudine in bulk and tablet dosage forms using UV detector. The chromatographic separation was carried out using Atlantis C18 column (250 mm × 4.6 mm, 5 µm, Waters Corporation, Milford, USA), run in isocratic mode with mobile phase comprising acetonitrile: water (0.05% formic acid with pH 3) 85:15 v/v, injection volume of 20 µl, with a flow rate of 1 ml/min detected at 240 nm. The retention times of Abacavir and Lamivudine were found to be 3.2 min and 5.3 min, respectively. The developed method was validated for the parameters like linearity, precision, accuracy, LOD, LOQ, range, robustness and was found to be within the limits as specified by the ICH guidelines. The proposed method was found to be economical and suitable for simultaneous determination of Abacavir and Lamivudine which can be applied for routine quality control analysis.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

RP-HPLC Method Development And Validation Of Dexlansoprazole In Bulk And Pharmaceutical Dosage Forms

Paper ID : 1034

A Paper Presented by:V. Suresh Babu, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

A sensitive, accurate and precise method has been developed and validated for the estimation of Dexlansoprazole by RP-HPLC and validates as per ICH guidelines. Isocratic separation was achieved using Methanol and water as mobile phase in the ration of 80:20 with flow rate 0.8 mL/min on Hypersil-BDS, C18 column (250 x 4.6 mm, 5µ), detected at 250 nm using PDA detector with a run time of 10 minutes. The developed method was validated for various parameters as per ICH guidelines. The method showed linear, specific, accurate, precise, rugged, robust and stability indicating for the determination of Dexlansoprazole in bulk and pharmaceutical dosage forms. The percentage recovery of the developed method was found to be 99.68 to 100.95%. The developed and validated can hence be applied in determination of drug in routine control analysis.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Rapid RP-HPLC Method Development And Validation For The Estimation Of Deflazacort In Bulk And Pharmaceutical Dosage Forms

Paper ID : 1035

A Paper Presented by:V. Suresh Babu, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The objective of the present study was to develop a simple, precise, accurate and specific method for the estimation of Deflazacort (DFZ) using RP-HPLC. Chromatographic separation was carried out on Zorbax Eclipse XDB C18 column in isocratic elution mode using methanol-water in the ratio 90:10, with detection at 248 nm and a flow rate of 1.0 mL / min. The optimized method showed linear (r^2 > 0.9998), precise (RSD < 2%) and accurate with recovery at 99.35% - 100.85%. The results indicated that the developed HPLC method was simple, linear, precise and accurate. The developed method can be suggested to be used in routine quality control analysis.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

RP-HPLC Method Development And Validation For Simultaneous Estimation Of Terazosin And Doxazosin In Bulk And Pharmaceutical Dosage Forms

Paper ID : 1036

A Paper Presented by:V. Suresh Babu, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The current study was an attempt to develop and validate a simple, precise and accurate RP-HPLC method for the simultaneous estimation of Terazosin and Doxazosin in bulk and pharmaceutical dosage forms. The optimized parameters for the chromatographic analysis were Ascentis C18 column with dimensions 250 × 4.6 mm, 5.0 µm, mobile phase mixture of acetonitrile and phosphate buffer with pH adjusted to 7.2 in the proportion 75: 25 with a flow rate of 0.8 mL/min detected at 248 nm. Peaks showed good resolution at retention time of 2.8 min and 5.2 min for Terazocin and Doxazosin respectively. Regression analysis data showed a good linear relationship with a regression coefficient of 0.999 in the concentration range of 5-250 µg/ml. The accuracy, sensitivity, short retention time, good resolution and linear results indicated that the developed method can be used in routine analysis.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

In-Vitro Protective Aptitude Of Spathodea Campanulata Against Mycobacterium Tuberculosis H37rv Strain

Paper ID : 1037

A Paper Presented by:V. Suresh Babu, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Tuberculosis (TB) is a chronic pandemic disease, predominantly caused by *Mycobacterium tuberculosis* primarily affecting lungs. The prime focus of the present study is to screen anti-tubercular activity for leaf extracts of *Spathodea campanulata* against *Mycobacterium tuberculosis* H37Rv strain using microplate alamar blue assay. Phytochemical screening resulted the presence of phenolic, flavonoid and alkaloid compounds which might be responsible for the protective aptitude against TB. The activity was evaluated by lowest concentration of sample that prevents colour change to pink and was documented within MIC range of 0.8 to 100µg/ml. Hexane, ethylacetate and methanol extracts were screened, which showed minimum inhibitory concentrations of 25, 12.5 and 6.25µg/ml respectively when compared to the standard drugs which proved significant protective effect.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Drug Carriers For Anti-Diabetics: A Focus On Various Novel Strategies

Paper ID : 1038

A Paper Presented by:V. Suresh Babu, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Almost 200 million people worldwide are found to be affected by Diabetes mellitus (DM). DM is a metabolic disorder which occurs due to reduced insulin action and/or insulin secretion in the body. Reduced or inactive insulin results in imbalanced food metabolism. With the progression of disease, pathological changes like nephropathy, retinopathy and cardiovascular complications start occurring in the body. DM is mainly categorized into 2 types: type 1 DM and type 2 DM. Type 1 is generally treated through insulin replacement therapy. Type 2 DM is treated with oral hypoglycemics. Oral hypoglycemics are classified into 5 types: sulfonylureas, biguanides, α-glucosidase inhibitors, meglitinide analogues and thiazolidinediones. Plants are a potential source of anti-diabetic drugs. The ethno botanical information reports that about 800 plants may possess anti-diabetic potential. A wide array of plant derived active principles representing numerous chemical compounds like flavonoids, alkaloids, glycosides, polysaccharides, peptidoglycons, hypoglycons, guanidine, steroids, carbohydrates, glycopeptides, terpenoids and amino acids has demonstrated activity consistent with their possible use in the treatment of non-insulin dependent DM. Conventional dosage forms of most of these drugs bear some drawbacks such as frequent dosing, short half live, and low bioavailability. Therefore, to alleviate the drawbacks associated with conventional dosage forms, efforts have been made in the area of novel and controlled drug delivery systems for various anti-diabetic drugs.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Green Synthesis Of Nanoparticles: An Innovation For Novel Drug Delivery

Paper ID : 1039

A Paper Presented by:V. Suresh Babu, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Green synthesis of nanoparticles is the emerging field of research for the clean, viable and ecofriendly synthesis of nanoparticles. Many physical and chemical methods that are being used extensively for the nanoparticle synthesis are associated with the major disadvantages like high energy consumption, production of toxic byproducts, rapid reduction rates of produced nanoparticles triggering the free radical reactions. More over these methods are not sustainable to meet the continuously emerging demand for the nanoparticulates in drug delivery. As an alternative approach green synthesis methods incorporate the principles of green chemistry to develop sustainable and biocompatible nanopartcles. These methods involve the biologically secreted proteins, enzymes, amino acids, peptides and organic acids which solely act as reducing and stabilizing agents for rapid and nonhazardous nanoparticle production. The nanoparticles produced by these methods had shown diverse physical, chemical, optical and thermodynamic properties at nano regime. They have shown a greater efficacy for anticancer antimalarial, antiarthritic therapies than the nanopaticulates prepared from conventional physical and chemical methods. There is major need for the uplift of these methods for the sustainable nanoparticle production.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Dual Release Bilayered Tablets: An Overview

Paper ID : 1040

A Paper Presented by:V. Suresh Babu, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The design of bilayer tablets are suitable for sequential release of two drugs in which one layer is immediate release layer and the second layer as sustained release layer. Bilayer tablets have been developed to achieve immediate and sustained delivery of different drugs with pre-defined release profiles. In the last decade, interested in developing a combination of two or more active pharmaceutical ingredients in a single fixed dosage form has increased in the pharmaceutical industry, promoting patient convenience and compliance. Bilayer tablet is suitable for sequential release of two drugs in combination or to incorporate two incompatible substances in same tablet. Techniques needed to reduce the common bilayer problems, such as layer-separation, insufficient hardness, inaccurate individual layer weight control, cross-contamination between the layers, reduced yield.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Liquisolid Technique: A Novel Approach For Dosage Form Design

Paper ID : 1041

A Paper Presented by:**R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy**
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Most of the newly developed drug candidates are lipophilic and poorly water-soluble. Enhancing the dissolution and bioavailability of these drugs is a major challenge for the pharmaceutical industry. Preparation of liquisolid systems (LSS) is for improving solubility, dissolution and bioavailability of such drugs. The increased bioavailability is due to either increased surface area of drug available for release, an increased aqueous solubility of the drug, or improved wettability of the drug particles. In addition to the enhancement of dissolution rate of poorly water-soluble drugs, this technique is also a fairly new technique to effectively retard drug release. Liquisolid technique is based on the conversion of the drug in liquid state into an apparently dry, non-adherent, free flowing and compressible powder by using suitable carrier and coating materials. It is a novel and advanced approach to tackle many issues related to the poor bioavailability of the drugs. Overall, liquisolid technique is a newly developed promising tool for the enhancement of drug dissolution and sustaining the drug release. Its potential applications in the field of pharmacy are still to be broadened.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Mouth Dissolving Tablets: An Overview

Paper ID : 1042

A Paper Presented by:**R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy**
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Mouth dissolving tablets are the solid unit dosage forms, which disintegrate or dissolve rapidly to release the drug as soon as they come in contact with saliva, thus obviating the need for water during administration. Therefore these dosage forms have lured the market for a certain section of the parent population which include bedridden, psychic, geriatric and paediatric patients. Mouth dissolving tablets are known by various names such as fast melting, fast dissolving, oral disintegrating, oro-dispersible tablets, rapid dissolving, rapid melts, quick disintegrating, and porous tablets. Mouth dissolving drug delivery systems have acquired an important position in the market by overcoming previously encountered administration problems and contributing to extension of patent life. Mouth dissolving tablets offer several advantages over other dosage forms like effervescent tablets, dry syrups and chewing gums or tablets which are commonly used to enhance patient compliance. Administering effervescent tablets or granules and dry syrups involve unavoidable preparation that includes the intake of water. Elderly patients cannot chew large pieces of tablets or gums and sometimes experience the bitter or unpleasant taste of the drug in the dosage form if the taste masking coat ruptures during mastication.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Nanotechnology: Modern Method For Solubility Enhancement

Paper ID : 1043

A Paper Presented by:R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Today it is widely recognized that up to 60% of new drugs in the developmental stage are water insoluble and this presents a major challenge to the pharmaceutical industry. 40% of the new drug candidates under FDA review. Considerable efforts have been directed at increasing the solubility of these hydrophobic compounds by creating nanoparticles formulations with high surface- to-volume ratios. Conventional techniques to form nanoparticles include slow anti-solvent addition followed by dialysis, solvent evaporation and emulsification followed by solvent stripping. Rapid precipitation from an organic solvent into an aqueous anti-solvent has proven an attractive processing scheme for laboratory studies as well as for large scale operations. Nanoparticles are solid colloidal particles composed of natural, synthetic, or semi synthetic polymers. The size ranges from 1 nm to 1000 nm. The drugs or other molecules may be dissolved into the nanoparticles, entrapped, encapsulated, and/or adsorbed or attached. Hydrophilic drugs, hydrophobic drugs, proteins, vaccines, and biological macromolecules using nanoparticles as carriers. Nanoparticles have a further advantage over larger microparticles, because they are better suited for intravenous delivery. Nanoparticles have been highly exploited for controlled drug release.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Orodispersible Tablets: A New Trend In Drug Delivery

Paper ID : 1044

A Paper Presented by:
R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Drug delivery through oral route is the most common and preferred route of drug administration both for solid and liquid dosage forms. Solid dosage forms are popular because of the ease of administration, accurate dosage, self-medication, pain avoidance, and most importantly the patient compliance. Orodispersible tablets are also called as orally disintegrating tablets, mouth-dissolving tablets, rapid-dissolving tablets, fast-disintegrating tablets, fast-dissolving tablets. It offers several advantages with respect to its stability, administration without water, accurate dosing, easy manufacturing, small packaging size, and handling. There are several methods (Molding methods, Compaction methods, Spray-drying method, Freeze-drying method, Melt granulation, Phase transition process, Sublimation, Effervescent method) for the preparation of orodispersible tablets but the prepared products vary in their properties depending on the method of preparation. Hardness/crushing strength, friability, wetting time, moisture-uptake studies, disintegration test, dissolution test are the evalution parameter of orodispersible tablets. Thus, in near future, it is expected that this delivery system will get much importance as that of conventional delivery.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Novel Approaches For Drugs Targeting To Brain

Paper ID : 1045

A Paper Presented by:R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Effective non-invasive treatment of neurological diseases is often limited by the poor access of therapeutic agents into the central nervous system (CNS). The majority of drugs and biotechnological agents do not readily permeate into brain parenchyma due to the presence of two anatomical and biochemical dynamic barriers: the blood–brain barrier (BBB) and blood–cerebrospinal fluid barrier (BCSFB). Therefore, different challenges facing CNS drug development is the availability of effective brain targeting technology. The present review enlightens about several novel approaches including nanotechnology based approach like nanoparticles, liposomes, antibody mediated delivery approach and application of genomics in brain drug targeting that would give an insight to the researchers, academia and industrialists.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Recent Approaches In Herbal Drug Standardization

Paper ID : 1046

A Paper Presented by:R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The use of herbal drug for the prevention & treatment of various health ailments has been in practice from time immemorial. Standardization is an important step for the establishment of a consistent biological activity, a consistent chemical profile, or simply a quality assurance program for production and manufacturing of herbal drugs. WHO specific guidelines for the assessment of the safety, efficacy and quality of herbal medicines as a prerequisite for global harmonization. The lack of standardization of herbal drugs would be a serious problem. 96% of ingredients are not standardized & it may affect the products solubility, bioavailability, stability, efficacy, & toxicity. Newer and advanced methods are available for the standardization of herbal drugs like fluorescence quenching, biological analysis, proximate analysis (gravimetric),chromatographic analysis (TLC, HPLC, HPTLC, LC-MS, GC-MS), finger print profiling using FTIR & PCA, hyphenation procedure like HPLC/MS, HRGC/MS. Capillary electrophoresis and polarographic techniques for standardization of herbal drugs is also used. DNA based molecular marker and SCAR marker is used for distinguishing adulterants. It is recommended that various government agencies should follow a more universal approach to herbal quality by adopting the WHO guidelines and also developing monographs using the various quality parameters.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Recent Approaches In Herbal Drug Standardization

Paper ID : 1047

A Paper Presented by:**R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy**
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The use of herbal drug for the prevention & treatment of various health ailments has been in practice from time immemorial. Standardization is an important step for the establishment of a consistent biological activity, a consistent chemical profile, or simply a quality assurance program for production and manufacturing of herbal drugs. WHO specific guidelines for the assessment of the safety, efficacy and quality of herbal medicines as a prerequisite for global harmonization. The lack of standardization of herbal drugs would be a serious problem. 96% of ingredients are not standardized & it may affect the products solubility, bioavailability, stability, efficacy, & toxicity. Newer and advanced methods are available for the standardization of herbal drugs like fluorescence quenching, biological analysis, proximate analysis (gravimetric),chromatographic analysis (TLC, HPLC, HPTLC, LC-MS, GC-MS), finger print profiling using FTIR & PCA, hyphenation procedure like HPLC/MS, HRGC/MS. Capillary electrophoresis and polarographic techniques for standardization of herbal drugs is also used. DNA based molecular marker and SCAR marker is used for distinguishing adulterants. It is recommended that various government agencies should follow a more universal approach to herbal quality by adopting the WHO guidelines and also developing monographs using the various quality parameters.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Influence Of Different Polymer Viscosity Grade On Drug Release

Paper ID : 1048

A Paper Presented by:R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Polymer physicochemical parameters are one of the most important criteria that influencing the drug behaviour. Different viscosity grade polymers to modify the release of drug from solid dosage form. These polymers are hydrophilic in nature, can affect the dissolution behaviour and transport properties of drug molecules by an increase in solution viscosity. Water soluble or hydrophilic polymer are widely used in pharmaceutical preparation and drug products as suspending agent, surfactants, emulsifying agents, binding agents in tablets, thickening or viscosity–enhancing agents in liquid dosage forms, film coating agent. Polymers represent an important constituent of pharmaceutical dosage forms. Indeed it is accepted that the formulation and clinical performance of pharmaceutical dosage forms. A wide range of polymers like HPMC, PVP etc. are used as components of pharmaceutical formulations. Selection of different polymer grades to determine the swelling index and to determine the influence of viscosity on drug release. So it is necessary to understand physicochemical behaviour of polymers.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Traditional Medicine (Ayurveda) – Inspired Approaches To Drug Discovery

Paper ID : 1049

A Paper Presented by:R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

.

Ayurveda is an Indian traditional system of medicine it was originated in ancient india many thousand years ago. The origin, development and practice of ayurveda has many dimentions and complex theories based on religion, faith and ancient vedic science. Ayurveda is one of the official system of medicine in India and it is also widely practiced in many other countries. Considerable research on Pharmacognosy, Photochemistry, Pharmacology and Clinical therapeutics has been carried out on ayurvedic medicinal plants. Many pharmaceutical companies changed their strategies towards natural product drug discovery and it is important to follow systems biological applications to facilitate the process. Number of drugs are entered the International Pharmacopoeia through the study of ethno pharmacology and traditional medicine. For ayurveda and other traditional medicines newer guidelines of standardization, manufacture and quality control are required. Drug discovery strategies based on natural products and traditional medicines are the attractive options. Drug discovery and development need not always be restricted to new molecular entities. Traditional knowledge give an idea for drug development can fallow reverse pharmacology approach and reduce the time and cost of process are expected to takes place mainly from innovation in drug target elucidation and lead structure discovery. Powerful new technologies such as automated separation techniques, high- throughput screening and combinational chemistry are revolutionizing drug discovery. Traditional knowledge can offer smart strategy for new drug candidates to facilitate discovery process and also for the development of rational synergistic botanical formulations.

Key Words: Ayurveda, Drug discovery, Reverse Pharmacology, Standardization, High-throughput screening.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Hepatoprotective activity of *Psidium guajava* Linn. unripe fruit peel extract

Paper ID : 1050

A Paper Presented by:R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present study was aimed to evaluate the hepatoprotective activity of *P. guajava* unripe fruit peel extracts in acute experimentally induced liver injury by paracetamol, carbon tetra chloride and chronic liver damage induced by carbon tetrachloride. The effects observed was compared with silymarin as standard hepatoprotective agent. In the acute liver damage induced by different hepatotoxins, *P. guajava* fruit extracts (200 and 400mg/kg, po) significantly reduced the serum levels of aspartate aminotransferase, alanine aminotransferase, alkaline phosphatase and bilirubin. The higher dose of the extract (400 mg/kg, po) prevented the increase in liver weight when compared to hepatoxin treated control, while the lower dose was ineffective in carbon tetra chloride induced liver injury but it showed positive result in paracetamol induced liver damage. The results for chronic liver injury induced by carbon tetrachloride, the higher dose (400 mg/kg, po) of *P. guajava* leaf extract was found to be more effective than the lower dose (200 mg/kg, po). Histological examination of the liver tissues supported the hepatoprotection. It is concluded that the aqueous extract of unripe fruit peel of guava plant possesses good hepatoprotective activity.

Keywords: Acute liver damage, Chronic liver damage, Paracetamol,Carbon tetrachloride.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation of anti ulcer activity of *Terminalia belerica* fruit extracts

Paper ID : 1051

A Paper Presented by:R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The antiulcer activity of ethanolic extract of *Terminalia belerica fruits* (Combretaceae) was carried out by using aspirin induced, cold stress restraint and pylorus ligated ulcer in rats. The ethanolic extract (100,200,400 mg/kg, p.o.) are significantly suppressed the peptic ulcer induced by aspirin. The extract at a dose of 400 mg/kg showed, good antiulcer activity hence, this dose was selected for further evaluation of antiulcer studies. The extract (400 mg/kg) showed significant ($p<0.05$) reduction in gastric volume, free acidity, total acidity, ulcer index, protein and pepsin content and increase in mucus content in pylorus ligated rats as compared to control. Treatment with *Terminalia belerica* ethanolic extract further provided significant antiulcer protection against cold stress restraint model. These results suggested that the ethanolic extract of *Terminalia belerica.*

KEYWORDS: *Terminalia belerica*, aspirin induced, cold stress restained, pylorus ligation, antiulcer.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

In-vitro Anti-Inflammatory screening on methanolic fruit pulp and leaf exatracts of *Limonia Acidissima* by HRBC (Human Red Blood Cell) membrane stabilization model

Paper ID : 1052

A Paper Presented by:R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Many herbal remedies have been employed in various medical systems for the treatment and management of different diseases. The plant *Limonia acidissima* is belong to the family Rutaceae (Citrus family). The Common names in English include wood-apple, elephant-apple, monkey fruit, curd fruit and Kath bel. This plant is prescribed as a traditional medicine for the treatment of various ailments like adaptogenic activity leucorrhoea, dyspepsia, jaundice and hepatoprotectant, Leaves, barks, roots and fruit pulp are all used against snakebite. Fruits and leafs of the plant was identified the phytoconstituents by several workers those include coumarins alkaloids, steroids and flavonoids. The unripe fruits contain Stigmasterol. Root bark yielded Osthenol, Geranyl umbelliferone, Marmin, Marmesin, Aurapten, Bergapten, Isopimpinellin, Fern oil. In the present study leafs and Unriped Fruits of *Limonia acidissima* are extracted with Methanol, the extract was screened for anti-inflammatory activity by HRBC (Human Red Blood Cell) membrane stabilization model. Methanolic extract of *Limonia acidissima* fruits and leafs are showed significant Anti inflammatory activity when compared to the standard diclofenac sodium. The percentage of stabilization was found to be 65.33%, % and 63%,67.33% at concentration of 1000 µg/ml of *Limonia acidissima* Methanol extract and standard respectively, the results suggest that the methanolic extract of *Limonia acidissima* posses anti inflammatory activity.

Key Words: In vitro Anti inflammatory activity, HRBC membrane stabilization, % stabilization, Limonia acidissima.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation of Nephroprotective activityof *Hibiscus rosasinensis* leaf extracts against gentamicicn induced nephrotoxicity in rats

Paper ID : 1053

A Paper Presented by:R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present work is aimed to evaluate the nephroprotective activity of *Hibiscus rosasinensis* leaf extracts against gentamicin induced nephrotoxicity and renal dysfunction. Wistar rats are divided into four groups (n=6). Control group rats recieved normal saline through i.p route and 0.5% carboxymethyl cellulose 0.5% per oral route for 8 days. Nephrotoxicity was induced by administering Gentamicin 100 mg/kg through oral route for 8 days. And were treated with Hibiscus rosasinensis leaf extract 100mg,200mg/kg through oral route for 8 days. Plasma and urine was examined for urea and creatinine and also measured the parameters like kidney weigh, blood urea, urine volume histopathological examination. It was observed that the gentamicine significantly increased the Plasma and urine urea and creatinine, kidney weigh, blood urea and decersed the urine volume. The treatment groups are significantly decreed the Plasma and urine urea and creatinine, blood urea.the histopathological observations are correlated with the biochemical observations.

Key Words: *Hibiscus rosasinensis,* Gentamicin,Nephrotoxicity,Carboxy methyl cellulose, creatinine.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Hepatoprotective activity of fruit pulp extract of *Litchi Chinensis Sonner* on carbon tetrachloride induced Hepatotoxicity in Albino rats

Paper ID : 1054

A Paper Presented by:R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present study was aimed to evaluate aqueous and alcoholic extract of fruit pulp of Litchi chinensis for hepatoprotective activity on carbon tetrachloride induced hepatotoxicity in rats. Fruit pulp of *Litchi chinensis* was pulverized, first batch was extracted with alcohol (90% v/v) and second batch was extracted with distilled water. Both the extracts were concentrated and dried separately under vacuum. Extracts were screened for hepatoprotective activity using albino rats (250-300gms) of either sex. Control group was treated with normal saline. Hepatotoxicity was induced by administering carbon tetrachloride, LIV-52 a marketed product was taken as standard and other groups were treated with alcoholic and aqueous extracts. After nine days the serum was analyzed for Serum Glutamate Pyruvate Transaminase (SGPT), Serum Glutamate Oxalate Transaminase (SGOT), Alkaline Phosphatase (ALP) and serum bilirubin. Livers were isolated, weighed and subjected for histopathological studies. Results: Carbon tetrachloride administration in rats elevated the level of SGPT, SGOT, ALP and bilirubin. Administration of LIV-52, alcoholic and aqueous extract significantly prevented this increase. Aqueous extract was found to be more effective than the alcoholic extract. Histopathological studies also confirmed the above investigation. Both alcoholic and aqueous extract of fruit pulp of *Lichi chinensis* has shown significant ($p<0.05$) hepatoprotective activity in carbon tetrachloride induced hepatotoxicity and aqueous extract is found to be more effective than the alcoholic extract.

Key Words: *Litchi chinensis*, hepatoprotective activity,carbon tetrachloride,SGOT,SGPT,ALP.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

"Phytochemical Screening And Evaluation Of Antimicrobial Activity Of Aqueous Leaf Extract Of *Santalum Album* Linn"

Paper ID : 1055

A Paper Presented by:R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Santalum album Linn is one of the important medicinal plants belonging to the family Santalaceae. Ayurveda and Unani medicinal systems use it for the treatment of several ailments. Santalum album Linn has Anti pyretic, Anti helmintic, Anti microbial, Hepato protective and Anti cancer activities. As per World Health Organization many people are suffering from microbial infections. The present study was designed to evaluate the anti microbial activity of *Santalum album*. The preliminary Phyto chemical studies determine the various secondary Metabolites like Carbohydrates, Glycosides, Alkaloids, Phenols and Tannins are present. These aqueous extract was screened for their antimicrobial activity agaainst *B.Subtilis* pathogen bacteria by agar cup-plate method. These aqueous extract shows significant activity against at 10, 20 and 40µgm/ml. The Activity Index is 0.21, 0.45, 0.86 (*B. subtilis*) and compared with a standard Drug Ofloxacin. This study gives the way for further studies to elucidate the other properties of *Santalum album*.

Key Words: *Santalum album,* Anti microbial activity, Cup-plate method , Ofloxacin, *B. Subtilis*

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation of anti diabetic activity of Terminalia chebula fruits on streptozotocin induced Diabetic Rats

Paper ID - 1056

A Paper Presented by:R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present study was undertaken for evaluation of anti-diabetic activity of *Terminalia chebula* (*T. chebula*) fruits on streptozotocin (STZ)-induced experimental diabetes in rats. The ethanolic extract of the fruits (200 mg/kg body weight/rat/day)are administered orally for 30 days the extract significantly reduced the blood glucose,and glycosylated hemoglobin levels of blood in diabetic rats. Plasma insulin levels are determined that reveles that the extracts shows the insulin stimulating action. Also observed that the carbohydrate metabolising enzymes levels are normalized after 30 days treatment with the extracts. the pathological abnormalities were normalized after treatment with *T. chebula* extract.The efficacy of the fruit extract was compared with glibenclamide, a well known hypoglycemic drug.

Key Words: Diabetes, *Terminalia chebula*, Ethanolic extract, Blood glucose levels, Glycosylated hemoglobin.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

A study on evaluation of *In-vitro* Anthelmintic activity of methanol extract of *Teprosia Purpurea. Linn*

Paper ID - 1057

A Paper Presented by:R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Many herbal remedies have been employed in various medical systems for the treatment and management of different diseases. The plant *Tephrosia purpurea* (Fabaceae) has been used in different system of traditional medication for the treatment of diseases and ailments of human beings. It is reported to contain various flavonoides, alkaloids, steroids, phenolic compounds. It has been reported as antibacterial, anticancer, antioxidant, antiulcer, hepatoprotective, immunomodulatory, free radical scavenging, antileishmanial, antimicrobial and wound healing activities. In the present study areal parts of *Tephrosia purpurea* are extracted with Methanol, the extract was screened for anthelmintic activity by method of Mali. Results reveled that the Methanolic extract of *Tephrosia purpurea* Stem possessed dose dependent anthelmentic activity when compared with the standard drug Albendazole on earthworm. The time required for causing paralysis (P) in case of Methanolic extract of stem is 54min and death (D) in 75 min; Methanolic extract of leaf is 74min and death (D) in 105 min, while aqueous extract showed P and D in 54 & 82, respectively. Albendazole showed 21 & 38 in for the same observations.
Keywords: *Tephrosia purpurea*, flavonoides, Methanolic extract, Albendazole, Mali

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Anticonvulsant activity of fruit and leaf extract of *Emblica Officinalis* against Strychnine induced convulsions in Albino Mice

Paper ID - 1058

A Paper Presented by:R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Epilepsy is the term used for a group of disorders characterized by recurrent spontaneous seizures that apparently result from complex processes involving several neurotransmitter systems such as glutamainergic, cholinergic, and gabaergic system. Seizures can arise from virtually any cerebral pathology that increases the excitability of brain tissue. The etiologies can be divided into genetic and acquired brain lesions. *Emblica officinalis* is plant and which is well known fruit and it is called as Usiri or usirikai (Telugu), amalika (Sanskrit), aamla (Hindi), aamla (Gujarati), aavalaa (Marathi), amloki (Bengali), Aula (Punjabi), nellikka (Malayalam), nellikkai (Tamil and Kannada). The present study is aimed to evaluate the anticonvulsant activity of Fruit and leaf extracts of *Emblica officinalis* by Strychnine Induced Convulsions in Mice Model. Here the animals are divided into Nine groups Phenytoin sodium 40mg/kg *p.o* is used for standard group and test groups received low dose 200mg/kg p.o ,medium dose 400mg/kg p.o, high dose 600mg/kg p.o of Fruit and leaf extracts respectively. The results demonstrated that the *Emblica officinalis* fruit and leaf extracts (200, 400 & 600 mg/kg) showed significant anticonvulsant activity.

Key Words: *Emblica officinalis*, Epilepsy, Strychnine, anticonvulsant activity

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Ameliorative Effect of Ferulic acid on Scopolamine-induced Dementia in Rats

Paper ID - 1059

A Paper Presented by:R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

AIM: This study aims to elucidate the possible ameliorative effect of Ferulic acid on scopolamine-induced dementia using the object recognition test (ORT) in rats. METHODS: The study was extended to demonstrate the role of cholinergic activity, oxidative stress, neuroinflammation, brain neurotransmitters and histopathological changes in the anti-amnestic effect of Ferulic acid in demented rats. Wistar rats were pre-treated with Ferulic acid (200, 400, 800 mg/kg) or donepezil (10 mg/kg) orally for 14 consecutive days. Dementia was induced after the last drug administration by a single intraperitoneal dose of scopolamine (16 mg/kg). Then behavioural, biochemical, histopathological, and immunohistochemical analyses were then performed. RESULTS: Rats pre-treated with Ferulic acid counteracted scopolamine-induced non-spatial working memory impairment in the ORT and decreased acetylcholinesterase (AChE) activity, reduced malondialdehyde (MDA), elevated reduced glutathione (GSH), restored gamma-aminobutyric acid (GABA) and dopamine (DA) contents in the cortical and hippocampal brain homogenates. Ferulic acid reversed scopolamine-induced histopathological changes. Immunohistochemical analysis showed that Ferulic acid mitigated protein expression of the glial fibrillary acidic protein (GFAP) and nuclear factor kappa-B (NF-κB) in the brain cortex and hippocampus. All these effects of Ferulic acid were similar to that of the standard anti-amnestic drug, donepezil. CONCLUSION: This study reveals that the ameliorative effect of ferulic acid on scopolamine-induced dementia in rats using the ORT maybe in part mediated by, enhancement of cholinergic activity, anti-oxidant and antiinflammatory activities as well as mitigation in brain neurotransmitters and histopathological changes.

Keywords: ferulic acid; Scopolamine; Object recognition test; Dementia; Donepezil; Rats

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Phytochemistry, anti-asthmatic and antioxidant activities of *anchomanes dalzielii* leaf extract

Paper ID - 1060

A Paper Presented by:R Subhakar Raju, Ch. Himatha Reddy, A. Rajasekhar Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

To study the phytochemistry, anti-asthmatic and antioxidant activities of the aqueous leaf extract of *anchomanes dalzielii* and to verify claims of use in folk medicine. **Methods :**For anti-asthmatic activity, male and female guinea pigs with average body weight of (451.4 ± 118.1) g were divided into six groups of six animals each. Group 1 served as control (distilled water); Group 2 was administered with salbutamol (reference drug) only; Group 3 served as ovalbumin sensitized group, Group 4, 5 and 6 were treated with *anchomanes dalzielii* extract at doses of 100, 200 and 400 mg/kg, respectively. Described methods were used to test fluid viscosity, fluid volume and quantitative phytochemistry analysis. Absorbance was read using a UV–Vis spectrophotometer and results computed in percentage. Total antioxidant assays [2, 2-diphenyl-1-picrylhydrazyl (DPPH) and lipid peroxidation assay], were carried out using reported procedures. **Results:** The anti-asthmatic evaluation showed that protection from asthma of the animals in Group 6 (400 mg/kg, 32.7%) were similar to that in Group 2 (salbutamol, 33.0%). Excised trachea was free of mucus secretion in Group 5 (200 mg/kg) as was observed in the control group. Fluid volume increase in Groups 3 and 6 indicated mucus secretion. DPPH radical scavenging activity of extract was effective as ascorbic acid which served as standard at 20 μg/mL. But, the extract elicited low lipid peroxidation activity compared with the reference (tocopherol) at concentrations tested. **Conclusions :** *anchomanes dalzielii* aqueous leaf extract is safe and possesses positive anti-asthmatic and antioxidant activities as claimed by traditional herbal practitioners in Delta State.

Key Words: Anti-asthmaticAnti-oxidant,Phytochemistry, *anchomanes dalzielii*

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Effect of Vanillic acid on dexamethasone-induced insulin resistance in mice

Paper ID - 1061

A Paper Presented by:Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The whole plant of Vanillic acid is traditionally used in the treatment of diabetes. Mice were treated with prestandardised dose of dexamethasone for 22 days and effect of Vanillic acid at the doses of 100, 200 and 300 mg/kg, p.o. on plasma blood glucose level, serum triglyceride level, glucose uptake in skeletal muscle, levels of hepatic antioxidant enzymes (GSH, SOD, catalase and LPO), and body weight were observed. Vanillic acid showed significant decrease in plasma glucose and serum triglyceride levels ($p < 0.01$) at the dose of 100 and 200 mg/kg, p.o. and also stimulated glucose uptake in skeletal muscle. The levels of antioxidant enzymes GSH, SOD, and catalase were significantly increased ($p < 0.01$) and there was significant decrease ($p < 0.01$) in level of LPO. Hence it can be concluded that Vanillic acid may prove to be effective in the treatment Type-II Diabetes mellitus owing to its ability to decrease insulin resistance.

Keywords: Diabetes, dexamethasone,I nsulin,resistance,antioxidants,

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

LC-PDA-ORD Bioassay of S-(+) and R-(-) Colchicine on Rat Dried Blood Spots: Application to a Pharmacokinetic Study

Paper ID - 1062

A Paper Presented by:Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

A simple and sensitive normal phase liquid chromatographic method was developed and validated for quantification of Colchicine (COL) enantiomers on rat dried blood spots (DBS). The COL was extracted systematically from FTA spotted DBS cards using ethanol: methanol (85:15, v/v). Chromatographic separation was accomplished on Chiralcel OJ-H column using mobile phase composition of nhexane:ethanol:diethylamine (75:25:0.1, v/v). The detection by PDA detector at 245 nm and elution order by polarimeter was monitored. The effect of hematocrit on extraction of COL enantiomers from DBS was studied. The average accuracy of enantiomers of COL were found to be 99.3 % and 98.2 %, respectively. The calibration curves were found to be linear over the concentration range of 1-500 µg/mL. The developed method was used to study the pharmacokinetics of COL enantiomers in rat blood samples.
Key Words: Colchicine; anti-inflammatory agent; enantiomers; dried blood spots; cellulose tris (4-methly benzoate) on silica; hematocrit.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Anticancer activity of synthetic (±)-kusunokinin and its derivative (±)-bursehernin on human cancer cell lines

Paper ID - 1063

A Paper Presented by:Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Kusunokinin is a potent lignan compound with a several biological properties including antitrypanosomal and anticancer. In this study, (±)-kusunokinin and its derivative, (±)-bursehernin, were synthesized and investigated for their anticancer activities on cell viability, cell cycle arrest and apoptosis in cancer cell lines including breast cancer (MCF-7, MDA-MB-468 and MDA-MB-231), colon cancer (HT-29) and cholangiocarcinoma (KKU-K100, KKU-M213 and KKU-M055) cells. The result showed that (±)-kusunokinin and (±)-bursehernin represented the strongest growth inhibition against breast cancer (MCF-7) and cholangiocarcinoma (KKU-M213) cells with the IC_{50} values of 4.30 ± 0.65 μM and 3.70 ± 0.79 μM, respectively, both of which were lower than IC_{50} of normal fibroblast cells (L929). Etoposide was used as a positive control since this chemotherapeutic drug is in the lignan group same as (±)-kusunokinin. Surprisingly, etoposide showed less cytotoxicity than (±)-kusunokinin and its derivative on MCF-7, HT-29, KKU-M213 and KKU-K100. Moreover, (±)-bursehernin induced cell cycle arrest at G2/M phase, meanwhile (±)-kusunokinin tended to increased cell population at G2/M phase but did not show the significant difference compared with non-treated cells. Interestingly, protein levels related to cell proliferation pathway (topoisomerase II, STAT3, cyclin D1, and p21) were significantly decreased at 72 h. Both compounds induced apoptotic cell in time-dependent manner as confirmed by MultiCaspase assay. In conclusion, synthetic compound, (±)-kusunokinin and (±)-bursehernin, showed anticancer effects via the reduction of cell proliferation proteins and induction of apoptosis.

Keywords:Anticancer,cell lines,IC50,apoptosis.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Inhibitory effect of Quercetin on angiogenesis in a streptozotocin-induced diabetic rat model

Paper ID - 1064

A Paper Presented by:Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Background: Quercetin has been associated with the inhibition of angiogenesis, as well as the prevention of cancers and inflammatory processes. The aim of this study was to assess the efficacy of Quercetin in suppressing angiogenesis in the cultured endothelial cells of rat aortic rings. Methods: Eight-week-old male Wistar rats were randomized into five groups each with a different treatment and cell culturing paradigm: controls cultured in the absence of VEGF (vascular endothelialgrowth factor) (C), controls cultured in the presence of VEGF (C-V), controls treated with Quercetin and then cultured in media lacking VEGF (C-TC), diabetics cultured in media supplemented with VEGF (D-V)and diabetics treated with Quercetin and then cultured in media supplemented with VEGF (D-V-TC). Each group consisted of 8 animals. Diabetes was induced in by streptozotocin (STZ; 60 mg/kg body weight, IV).After 8 weeks, animals were sacrificed and their aortas were excised. Ring-shaped explants were embedded in a 96-well culture plate. Angiogenesis response was measured by counting the number of primary microtubules in each well . Results: Optic microscopy revealed that the D-V group had the highest number of micro vessels, while angiogenesis was not observed in the C or C-TC groups. The number of primary microtubules was significantly lower in the D-V-TC group compared to the D-V group ($P<0.05$). The D-V-TC group had a significantly higher number of micro vessels compared to the C-TC group ($P<0.05$). Conclusion: Quercetin attenuates angiogenesis response in steprtozotocin-induced diabetic rats.

Keywords: Quercetin, streptozotocin,diabetes,angiogenesis,endothelaial growth factor.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Effect of *Olea europaea* leaves extract on streptozotocin induced diabetes in male albino rats

Paper ID - 1065

A Paper Presented by:Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present study was aimed to evaluate the effect of olive (*Olea europaea*) leaves extract on streptozotocin (STZ)-induced diabetic male rats. The experimental rats were divided into six groups. Rats of the first group were served as normal controls. Rats of the second group were diabetic control. The third and fourth groups were diabetic rats, treated with olive leaves extract at low and high doses respectively. The fifth and sixth groups were non diabetic rats, subjected to olive leaves extract at the same doses given to the third and fourth groups respectively. The minimum of body weigh gain was noted in diabetic rats of the second group. the levels of serum glucose, insulin, total protein, albumin, triglycerides, cholesterol, low density lipoproteincholesterol (LDL-C), very low density lipoprotein cholesterol (VLDL-C), creatine kinase (CK), lactate dehydrogenase (LDH) and malondialdehyde (MDA) were significantly increased, while the levels of high density lipoprotein cholesterol (HDL-C), superoxide dismutase, (SOD) glutathione(GSH) and catalase (CAT) were statistically decreased in diabetic rats of the second group. The levels of liver insulin receptor substrate 1 (IRS1) and insulin receptor A (IRA) were significantly declined in diabetic rats of the second group. The diabetic pancreatic sections from diabetic rats of the second group showed several histopathological changes. Administration of low and high doses of olive leaves extract improved the observed physiological, molecular and histopathological alterations. Collectively, the obtained results confirmed that the protective effects of olive leaves extract are attributed to the antioxidant activities of olive leaves extract and its active constituents.

Keywords: Diabetes, Streptozotocin, Olea europaea, Blood, Liver, Antioxidant, Gene expressions, Rats

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Quercetin nanoparticles attenuates scopolamine induced spatial memory deficits and pathological damages in rat

Paper ID - 1066

A Paper Presented by:Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Quercetin is a well-known flavonoid, has low bioavailability. Quercetin nanoparticles (NQC) enhance its bioavailability. NQC were not explored for their potential therapeutic activities in Alzheimer's disease (AD). Hence, the present study was performed to evaluate the protective effect of NQC in comparison to free quercetin against scopolamine induced spatial memory impairments. NQC prepared by anti solvent precipitation method. Quercetin, NQC (30 mg/kg p.o.) and rivastigmine (2 mg/kg i.p.) as a reference drug were administered for 8 consecutive days. At the end of the treatment period memory impairments were induced by a single injection of scopolamine (20 mg/kg; i.p.). Conditioned avoidance and rectangular-maze tests were conducted 30 min thereafter then rats were sacrificed and brain homogenates were used for the estimation of glutathione (GSH), catalase and malondialdehyde (MDA) contents together with acetyl cholinesterase (AchE) activity. In addition, histopathologic studies were also performed. The size of NQC was observed below 300 nm. NQC significantly reduced the transfer latency and conditioned avoidance response compared to scopolamine treated group ($p < 0.05$). Pretreatment with NQC showed a significant ($p < 0.05$) decrease in MDA, AchE levels and increase in brain catalase and GSH levels to be similar to that observed in the rivastigmine group. In all the behavioral, biochemical and histological experiments, the rats treated with NQC showed additional distinguished results compared to quercetin group indicating that a preventive strategy against the progression of AD. This approach of quercetin nanoparticles provides the potential therapeutic application in human neurodegenerative disease in future.

Keywords: Quercetin,nanoparticles,scopolamine,dementia,antioxidants.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Protective role of *Emblica* officinalis leaf and *Cola acuminata* seed extracts against scopolamine-induced cognitive dysfunction

Paper ID - 1067

A Paper Presented by:Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The leaves of Emblica officinalis L. When chewed with *Cola acuminata* (P. Beauv.) Schott & Endl. (Sterculiaceae) seeds have memory enhancing and anti-ageing properties. This study sought to investigate the protective effect of hydroethanolic leaf extract of Emblica officinalis and *Cola acuminata* seed extract (CA) against scopolamine-induced cognitive dysfunction. Emblica officinalis or CA (50, 100 or 200 mg/kg, *p.o.*) or SM + CA (50 mg/kg, *p.o.*) was administered to rats for 3 consecutive days. One hour post-treatment on day 3, scopolamine (3 mg/kg i.p) was administered and 5 min later, the Y-maze test or Morris water maze test (MWM; days 3–7) was conducted. The rat's brains were isolated for the estimation of oxidative-nitritive stress status following the MWM task. The antioxidant capacity of Emblica officinalis and CA was also evaluated *in vitro* using the 1,1-diphenyl-2-picrylhydrazyl (DPPH), nitric oxide(NO) and ferric ion reducing power (FRAP) assays. Pretreatment of rats with SM, CA or Emblica officinalis + CA significantly ameliorated the learning and memory impairment induced with scopolamine as evidenced in Y-maze and MWM paradigms. Moreover, EO, CA or EO + CA significantly attenuated the oxidative-nitritive stress induced by scopolamine, evidenced in the decrease in malondialdehyde and nitrite levels and restoration of glutathione, catalaseand superoxide dismutase levels. Furthermore, EO and CA showed promising free radical scavenging effect against DPPH and moderate antioxidant activity in NO and FRAP tests. This study showed that *Spondias mombin* and *Cola acuminata* have significant protective effect against scopolamine-induced memory deficit that could be attributed to their antioxidant properties.
Keywords:Cognition,protective,DPPH,antioxidant,scopolamine.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Cognitive effects of *Psoralea corylifolia* against streptozotocin-induced neurodegeneration in mice

Paper ID - 1068

A Paper Presented by:Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

This study investigates the neuroprotective effect of *Psoralea corylifolia* on streptozotocin (STZ)- induced neurodegeneration in mice through behavioral and biochemical parameters. Materials and methods: The behavioral effects were determined using the Y-maze and openfield habituation memory. In biochemical parameters, acetylcholinesterase (AChE), corticosterone, tumor necrosis factor (TNF)-a, and antioxidants (superoxide dismutase (SOD), glutathione peroxidase (GPx), and catalase) were measured. Five groups of animals used were of control, negative control, and three separate groups treated with 25, 50, and 100 mg/kg of *Psoralea corylifolia* , respectively, for 28 d. Intracerebroventricular (ICV) injections of STZ were performed for all groups except control on 14th and 16th of 28 d of *Psoralea corylifolia* treatment. Results: VA improved spatial learning and memory retention by preventing oxidative stress compared with control animals. *Psoralea corylifolia* at 50 and 100 mg/kg dose significantly (p50.001) improved the habituation memory, decreased the AChE, corticosterone, TNF-a, and increased the antioxidants (p50.001). *Psoralea corylifolia* (100 mg/kg) exhibited dose-dependent effect in all parameters with p50.001 except antioxidants in which *Psoralea corylifolia* showed the significance of p50.01. Discussion and conclusion: *Psoralea corylifolia* exhibited reduction in AChE, TNF-a, and corticosterone with improved antioxidants to contribute neuroprotection and could be an effective therapeutic agent for treating neurodegenerative disorders.
Keywords: Acetylcholinesterase, Alzheimer's disease, corticosterone, oxidative stress, tumor necrosis factor-alpha

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Of Cooperation and Conflict: UNCLOS and Ocean Governance in the Indian Ocean and the South China Sea

Paper ID - 1069

A Paper Presented by:Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The idea of maritime security is finding place in the security calculus of several nations, whose earlier strategic orientation was primarily continental. This shift is a result of globalization, liberalizing economies and ever expansion in international trade. But United Nations Convention for the Law of the Sea (UNCLOS) is a significant causal factor for it provided nations with EEZ which necessitated its protection. This has given rise to complications particularly in the South China Sea where a Code of Conduct is yet to see light of the day. The Indian Ocean, an emerging geo-political hotspot has IORA &IONS for management of regional affairs. But it has had a limited success. This paper would present the situations in both the maritime theatres, each dominated by India and China, and attempt to explain why we see a certain kind of tension in each of these- what worked and what has not & the role of UNCLOS therein. In conclusion, it is apparent that UNCLOS is not entirely adequate to address realpolitik matters, and that regional and sub-regional mechanisms seem more preferable.

Keywords: India, China, Geo-politics, Maritime Security, Navy

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Monitoring micro- and nanoplastic interaction with microalgae using spectroscopic tools

Paper ID - 1070

A Paper Presented by:Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Plastic particles are widespread in the aquatic environment, becoming a non-living integral environment. Their possible interaction with aquatic organisms are complex and not completely understood. Microalgae, primary producers, play an important role at the base of the aquatic trophic chain. Different pathways of interaction between microalgae and particles can be envisaged depending on particles characteristics (ions release, adsorption, absorption). The interaction can cause different levels of stress effects on microalgae, such as photosynthesis inhibition, cell-wall degradation, and cell death. In this research, the interaction between microplastic and nanoparticles with microalgae were studied and characterized, using traditional methods coupled to infrared spectroscopy as a sensitive tool. Among other advantages, infrared spectroscopy can rapidly provide the biochemical composition of large amounts of microalgae in their living medium. Particle nature, size and surface chemistry are three potentials factors influencing the patterns of interaction. Several experiments were performed in order to monitor the influence of each factor on microalgae *Chlamydomonas reinhardtii*, a freshwater model organism. The particles studied were gold and polystyrene nanoparticles and polyethylene microparticles with different surface coatings. All infrared spectra were compared using principal component analysis and data clustering by different stress conditions was observed. We could also discriminate microalgae composition variation between the two types of particles. It was notably shown that nanoplastics have much more impact on microalgae than gold nanoparticles. In parallel, confocal microscopy imaging was performed to visualize and confirm interaction of nanoplastic with microalgae. In conclusion, infrared spectroscopy provides a very useful tool to improve knowledge on microalgae and their interaction with the non-living aquatic environment.

Keywords: infrared spectroscopy, microalgae, plastic particles, confocal microscopy

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Fate and effects of microplastics in the shrimp *Palaemon varians*

Paper ID - 1071

A Paper Presented by:Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The invention of plastics in the 20th century yielded durable and cheap materials, which meanwhile are integral components in almost all areas of human life. Production of plastics increased substantially in the last decades. To the same extent, environmental pollution by plastic litter rose. Only recently, we start to realize environmental consequences. Marine litter can have adverse effects on animals of all sizes. Degradation of plastic items generates a continuously increasing number of smaller sized particles, dispersed throughout the oceans. Microplastics, finally ranging in the µm-size classes, may have detrimental effects on marine invertebrates. These effects can be attributed to the cellular level and may lead to an imbalance of the cells' redox state upon microplastic ingestion. This emerging of oxidative stress has adverse effects on cell membranes, proteins, or DNA. The ingestion of microplastics by marine invertebrates and associated effects were examined in the Atlantic ditch shrimp, *Palaemon varians*. This species inhabits coastal regions, estuaries, and brackish water systems, which are strongly affected by anthropogenic pollution. Fluorescent polystyrene microbeads of different sizes were offered as food and served as a tracer within the digestive organs. Uptake into the digestive tract of *P. varians* was analysed by fluorescence microscopy and histological cryostat sections. The formation of reactive oxygen species (ROS) and the activity of the membrane-bound NADPH oxidase, a superoxide (O_2^-) catalyzing enzyme, served as oxidative stress markers. Activity levels after microplastics incubation were analysed with the chemiluminescent superoxide specific reagent Lucigenin. The expression of NADPH oxidase in *P. varians* was verified by PCR amplification of an isoform transcript. The outcome of this work may help identify cellular reactions after exposure to microplastics and indicate toxicological impacts on cells, organs, and whole organisms.

Keywords: crustaceans, histology, oxidative stress, NADPH oxidase, enzyme activity

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Antimicrobial activity of bacteria isolated from the sea cucumber *Stichopus vastus*

Paper ID - 1072

A Paper Presented by:Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Marine bacteria produce unique and bioactive compounds. Associated with marine invertebrates, bacteria are often identified as the active producer of bioactive compounds. Sea cucumbers are one of the marine invertebrates that is known not only for its nutritious values but also for its potent source of bioactive substances. However, there are only a few studies that investigated the presence and function of sea cucumber associated bacteria. The aim of this study is to investigate the bioactive compounds produced not by the host itself but by the sea cucumber associated bacteria. Therefore, the sea cucumber *Stichopus vastus*, known to contain bioactive compounds, was collected in Indian Ocean (India). The associated bacteria were isolated from both, the inner and outer body part of the sea cucumber using either Marine Agar, M1 or M2 media. Selected axenic bacteria were identified by 16s rRNA, grown to high density followed by organic solvent extraction. The activity of potential bioactive compounds were tested against a set of test microorganisms and the structure of known and potentially novel compounds elucidated using high resolution mass spectrometry (HRMS). Here we identified 49 different bacteria (via 16s rRNA) that consist of: Actinobacteria (40.8%), Firmicutes (40.8%) and Proteobacteria (18.4%). Among the detected bacteria, 4.1% had a sequence similarity of less than 97%, indicating the discovery of potential novel bacterial strains. An antimicrobial assay of the bacterial extracts showed that 45.8% of isolated bacteria were active against the Gram-positive bacteria *Bacillus subtilis*. Furthermore, the isolation of bioactive compounds from larger fermentation experiments followed by compound analysis via HRMS and nuclear magnetic resonance (NMR) spectroscopy indicated that one bioactive compound isolated from Streptomyces sp., JK 21, was related to valinomycin. Valinomycin is a depsipeptide that has antimicrobial bioactivities and has been previously found in *Streptomyces*.

Keywords: sea cucumber associated bacteria, Stichopus vastus, antimicrobial, bioactive compounds, Streptomyces

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

From Discovery to Production: *Microascus brevicaulis* strain LF580 as a case study

Paper ID - 1073

A Paper Presented by:Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The discovery of new natural products is essential for the development of new drugs. In order to translate the immense bio- and chemodiversity of marine habitats into products, marine biotechnology plays an important role at several steps in the discovery-to-development pipeline. Furthermore, the implementation of biotechnological production processes based on state-of-the-art technologies enables the sustainable use of marine resources. The fungus *Microascus brevicaulis* strain LF580 was isolated from the marine sponge *Tethya aurantium*. Its capability to produce the two scopularides A and B was already discovered in 2008. Both cyclodepsipeptides show distinct cytotoxic activity against tumor cell lines. Several methods were adapted and utilized in order to bridge gaps in the drug discovery pipeline of marine natural products. The focus was set on e.g. comparative metabolome analysis, transfer of cultivation into stirred tank reactor, development and validation of screening processes of mutant libraries and qualitative and quantitative proteome analysis. On the one hand the integrated approach provided fundamental knowledge on filamentous fungi and their biology, and on the other hand, enlarged the toolbox suitable for non-model fungal producer strains. Moreover, the impact of physiology on the biotechnological process design was demonstrated, is discussed as a case study to highlight steps towards the implementation of nonmodel organisms of marine origin as producer strains.

Keywords: marine biotechnology, marine natural products, marine fungi

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

The potent antimicrobial activity of brominated compounds extracted from the marine sponge *Lamellodysidea* sp.

Paper ID - 1074

A Paper Presented by:Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The marine sponge *Lamellodysidea* sp. has been reported to contain bioactive compounds that function as anti-microbial, anti-tumor and anti-HIV, as well as enzyme inhibition and increased cytotoxicity against different cancer cell lines. This sponge and/or their associated symbionts may hold additional information on novel bioactivities that are in high demand for human health and society. Here we study the metabolome of *Lamellodysidea* sp., via high-performance liquid chromatography-mass spectrometry (HPLC-MS), with a strong focus on the abundance, diversity, and bioactivity of the diverse brominated compounds. We collected the sponge in Andaman and Nicobar Islands (India) and extracted sponge, together with their associated bacteria, three times with MeOH:EtOAc (1:1). Following, a clinical microbial assay was conducted on the crude extract using the qualitative minimum inhibition concentration (MIC) method. The result showed that among the eight tested pathogenic isolates, four showed tremendous activity, including two pathogenic bacteria (*Bacillus subtilis* and *Staphylococcus aureus*) and two pathogenic fungi (*Rhodotorula glutinis* and *Mucor hiemalis*). To further determine the active components of the crude extract, the complex organic mixture was further fractionated using, liquid-liquid, solid phase extraction and preparative-HPLC separation protocols. For tentative peak identification, HPLC-MS was applied on the semi-pure and purely isolated target peaks. Up until now, we identify six different brominated compounds and fully isolated the two most abundant ones (2.4 mg and 8.2 mg). The structure of the latter two was determined via Nuclear magnetic resonance (NMR). This study aims to uncover novel structural information and their bioactivities of the highly abundant brominated compounds found within *Lamellodysidea* sp.

Keywords: marine biotechnology, marine natural products, marine sponge

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

A case study to describe the putative associated bacterial core community on a marine diatom

Paper ID - 1075

A Paper Presented by:Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Marine microalgae and bacteria have co-occurred over billions of years, resulting in distinct interactions between these two groups of organisms. For example, over half of microalgal species representing marine and freshwater habitats require the cofactor cobalamin (vitamin B12) for growth, which is synthesized de novo by only certain bacteria and archaea. Elucidating the interactions between marine microalgae and bacteria is of prime importance to better understand oceanic nutrient and carbon flux and hence, marine primary production. Prior studies revealed distinct bacterial phylotypes associated with individual genera of microalgae, however it is unclear if the community of algae-associated bacteria differentially supports algal growth and performance, e.g. via the provision of essential micronutrients such as vitamins. Different bacterial communities were dissociated from several diatom species and inoculated to the same acceptor cultures of the axenic diatom *Thalassiosira rotula*. Bacterial communities in both, donor and acceptor cultures were characterized with Illumina-MiSeq targeting the 16S rDNA V4 region. In parallel, growth and performance of the experimental acceptor cultures were analysed with imaging flow cytometry and pulsed amplitude modulation fluorometry. This study aimed to test (a) if the bacterial community composition in the acceptor cultures differed from those in the donor cultures, and (b) if the acceptor cultures shared a certain core community of bacterial taxa? The outcomes of this study will be discussed in the context of the pending research questions if marine microalgae harbor or support functionally important bacteria in their phycosphere to support algal growth and performance.

Keywords: microalga-bacteria interaction, diatoms, vitamin B12, microbial community analysis

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Biogeography and population structure of the key marine zooplankton *Calanus finmarchicus* revealed by molecular tools

Paper ID - 1076

A Paper Presented by:Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Copepods of the genus *Calanus* play a key role in marine food webs as consumers of primary producers and as prey for many commercially important marine species. Within the genus, *Calanus finmarchicus* and *C. glacialis* are considered indicator species for Atlantic and Arctic waters, respectively, and changes in their distributions are frequently used as a tool to track climate change effects in the marine ecosystems of the northern hemisphere. However, discrimination between these two species is challenging due to their morphological similarity and most of the knowledge on these species has been built based almost exclusively on morphological identification leading to misidentification. Here, we used molecular markers as tools for species identification in order to redraw the distribution ranges of the different species within the *Calanus* genus in the North Atlantic and Arctic Oceans. This revealed wider and more overlapping distributions for each species than it was described before when using only morphology to separate species. With this knowledge, we selected a set of *C. finmarchicus* individuals from 9 locations that span the species distributional range, and we applied a technic that we developed based on targeted-resequencing to investigate genomic variability and gene flow among different locations.

Keywords: Population genomics; Next-Generation Sequencing; Molecular markers

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Sponges bring life or destruction? to shallow and deep reef ecosystems

Paper ID - 1077

A Paper Presented by:Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Coral reefs are iconic examples of biological hotspots, highly appreciated because of their ecosystem services. Yet, they are threatened by human impact and climate change, highlighting the need to develop tools and strategies to curtail changes in these ecosystems. Remarkably, ever since Darwin's first descriptions of coral reefs, it has been a mystery how one of Earth's most productive and diverse ecosystems thrives in oligotrophic seas, as an oasis in a marine desert. The common view on how highly productive systems cope with oligotrophic conditions has changed completely with the discovery of the sponge loop. Sponges are now increasingly recognized as key ecosystem engineers, efficiently retaining and transferring energy and nutrients on the shallow reef and in the deep sea. As a result, current reef food web models, lacking sponge-driven resource cycling, are incomplete and need to be redeveloped. However, mechanisms that determine the capacity of sponge 'engines', how they are fueled, and drive communities are unknown. In this perspective I will discuss how sponges integrate within the novel reef food web framework. Sponges will be evaluated on functional traits in the processing of food (e.g., morphology, associated microbes, pumping capacity), and to what extent these different traits are a driving force in structuring shallow- to deep-sea reef ecosystems. Finally, as climate change causes the onset of alterations in the community structure and food web of reef ecosystems, there is evidence accumulating that certain biological pathways are triggered, such as the sponge loop and the microbial loop that may shift reef ecosystems faster than their original stressors (e.g., warming oceans and ocean acidification). Unfortunately, these biological pathways receive much less attention at present, which seriously hampers our ability to predict future changes within reef ecosystems.

Keywords: food web, coral reef biogeochemistry, stable isotope probing, ecosystem engineers, eukaryote-prokaryote interactions

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Unraveling the DOM uptake and assimilation in sponges: A guide for cell separation and stable isotope identification for spongeholobionts in coral reef ecosystems

Paper ID - 1078

A Paper Presented by:Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Sponges efficiently shunt dissolved organic matter (DOM), which is one of the most important carbon sources on coral reefs, but largely unavailable to most heterotrophic reef organisms to higher trophic levels in the form of detritus. This process is better known as the sponge loop. However, the mechanisms that drive this process are not entirely understood. It is assumed that sponge associated microbes mainly contribute to these complex metabolic processes. Nevertheless, previous studies have shown that sponges with relatively low numbers of microorganisms are just as effective in the processing of DOM as sponges with high numbers of microorganisms. The aim of this project is to understand whether the sponge cells themselves are responsible for DOM uptake and assimilation or that their microbial associates make an important contribution. For this study a modified cell separation protocol will be developed for efficiently separating the sponge and sponge-associated microbial cells in the sponge-holobiont. This technique will then be applied combined with tracer incubation experiments using ^{13}C- and ^{15}N-labelled DOM to identify where the DOM is being processed. Therefore, this study will be an important step in unraveling the complex metabolic interactions involved with nutritional processing in sponges.

Keywords: Metabolic interactions, DOM-shunt, Sponge Loop

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

In Vitro Anti-coagulant activity of hydroalcoholic extract of *Annona Cosmoses* fruit peel

Paper ID - 1079

A Paper Presented by:Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

There is an increasing need to source for pharmacological and medicinal materials from plant source. An exploratory effort towards identifying and characterizing new anticoagulants from plants is worthwhile. Hydro alcoholic extract from *Annanas cosmosus* (Pine apple) fruit peel was subjected to anticoagulation activity and compared with sodium citrate anticoagulant using some haematological parameters. The fruit peel of *Annanas cosmosus* was separated, dried and ground into powdered form. 2ml of blood sample was introduced into each tube containing 0.1g, 0.2g and 0.5g of the powdered extract. Coagulation was achieved in 2520 sec and 105 sec in 0.2g and 0.5g tubes respectively while in 0.1g tube coagulation was unattained. The extract-anticoagulated blood was compared with sodium citrate-anticoagulated blood. The results of PCV, Hb, WBC and platelet count showed no significant difference ($p>0.05$) when compared. However, PT and APTT were significantly different ($p<0.05$). In vitro anticoagulation activity of *Annanas cosmosus* was established. It may also be of interest as an anticoagulant for laboratory use.

Keywords: *Annanas cosmosus*, anticoagulation, Coagulation, In vitro, haematological, Sodium citrate

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

In Vivo Antioxidant activity of *Piper guineense* leaf extracts.

Paper ID - 1080

A Paper Presented by:Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Piper guineense leaves are traditional medicinal plants for the treatment of many ailments such as diabetes, cancer and Alzheimer disease. However, the global use of plant extract becomes more significant concerns including its safety, efficacy, and quality. Therefore, the precise scientific evaluation has become a prerequisite for acceptance of herbal health claims. The aim of this study was to determine the antioxidant activities of *Piper guineense* leaf extract. Isolation of antioxidant fractions were conducted using organic solvent extraction techniques. Antioxidant assays were conducted by using in vivo method showed the best dose at 8 mg. *Piper guineense* leaf extracts have been successfully determined in antioxidant actions in vivo. *Piper guineense* in water and ethanol solvents exhibit strong antioxidant properties. The plant leaves showed that 8 mg dose was better than the dose of 4 mg and 16 mg in vivo.

Keywords: *Piper guineense*, antioxidant, Cancer, Alzheimer's, In vivo, diabetes.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Comparative studies of In Vitro Antidiabetic activity of various leaf extracts.

Paper ID - 1081

A Paper Presented by:Ch. Himatha Reddy, A. Rajasekhar Reddy, G. Chakravarthi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

In vitro analysis of the anti-diabetic effect of aqueous extracts of the medicinal plants *Allium cepa*, *Eugenia jambolana*, *Ficus bengalensis*, *Gymnema sylvestre*. Methods: Plants were collected, authenticated, shade dried and finally aqueous extracts of the plants were prepared by maceration. They were then tested for inhibition of alpha-amylase activity by DNSA colour reagent. Results: The aqueous extract of *Allium cepa* showed maximum inhibition of alpha-amylase activity and a strong hindrance to diffusion of glucose across a dialysis membrane. *Ficus bengalensis* showed both a strong inhibition of alpha-amylase and a significant hindrance to the diffusion of glucose across the dialysis membrane. Gymnema sylvestre showed low inhibition of alpha-amylase activity, but it showed maximum hindrance to the diffusion of glucose across the dialysis membrane. *Allium cepa* was found to possess maximum anti-diabetic properties. Conclusions: The findings indicate that all the above plants possess antidiabetic properties too varying degrees. They can be used to develop natural drugs which may be used in lieu of commonly used strong allopathic drugs which possess a number of harmful side effects.

Keywords: *Allium cepa, Eugenia jambolana, Ficus bengalensis, Gymnema sylvestre,* anti-diabetic, alpha-amylase.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Antibacterial activity of crude extracts of some plant leaves.

Paper ID - 1082

A Paper Presented by:Ch. Himatha Reddy, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The effect of ethanol, methanol, acetone and water extracts of leaves of 11 plant species, used in the folk medicine, against six antibiotic resistant clinical pathogens was evaluated by the agar-well diffusion method. The obtained results indicate that most of the extracts revealed antimicrobial activity. The water extract of *Aloe arborescens Mill.* leaves exerted significant effect and recorded the lowest MIC and MMC. Ethanol leaf extraction method is the best. It produced broad-spectrum of antimicrobial activity followed by methanol leaf extraction. Interestingly, methanol extraction method was found to be the most effective extraction method of anticandidal agents. Among the pathogenic bacteria tested, *S. pneumonia* was the least sensitive. Nevertheless, the anticandidal MIC and MMC values are higher than antibacterial values suggesting that *C. albicans* is less sensitive to plant leaf extracts. In conclusion, aqueous extracts of *Aloe arborescens Mill.* leaves exhibited the highest potency against all pathogens tested. Thus, this study confirms the efficacy of some plant extracts as natural antimicrobials and suggests the possibility of employing them in drugs for treatment of infectious diseases caused by the test pathogens

Keywords: *Aloe arborescens* Mill., *S. pneumonia,C. albicans,* anti-bacterial, antimicrobial

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Anticancer Activities of Apple Extracts and Genistein in Human Breast Cancer Cells

Paper ID - 1083

A Paper Presented by:Ch. Himatha Reddy, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

In the present study, the potential anticancer effects of apple extracts and genistein on inhibition of cell proliferation and induction of apoptosis in human breast cancer cells was investigated. Human breast cancer cells (MCF-7) were cultured on complete RPMI 1640 medium for 48 hours to allow growth and achieve about 80% confluence in 48-well culture plates, and then exposed to the agents for 24 hours in single and combination treatments. Post-treatment growth rate and apoptosis induction were assessed by the use of a series of bioassay 3-(4,5-dimethylthiazol-2-yl)-5-(3-carboxymethoxyphenyl)-2-(4-sulfophenyl)-2*H*-tetrazolium (inner salt) for viability and cytotoxicity and terminal deoxyribonucleotidyl transferase-mediated dUTP nick-end labeling assays for induction of apoptosis. Both grape extracts and genistein had significant (dose- and time-dependent) cytotoxic and growth inhibition effects on MCF-7 cancer cells. Both growth inhibition and cytotoxicity were significantly higher (P _ .01) in the combination treatments than in the single treatments with either agent. Both apple extracts and genistein inhibit the growth of MCF-7 breast cancer cells through induction of apoptosis, with combination treatment being more efficacious than single treatments.

Keywords: anticancer, genistein, apple, MTT, XTT, MCF-7.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Cardioprotective Activity of Alcoholic Extract of *Ilex paraguariensis* in Ischemia-Reperfusion Induced Myocardial Infarction in Rats

Paper ID - 1084

A Paper Presented by:Ch. Himatha Reddy, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

It has been suggested that the beneficial effects of reperfusing the myocardium might be in part reversed by the occurrence of reperfusion injury caused by oxidative stress. The present study was designed to investigate the effects of pretreatment with alcoholic extract of *Ilex paraguariensis* in an *in vivo* rat model. The model adopted was that of surgically-induced myocardial ischemia, performed by means of left anterior descending coronary artery occlusion (LAD) for 30 min followed by reperfusion for another 4 h. Infarct size was measured by using the staining agent TTC (2,3,5-triphenyl tetrazolium chloride). Lipid peroxide levels in serum and in heart tissue were estimated spectrophotometrically by the methods developed by Yagi and Ohkawa *et al.* respectively. A lead II electrocardiogram was monitored at various intervals throughout the experiment. A dose dependent reduction in infarct size and in lipid peroxide levels of serum and heart tissue were observed with the prior treatment of *Ilex paraguariensis* with various doses for 7 d compared to control animals. Hence, the present study suggests the cardioprotective activity of *Ilex paraguariensis* in limiting ischemia-reperfusion induced myocardial infarction.

Keywords: *Tinospora cordifolia*, Cardioprotective, ischemia, TTC, reperfusionm, MI.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Anti-inflammatory activity of the leaf extracts of *Annona squamonsa* Linn.

Paper ID - 1085

A Paper Presented by:Ch. Himatha Reddy, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

To evaluate the anti-inflammatory property of the leaf exacts of *Annona squamosa Linn*. The present study aimed at the evaluation of anti-inflammatory property of the aqueous and alcoholic extracts of the leaves by both in vitro and in vivo methods. In vitro method was estimated by human red blood cell membrane stabilisation (HRBC) method was estimated on the carrageenan induced paw oedema. Bothe the methods showed significant anti-inflammatory property of the different extracts tested. The alcoholic extract at a concentration of 300 mg/mL showed potent activity on comparing with the standard drug diclofenac sodium.

Keywords: *Annona squamosa Linn*, anti-inflammatory, HRBC, carrageenan.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Antiulcer Activity of Ethanolic Extract of *Evolvulus* alsinoides Leaves on *Albino* Rats

Paper ID - 1086

A Paper Presented by:Ch. Himatha Reddy, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Background: Ulcer can be developed inside the inner lining of the stomach (gastric ulcer) or the small intestine (duodenal ulcer). Both the ulcers are also cumulatively referred as peptic ulcers. It affects nearly 10% of world population. **Aim:** To investigate the antiulcer activity of ethanolic extract of *Evolvulus alsinoides* leaves on albino rats. **Materials and Methods:** The present study was carried by pylorus ligation, ethanol and cysteamine induced ulcer models in albino rats. The antiulcer activity of ESIL (150, 300 and 600 mg/kg p.o. for 7 days) was compared with standard drugs (Ranitidine). In pyloric ligation induced ulcer model, the studied parameters were gastric volume, pH, total acidity, free acidity, and ulcer index whereas in ethanol and cysteamine induced ulcer model, the ulcer index was determined for severity of ulcers. The parameters studied were ulcer index, gastric juice volume, pH, free acidity and total acidity. **Results:** In pyloric ligation model; the volume of gastric content, total/free acidity and pepsin activity was significantly decreased at $p<0.05$ and $p<0.01$ and pH of the gastric juice was significantly increased at $p<0.05$ and $p<0.01$ in ESIL treated groups as compared to control group. All the doses of ESIL showed dose dependent antiulcer effect as well as significant ($p<0.05$ and $p<0.01$) reduction in the ulcer index as compared to control group in all the experimental models. **Conclusion:** The results of the study indicate that the *Evolvulus alsinoides* have better potential against ulcer which supports the traditional claims in folklore medicine.

Keywords: *Evolvulus alsinoides*, anti-ulcer, rantidine, gastric, duodenal

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Preparation And In-Vitro Evaluation Of Fe_3o_4 Encapsulated By Alginate Loaded Carmofur Nanoparticles For The Treatment Of Ovarian Cancer

Paper ID - 1087

A Paper Presented by:Ch. Himatha Reddy, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present study was aimed to formulate and evaluate Carmofur loaded Alginate- Fe_3O_4 Nanoparticles and to study the in-vitro evaluation by sigma dialysis method. Nanoparticulate Carriers play significant role as they are biodegradable, biocompatible and bio adhesive for administration of therapeutic molecules. Carmofur loaded alginate – Fe_3O_4 nanoparticles batches with different ratios of drug: polymer (1:1, 1:2, 1:3, 1:4, 1:5, 1:6) were prepared by ionic gelation method. Increase in polymer concentration increases the nanoparticle drug content. Entrapment efficiency was 60.12% with drug to polymer ratio F6 (1:4). In-vitro release was found to be 68% for 12 hrs. Carmofur from alginate- Fe_3O_4 nanoparticles SEM image reveals discrete spherical structure and particles with size range of 100-500nm. FTIR studies show that functional groups do not undergone any change. Samples stored at refrigerator conditions showed better stability compared with samples kept at other conditions during 8 weeks of storage.

Keywords: Alginate, Carmofur, Ionic gelation, biodegradable, Fe3O4 nanoparticles

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation, Characterization And Evaluation Of Polymer-Assisting Formulation Of Azithromycin Using Solvent Evaporation Method

Paper ID - 1088

A Paper Presented by:Ch. Himatha Reddy, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Solubility is one of the important parameters to achieve desired concentration of drug in systemic circulation for desired pharmacological response. 'Low aqueous solubility' is the major problem encountered with formulation development of new chemical entities as well as for the generic development. Azithromycin belongs to BCS, class II i.e., with low solubility and high penetration. Solid dispersion of Azithromycin was prepared through the solvent evaporation method, with Poly ethylene Glycol as hydrophilic carrier. The prepared formulation was characterized for the structure, morphology and functional group identification by SEM, differential scanning calorimetry, powder X-ray diffraction and Fourier transform infrared spectroscopy. In addition, the drug solubility studies as well as dissolution rates compared with bulk drug and market tablets were also examined. Furthermore, the study investigated the pharmacokinetics after oral administration and solid dispersion. And the AUC 0–6 h and C max increased after taking Azithromycin marketed drug and compared with the marketed drug. All these studies concluded that Azithromycin with its co-solvent is a prospective means for enhancing higher oral bioavailability.

Keywords: Azithromycin, Poloxamer 188, Solid dispersion, Dissolution rate

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation And Evaluation Of Simvastatin Mucoadhesive Nanoparticles

Paper ID - 1089

A Paper Presented by:Ch. Himatha Reddy, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Mucoadhesive nanoparticles are one of the important novel drug delivery systems, that helps in localized action of drug. The aim of this study was to prepare mucoadhesive nanoparticles of simvastatin, an antilipidemic agent. Simvastatin nanoparticles were prepared using precipitation of nanoparticles and were evaluated using Fourier-transform infrared spectroscopy-ray powder diffraction, scanning electron microscopy and by estimating their zeta potential and in vitro drug release. Results indicated that gastroretentive nanoparticle formulation could be developed to release simvastatin for up to 7 hours in the stomach.

Keywords: Mucoadhesion, gastroretention, mucoadhesive nanoparticles

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation And Evaluation Of Niosomal Suspension Of Cefalexin

Paper ID - 1090

A Paper Presented by:Ch. Himatha Reddy, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Most of the drug preparations face the problems of inefficient bioavailability, insufficient half-life and inability to release the drug at desired time and desired place of action. The present study was targeted to the above problems. The method of preparation is thin film technique with different ratios of Tween 80 and cholesterol. The formulations prepared were evaluated for different parameters. The formulation of 1:3 ratio of tween 80 and cholesterol was optimized and the vesicular size was found to be 300-380 nm. With Variation in the concentration of Tween 80, the entrapment efficiency is altered. The entrapment efficiency was found to be 92%. Kinetics study was performed and it suggested that the drug is released with some restricted manner. With the statistical optimization, E4 formulation was found to be effective. Also, the study suggests there is no significant change in the release of drug from the formulation and the zone of inhibition studies suggest that the optimized formulation has a better activity than the marketed formulation.

Keywords: Niosomal preparation, Cholesterol, Thin film technique

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation And Evaluation Of Esomeprazole Delayed Release Pellets Using Different Polymers

Paper ID - 1091

A Paper Presented by:Ch. Himatha Reddy, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present work focus on formulate Esomeprazole multiple unit particulate system (pellets) as a delayed release dosage form and study the invitro release pattern. Methyl acrylic acid co-polymer was used as delayed release polymer and the formulations were carried out using drug and polymer in the ratio of 1:1,1:2,1:3,1:4 and 1:5. Invitro studies were carried out and the formulation was investigated for the surface and morphological characteristics by SEM,FTIR and dissolution data was studied by fitting in Higuichi-pepper model. The invitro results shown 20% increase in the bio-availability of drug.

KEYWORDS:
Esomeprazole, pellets, Methyl acrylic acid co-polymer

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation And Evaluation Of Delayed Release Capsules Of Pantoprazole Made Of Different Enteric Polymers

Paper ID - 1092

A Paper Presented by:Ch. Himatha Reddy, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Delayed release systems have been playing important role in the arena of pharmaceutical research and development. The present study involves formulation and evaluation of Pantoprazole delayed release capsules. Pantoprazole is an acid labile drug. It degrades in the acidic environment of the stomach thus leading to therapeutic inefficacy. Therefore, it is necessary to bypass the acidic pH of the stomach which can be achieved by formulating delayed release dosage form by using different enteric polymers. Protection of drug from acidic environment is done by coating the drug with enteric polymers by entering coating in Fluidized bed processor (FBP) with different enteric polymers like HPMC (Hydroxy Propyl Methyl Cellulose, HPC (Hydroxy propyl cellulose). The formulation with ratio of drug : HPMC polymer of 1:3 of delayed release capsules of Pantoprazole containing as enteric polymer can be taken as optimized and further investigated for invitro release studies and physical parameters.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation and Evaluation Of Controlled Release Matrix Tablets Of Minocycline Using Different Polymers

Paper ID - 1093

A Paper Presented by:Ch. Himatha Reddy, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present study was aimed at formulating and evaluating of controlled release tablets of Minocycline HCl using different polymers (guar gum, Xanthun gum and HPMC K100) at different proportions. The formulated controlled release tablets were evaluated for organoleptic properties and *in vitro* dissolution rate and then compared for optimum drug releasing formulation. The results of the *in vitro* drug release showed that the formulation containing Xanthun gum (1:1.5) has a zero-order drug release over a period of 24 h. In case of formulations containing guar gum and HPMCK100 the release of drug was found to be dependent on the relative proportions of guar gum and HPMCK100 used in matrix tablet. The *in vitro* analysis then further supported with *in vivo* studies, as well as, improving patient compliance. The drug release from the matrix occurred by combination of two mechanisms, diffusion of drug from tablet matrix and erosion of tablet surface, which was reflected from Higuchi's model.

Keywords: minocycline, HPMC K100, guar gum, Xanthun gum, control release

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation And Characterization Of Deflazocort Raw Material

Paper ID - 1094

A Paper Presented by: Ch. Himatha Reddy, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Oral dosage forms are highly used because of convenient intake and hence solid doses gained their popularity for oral route because of high productivity and low cost and stability. The bio equivalency of the dissolution profile of 12-mg Deflazocort tablets is compared to reference product and the formulations were evaluated for stability testing. During the study, Deflazocort tablets and the active pharmaceutical ingredient (API) Deflazocort from two different manufacturers were evaluated for physical and physicochemical properties. The results showed that the dissolution profiles of the test batches and the reference product did not retain pharmaceutical equivalence throughout all the stability study. Samples of API Deflazocort were of the same crystal form, and any phase transition that occurred during the study could not be attributed to dissolution variation during stability.

Keywords: Deflazocort; Solubility; Formulation; Stability

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation And Evaluation Of Bilayer Matrix Tablets Of Dicloxacillin And Omeprazole As An Oral Modified Release Dosage Form For Treatment Of Peptic Ulcer

Paper ID - 1095

A Paper Presented by:Ch. Himatha Reddy, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The objective of the present study is to formulate a dual therapy of peptic ulcer containing antimicrobial agent Dicloxacillin and antiulcer agent Omeprazole, utilizing the concept of bilayer tablet system for the effective treatment of gastric/duodenal ulcer. Sustained release tablets were prepared using Ethyl cellulose and Guar gum. as matrix forming polymers in a polymer-polymer ratio of 4:1, respectively. Also, Omeprazole can be prepared as extended release multi particulate tablets using pH-independent hydrophilic Eudragit polymers as matrix forming agent with EC. Kinetic release studies that the selected formula showed that the mechanism of drug release pattern follows non-fickian diffusion

Keywords: Dicloxacillin, Omeprazole, Bilayer tablet, Peptic ulcer.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation And Evaluation Of Capsule In Capsule Dosage Form With Mini Tablets For The Treatment Of Ulcer

Paper ID - 1096

A Paper Presented by:Ch. Himatha Reddy, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present study focuses the treatment for anti-ulcer with the combination of antibiotics (Dexlansoprazole + Azithromycin + Doxycycline) and anti-ulcer drugs. A combination of mini tablets of azithromycin and doxycycline were formulated by direct compression method. Evaluation was carried out for flow properties and other physicochemical properties, in vitro release study and drug content. Stability study was carried out at accelerated conditions of temperature and relative humidity of 35ºC ± 0.9ºC and 69% ± 4% RH and then evaluated for physical appearance and drug content on regular basis and the stability results were found to be within the acceptable range. Dexlansoprazole was filled in size 4 capsules and capsules were enteric coated with HPMC K 100, as the drug is acid-labile. The mini tablets were filled into the 00 size capsules and an enteric coated Dexlansoprazole capsule was placed in it (capsule in capsule technology). Invitro release profile studies were carried out and the results showed an acceptable range which implies that the formulated dosage form of capsule in capsule is a better alternative for the treatment of anti-ulcer.

KEYWORDS: Mini tablets, capsule in capsule, Dexlansoprazole, Azithromycin and Doxycycline, HPMC K 100.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Preliminary Studies on Anticoagulant Activity of *Terminalia tomentosa* Bark Extracts

Paper ID - 1097

A Paper Presented by:Ch. Himatha Reddy, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Cardiovascular diseases such as atherosclerosis and thrombosis are more commonly developed due to hyperactivity platelet and also interaction of platelet with endothelial cells. ***Terminalia tomentosa*** , L. Combretaceae is used in many southern and southeast Asian countries, and it is well known for its diverse biological activity. The present study investigates the presence of coumarins in ***Terminalia tomentosa*** bark and subsequently determines the extract with a major amount of coumarin derivatives. Different polar solvents at different pH values were used for the purpose of purifying the primary extract in order to obtain fractions with the highest coumarin content. The resulted extracts and fractions were investigated for their anticoagulant activity by determining prothrombin time and the international normalized ratio, expressed in relation to the normal coagulation time. Purified extracts and fractions obtained from plant residue, concentrated in coumarin derivatives, showed the best anticoagulant activity, using samples of human blood. International normalized ratio (2.12) and consequently the best anticoagulant activity showed the methanol extract at concentration of 10%. The international normalized ratio value of normal plasma in testing this extract was 1.12.

Key Words: *Terminalia tomentosa***,** anticoagulant, coagulation time, prothrombin time, coumarin.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Development and validation of bioanalytical method for the determination of Dolutegravir in human plasma by RP-HPLC

Paper ID - 1098

A Paper Presented by:Ch. Himatha Reddy, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Dolutegravir is an antiviral prescription medicine used to prevent genital herpes outbreaks in adults infected with HIV. A simple method is described for the quantitation of dolutegravir in plasma by RP-HPLC. Chromatographic separation was achieved on a reversed phase Hypersil ODS C18 (150 mm * 4.6 mm, 5.0µm) column, using gradient elution (acetonitrile-water (75:25 %v/v) at a flow rate of 0.2–1.2 mL/min. Dolutegravir were measured using UV detection at 254 nm. The total chromatographic run-time was 10 min with dolutegravir eluting at 3.23 min. Limit of quantification was 50 ng/mL. The linearity range of the method was 100-1000 ng/ml (r^2 = 0.998). Mean recoveries from plasma were 101.13%. Intra-batch and inter-batch precision was 0.951 and 1.142, respectively. The Freeze and Thaw Stability, Short-Term Temperature Stability , Long-Term Stability, Stock Solution Stability evaluation indicated no evidence of degradation of dolutegravir. The method is simple, selective and rapid and can be used for pharmacokinetic study.

Key Words: Dolutegravir, human plasma, stability, recovery, validation etc.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Cytotoxic and Antioxidant Activity of Methanolic Extract from *Terminalia Pallida* Leaves

Paper ID - 1099

A Paper Presented by:Ch. Himatha Reddy, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

In present study the in vitro cytotoxic activity of methanolic and aqueous extract of leaves of *Terminalia Pallida* on evaluated on MCF-7 breast cell lines. Qualitative phytochemical screening tests were performed to detect phytochemicals in the methanolic and aqueous extracts. Antioxidant activity of the plant extracts were characterized by using DPPH free radical scavenging method. The cytotoxic activity of the extracts of *Terminalia Pallida* on MCF-7 cells was performed in vitro through MTT assay. The results showed antioxidant activity using DPPH were found to be increased in a concentration dependent manner. The cell viability of MCF-7 cell lines also decreased in a dose dependent manner. The findings from this study indicated that methanolic and aqueous extracts of *Terminalia Pallida* leaf possessed vast potential activity as a medicinal drug especially in breast cancer treatment.

Key Words: *Terminalia Pallida*, cytotoxic activity, MTT assay, DPPH.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

A Spectroscopic method development and validtion for estimation of Metoprolol Succinate in its pharmaceutical dosage forms by formation ion-pair complex

Paper ID - 1100

A Paper Presented by:Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

A simple, accurate, rapid, sensitive and precise analytical method (ion-pair formation method) was developed for the estimation of Metoprolol succinate in its tablet dosage form using UV-Visible Spectrophotometry. Phosphate buffer (pH.4.6) used as solvent system at temperature conditions 37^0 C ± 5^0C. 0.05 % Methyl Orange dye used to form complex. The absorbance maxima were found for Metoprolol succinate. The proposed method satisfied the validation criteria for all parameters evaluated and it has found to be reliable, simple and rapid. System suitability parameters, precision, linearity, accuracy, robustness and stability according to ICH $Q_2(R_1)$ guidelines and were found to be satisfactory. The proposed method was simple, specific, requires short time to analyze samples and it is easy to perform. Hence it was concluded that the present developed method was well suitable for routine analysis of metoprolol succinate in its pharmaceutical dosage formulations.

Keywords: Metoprolol succinate, Io-pair method, Methyl orange, Linearity, Method validation etc.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation and Evaluation of Tolnaftate Loaded Nanosponges for Topical Delivery

Paper ID - 1101

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The objective of the current study was to formulate controlled release Tolnaftate nanosponges for topical delivery. Nanosponges using ethyl cellulose polymer were prepared successfully using poly vinyl alcohol (PVA) as surfactant by emulsion-solvent evaporation method. The effects of different surfactant concentration, drug: polymer ratio, stirring speeds, stirring time and sonication time on the physical characteristics of the Nanosponges as well as the drug entrapment efficiency of the Nanosponges were investigated. Particle size analysis and surface morphology of Nanosponges were performed with the help of scanning electron microscopy (SEM). These nanosponges showed particles in spherical in shape and spongy in nature. The particle size of the formulations was found to be 118 nm and the drug entrapment efficiency was found to be in the range of 55.18-78.86 %. Optimized nanosponge formulations was taken for formulating nanogels using various gelling agents like Carbopol 934, Carbopol 940, HPMC K4M and studied for pH, viscosity and in vitro drug release. Of the various formulations prepared, F2 was found to show the maximum sustained drug release of 76.26 % in 12 hours.

Keywords: Carbopol 934, Carbopol 940, Ethyl cellulose, HPMC K4M, Nanosponges, PVA.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

RP-HPLC method development and validation for simultaneous estimation of Atorvastatin and Ezetimibe in bulk and pharmaceutical dosage forms

Paper ID - 1102

A Paper Presented by:Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

A new Reverse Phase High Performance Liquid Chromatographic (RP-HPLC) method has been developed for estimation of Atorvastatin and Ezetimibe in bulk and tablet dosage forms using UV-detector. A Hypersil ODS C18 (150 mm * 4.6 mm, 5.0µm) column, using gradient elution using acetonitrile and water (80:20 % V/V) as mobile phase by maintaining flow rate of 1 mL/min at 246 nm as detection wavelength. The peaks were eluted at 4.6 and 5.4 mins for Atorvastatin and Ezetimibe, respectively. The method was validated in accordance with ICH guidelines, the linearity curve for Atorvastatin was obtained over the range of 10-60 µg/mL, and it was found to be linear with y = 1951x + 9216 (r2 = 0.999). The linearity curve for Ezetimibe was obtained over the range of 25-150 µg/mL and was found to be linear with y =24328x + 932.3 (r2 = 0.998). The percentage recoveries were found to be 99.5-101.1% and 99.1-101.5%, respectively. The system suitability parameters such as number of theoretical plates and tailing factor were found to be 7132, 1.46 for Atorvastatin and 6625, 1.25 for Ezetimibe. The developed RP-HPLC method was found to be simple, precise, and accurate; hence it can be applied for routine analysis of these drugs in their combined formulations.

Keywords: Atorvastatin and Ezetimibe, Acetonitrile, RP-HPLC, Method development, Method
Validation.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Design, synthesis and in-vitro evaluations of 6-pyridyl-imidazo[1,2-*a*]pyridine-3-sulfonamide as an inhibitor of TNF-α production

Paper ID - 1103

A Paper Presented by:Ch. Himatha Reddy, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Tumor necrosis factor-α (TNF- is an important pro-inflammatory cytokine having a key role in hosts defensive process of immune systems and its over expression led to a diverse range of inflammatory diseases such as Rheumatoid arthritis, Cronh's disease, psoriasis, etc. the present work describes the design, synthesis of imidazo[1,2-b]pyridine analogues. By the introducing sulfonamide functionality at 3 positions, a small library of compounds was prepared. All synthesized compounds were screened for lipopolysaccharide (LPS) mediated TNF-α production inhibitory activity. Biological data revealed that the majority of the compounds of this series showed moderate to potent TNF-α production inhibitory activity. Among these some compounds showed IC50 value in the range of 0.5 µM - 0.3 µM. The molecular modeling studies revealed that the potent TNF-α production inhibitory activity due to the extra stability of complex because of an extra pi-pi (π- π) stacking, hydrogen-bonding interactions.

Keywords: Imidazo[1,2-a]pyridine, Sulfonamide, Tumor Necrosis Factor-Alpha (TNF-α), Rheumatoid arthritis.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Design, synthesis and evaluation of 1,2,4-triazolo[1,5-*a*]pyrimidines as anti-tubercular agents

Paper ID - 1104

A Paper Presented by:Ch. Himatha Reddy, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

1,2,4-triazolo[1,5-*a*]pyrimidine analogues were developed with potent anti-tubercular activity against *Mycobacterium tuberculosis*. Three crucial segments of the scaffold were identified rationally to establish its structure-activity relationship in order to enhance the potency. About twelve compounds were synthesized with appropriate synthetic strategies. Among these some compounds displayed micromolar activity against *Mycobacterium tuberculosis* with no cytotoxicity against eukaryotic cells. The C5 position with aryl moiety and C7 with substituted amino groups were preferred features for their activity. The anti-tubercular activity was assessed on *Mycobacterium tuberculosis H37Rv* and also on drug resistant strains. Out of these compound substituted with *p*-methoxy benzethylamino moiety at C7 position showed anti-tubercular activity in the of range of 2.6 µM. Our investigations suggest that the simplicity of the synthetic methodology for development of 1,2,4-triazolo[1,5-*a*]pyrimidine analogues as well as introducing the promising class of potent anti-tubercular agents.

Keywords: *Mycobacterium tuberculosis*, anti-tubercular activity 1,2,4-triazolo[1,5-*a*]pyrimidine.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Method Development And Validation Of Simultaneous Estimation Of Artemether And Lumefantrine By Rp-Hplc

Paper ID - 1105

A Paper Presented by:Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present research was aimed to develop and validate a novel method for the simultaneous estimation of Antimalarial drugs, Artemether and Lumefantrine using reverse phase HPLC. Chromatographic estimations were performed employing several trials and an optimized method was developed. A Kromasil Eternity C18 column made up of Stainless Steel has been used with dimensions 250mm x 4.6mm x 5 µm. Separation was performed in an Isocratic mode with Mobile phase consisting of *Ammonium buffer solution*: Methanol (50:50) ratio. A UV-Detector is used and the wavelength was set at 246 nm with flow rate of 1.0 mL/min and runtime of 8 minutes. The method was validated for Linearity, Accuracy, Precision, Ruggedness and Stability parameters. All validation parameters were observed to be under the acceptance limits and the method was found to be simple, accurate, precise for simultaneous estimation of drugs in pharmaceutical dosage forms.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Novel Analytical Method Development And Validation For Simultaneous Estimation Of Didanosine And Stavudine

Paper ID - 1106

A Paper Presented by:Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

A simple, precise and economical RP-HPLC method has been developed for the simultaneous estimation of didanosine and stavudine in pharmaceutical dosage form. The method was carried out on a Monolithic C18 (100 X 4.6 mm, 5 µm) column with a mobile phase consisting of 0.05 M phosphate buffer adjusted to pH 7.4 : methanol (70:30) at a flow rate of 1.0 ml/min. Detection was carried out at 246 nm. The retention time of didanosine and stavudine was 4.23 and 5.17 min, respectively. The developed method was validated for all parameters as per ICH guidelines. The method showed linearity at range of 0-40µg/mL and 0-20µg/mL and correlation coefficient of 0.99939 and 0.99968 respectively. The results suggested the developed method was precise, accurate, linear, robust and specific.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Anticonvulsant Potential Of Ethanolic Extract And Aqueous Fraction Isolated From *Schrebera Swietenoids*

Paper ID - 1107

A Paper Presented by:Ch. Himatha Reddy, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Dried roots of *Schrebera swietenoids* are a popular folk remedy for the treatment of epilepsy in the traditional Unani system of medicine in the sub-continent. We carried out anticonvulsant screening of the ethanolic extract (EE) and aqueous fraction (AF) of this plant utilising the maximal electroshock (MEST) and subcutaneous pentylenetetrazole (scPTZ), bicuculline (scBIC), picrotoxin (scPTX) and strychnine (scSTN) tests for anticonvulsant activity. EE had weak dose-dependent anticonvulsant effects on seizures induced by PTZ and BIC. AF exhibited dose-dependent activity against hind limb tonic extension phase (HLTE) of MEST and comparatively stronger anticonvulsant activity against seizures induced by PTZ and BIC. The results suggest the presence of potent anticonvulsant compounds in AF of *Schrebera swietenoids* and deserve further investigation for isolation of active compounds and elucidation of the mechanism of anticonvulsant action.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Green Synthesis Of Silver Nanoparticle Using *Barleria Noctiflora* And Its Antidiabetic Activity

Paper ID - 1108

A Paper Presented by:Ch. Himatha Reddy, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present study focuses on the green synthesis of silver nanoparticles using aqueous extract of *Barleria noctiflora* . This medicinal plant was rich in phenol and flavonoids groups of compounds. They reduced the silver nitrate into silver nanoparticle (AgNPs) and which were characterized using UV–vis spectrophotometry, X-Ray Diffraction (XRD), Scanning Electron Microscopy (SEM), Transmission Electron Microscopy (TEM), Energy Dispersive X-Ray (EDAX) patterns and FT-IR. The XRD analysis illustrated that the silver nanoparticles were crystalline in nature. The SEM and TEM analyses revealed that the synthesized silver nanoparticles were spherical in shape and the particle size was found to be less than 100 nm. The antidiabetic ability of the AgNPs was tested and the results showed significant free radical scavenging ability, inhibition of carbohydrate digestive enzymes (α-Glucosidase and α-Amylase) and enhancement of Glucose uptake rate. The FT-IR result revealed that the presence of various functional groups around AgNPs.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Phytochemical, *In Vitro* Antioxidant Activity On The Bark Of *Soymida Febrifuga*

Paper ID - 1109

A Paper Presented by:Ch. Himatha Reddy, V Aparna, G. Kalyani
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The aim of the work was to carry out the Phytochemical screening and *In-vitro* Antioxidant activity of the plant, *Soymida febrifuga* (Meliaceae), claimed to be used traditionally in the treatment of wounds, dental diseases, fever, haemorrhage and asthma. In Unani system it is used as astringent to bowels it is bittertonic and antimalarial. However, literature survey indicated no published reports on the *In-vitro* Antioxidant activities of the bark of the plant. In view of this *In-vitro* Antioxidant activity of the hydro alcoholic extracts of the bark of *Soymida febrifuga* was evaluated by using three parameters such as Superoxide anion, Hydroxyl radical and DPPH radicals and compared to standard antioxidant drug. The mean IC_{50} values for extract of *Soymida febrifuga* and Ascorbic acid were found to be 220 µg and 80.24µg for superoxide scavenging activity, 203.5 µg and 60.24 µg for DPPH and 351.9 µg and 190.21 µg for hydroxyl radical scavenging activities respectively. The Antioxidant activity of the plant may be attributed due to phenolic compounds.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

RP-HPLC Method Development And Validation Of Dexlansoprazole And Clopidogrel In Bulk And Pharmaceutical Dosage Forms

Paper ID - 1110

A Paper Presented by:Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

A sensitive, accurate and precise method has been developed and validated for the estimation of Dexlansoprazole and Clopidogrel by RP-HPLC and validates as per ICH guidelines. Isocratic separation was achieved using Methanol and water as mobile phase in the ration of 60:40 with flow rate 0.8 mL/min on Phenomenex, C18 column (250 x 4.6 mm, 5µ), detected at 262 nm using PDA detector with a run time of 10 minutes. The developed method was validated for various parameters as per ICH guidelines. The method showed linear, specific, accurate, precise, rugged, robust and stability indicating for the determination of Dexlansoprazole and Clopidogrel in bulk and pharmaceutical dosage forms. The percentage recovery of the developed method was found to be 99.68 to 100.95%. The developed and validated can hence be applied in determination of drug in routine control analysis.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Hepato-Protectant Activity Of Leaf Extract Of Caesalpinia Coriaria (Jacq.) Willd.

Paper ID - 1111

A Paper Presented by:Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Hepatoprotective activity of the extracts hexane, ethyl acetate, ethanolic and hydro-alcoholic were tested against CCl_4-induced hepatic damage in rat at doses 200 mg/kg and 400 mg/kg, respectively of each extract for 6 days. Silymarin, a standard hepatoprotective substance (40 mg/kg) was used as positive control. The doses were administered orally prior to the induction of CCl_4 (1ml/kg) hepatotoxicity. Drug vehicle, as negative control, was used 5% gum acacia suspension. The serum biochemical markers such as SGOT, SGPT, ALP and Total bilirubin were assessed using standard protocols. Percentage protection of the extracts tested including silymarin was calculated. All the extracts produced dose-dependent protection of liver tissue, as evident from the declined levels of serum parameters. It was observed that the percentage protection for SGOT, SGPT, ALP and Total bilirubin at 200 mg/kg b.w. were 41.56, 39.85, 50.95 and 60.32, respectively and at 400 mg/kg b.w. were 60.98, 55.61, 60.13, and 71.60, respectively, and Silymarin at 50 mg/kg were 93.55, 94.32 89.04 and 80.00, respectively. Of all the extracts tested, hydro-alcoholic extract possessed more protection of the liver tissue at both the dose levels. The results indicated that all extracts of the leaves of *Caesalpinia coriaria* showed considerable significant hepatoprotective activity against CCl_4 induced liver damage compared to control groups.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Role Of Natural Products In Drug Discovery And Development

Paper ID - 1112

A Paper Presented by:Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Natural products (NPs) are typically secondary metabolites, produced by organisms in response to external stimuli such as nutritional changes, infection and competition. NPs produced by plants, fungi, bacteria, protozoans, insects and animals have been isolated as biologically active pharmacophores. Some well known examples of valuable NPs used widely used in medicinal and health industries include morphine (opioid analgesic), salicin (analgesic-antipyretic), cocaine (local anesthetic), etc., and their analogues, lovastatin (antihyperlipidemic), cyclosporine A and tacrolimus (immunosuppressive agents), paclitaxel and docetaxel (antitumor agents), erythromycin (antibiotic) and amphotericin-B (fungicidal agent). Approximatley one-third of the top selling drugs in the world are NPs or their derivatives. Moreover NPs are widely recognized in pharmaceutical industry for their broad structural diversity as well as their wide range of pharmacological activities. In light of this, current paper attempts to discuss the role of natural products in drug discovery and development.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

FORMULATION AND EVALUATION OF POLYHERBAL ANTI-INFLAMMATORY TABLETS

Paper ID - 1113

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present study deals with the Formulation and Evaluation of polyherbal tablets with anti-inflammatory activity using *invivo* Carrageenan induced rat paw odema model. Polyherbal formulations were developed by using three bioactive fractionated extracts of *Hibiscus cannabinus*, *Murraya koenigii* and *Tabernamontana divaricata*.Preliminary phytochemical studies were carried out for individual extracts for the evaluation of active phytoconstituents present in them. Anti-inflammatory activity was performed using albino wistar rats of either sex at the doses of 100, 200 and 400 mg/kg body weight, taking Indomethacin as standard drug. The graphs were plotted by taking Mean ± SEM where n=4. Formulation was carried out using Avicel PH-102 as Carrier material, Sodium starch glycolate as disintegrating agent, Magnesium stearate as lubricant and Aerosil 200 as coating material. The thus obtained granules were punched in rotary tablet punch.Tablets were evaluated for its hardness, appearance, weight variation test disintegration time and *In-vitro* dissolution. The absorbance values of dissolution samples were performed using UV Visible spectrophotometer between 200-700nm. The prepared herbal tablets showed hardness values which are 4 to 4.5 kg/cm^2 , this is within standard USP limit and Angle of repose between 26-37. This indicates that the granules have good flow properties and exhibited good antiinflammatory activty individually and in mixture which showed a synergistic effect.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Protective Effect Of A*lstonia Scholaris* On Paracetamol Induced Hepatotoxicity In Rats

Paper ID - 1114

A Paper Presented by:Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Alstonia scholaris is traditionally used in treatment of liver disorders and thought to have protective effect in reducing hepatotoxicity. The current study evaluated the *in vivo* model along with *in vitro* antioxidant activity. Albino rats were divided into five groups. Groups A and B were normal and experimental controls, respectively. Group C received silymarin 100 mg/kg BW/day, Groups D and E received methanolic extract of *Alstonia scholaris* roots (ASE) 200 and 400 mg/kg BW/day p.o., respectively, for 10 days. Hepatotoxicity was induced with paracetamol 2 g/kg BW/day. Blood samples were collected; serum was separated and analyzed for various biochemical parameters. *In vitro* anti-oxidant activity was performed using DPPH method. Paracetamol caused marked liver damage as noted by significant increased activities of serum SGPT, SGOT, ALP, Total Bilirubin and lowered levels of Total Protein. The plant extract showed a remarkable hepatoprotective activity against paracetamol induced hepatotoxicity. Groups C, D and E, remarkably prevented liver damage in a dose dependent manner. Antioxidant values clearly showed the inhibition of free radicals in a dose dependent manner. The efficacies of the extracts showed significant hepatoprotective activity and synergism with standard drug silymarin. Data indicates a positive effect and hence more research is required to derive an optimal therapeutic dose.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Phytochemical Screening And Anti-Oxidant Activity Of Aerial Parts *Hugonia Mystax*

Paper ID - 1115

A Paper Presented by:Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present study was to carry out the preliminary phytochemical screening and *In-vitro* antioxidant activity of aerial parts of *Hugonia mystax*. Preliminary phytochemical screening was carried out to identify the phytoconstituents present in them. *In*vitro antioxidant activity of hydroalcoholic, ethyl acetate and hexane extracts of *H. mystax* was evaluated using two parameters such as hydroxyl radical and DPPH radicals and they are compared to standard antioxidant drug (Ascorbic acid). The Phytochemical screening of all the three extracts showed the presence of phytosterols, terpenoids, glycosides, flavanoids, alkaloids and phenols. The mean IC_{50} values for DPPH radical of hydroalcoholic, ethyl acetate and hexane extracts produced dose dependent scavenging activity on DPPH radicals ranging from 727µg, 699µg, and 1010µg respectively. The mean IC_{50} value for standard was found to be 107µg. The mean IC_{50} values for hydroxyl radical of the three extracts produced dose dependent inhibition of hydroxyl radicals ranging from 574µg, 684µg, and 735µg respectively and that of standard was found to be 348µg. Among the three extracts of *H. mystax*, the hydroalcoholic extract showed better activity than remaining extracts on hydroxyl radical whereas ethyl acetate extract showed better activity than other extracts on DPPH radical.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation Of Anti-Inflammatory Activity Of *Leaf Exttracts Of Caesalpinia Coriaria*

Paper ID - 1116

A Paper Presented by:Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present study was aimed to investigate the Anti-inflammatory activity of the leaf extract of *Caesalpinia coriaria* using carrageenan-induced rat paw oedema, an acute inflammation model. Indomethacin is used as standard drug at a dose $1.3x10^{-5}$ moles/kg b.w. The extracts, hexane, ethyl acetate and methanol at the doses of 200 and 400 mg/kg b.w., of each extract produced dose dependent reduction significantly ($p<0.05–0.001$) in carrageenan-induced rat maximal paw oedema as time-course curve during 6hrs by 11.40±1.11, 24.07±2.57 (hexane), 31.45±1.76, 54.40±1.38 (ethyl acetate) and 24.30±1.28, 46.31±2.11, respectively and Indomethacin at dose 1.3×10^{-5} moles/kg reduced paw oedema by 64.16±2.49. The percentage inhibition of total paw oedema response as area under the curve (AUC) during 6 hours were 13±3.34 15.14±2.61; 34.57±2.22, 58±3.20 and 26.76±2.41, 33.48±1.30, respectively and Indomethacin was 65±2.39. All the extracts (methanol, ethyl acetate and hexane) of *Caesalpinia coriaria* leaves tested exhibited significant inhibitory effects. However, ethyl acetate extract was possessed more activity compared to methanol and hexane extracts and almost equipotent activity in inhibiting total paw oedema significant compared to standard drug, Indomethacin.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Nephroprotective Activity Of Bark Of *Soymida Febrifuga*

Paper ID - 1117

A Paper Presented by:Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present research was to investigate phytochemical screening, Nephroprotective activity of hydro-alcoholic (methanol 70%v/v) extract of *Soymida febrifuga* bark in cisplatin induced animal models. Preliminary phytochemical screening indicated presence of sterols, triterpenes, tannins, alkaloids, glycosides, flavanoids and phenols.The plant extract when administered. at doses of 250 mg/kg and 500mg/kg (Group III and Group IV) produced dose dependent significant ($P<0.01$) reduction in serum levels of Creatinine and Blood Urea Nitrogen as compared to Cisplatin treated group.The % protection against rise in serum creatinine levels and blood urea levels by hydro alcoholic bark extract of *Soymida febrifuga* at doses of 250mg/kg and 500mg.kg was found to be 66.42%, 73.88% and 54.43%, 68.54% respectively. (Group III and Group IV) produced dose dependent significant ($P<0.01$) increase in serum levels of Albumin and Total protein as compared to Cisplatin treated group.The % protection against decrease in serum albumin levels and Total protein levels by hydro alcoholic bark extract of *Soymida febrifuga* at doses of 250mg/kg and 500mg.kg was found to be 34.32%, 70.88% and 37.80%, 62.99% respectively. From the results it can be concluded that the hydro alcoholic bark extract of *Soymida febrifuga* has good Nephroprotective activity. Further studies are warranted to identify and isolate the active principle responsible for its pharmacological activities.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Hepatoprotective Activity On Fruits Of *Balanites Roxburghii*

Paper ID - 1118

A Paper Presented by:Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present study deals with the preliminary phytochemical screening, antioxidant and hepatoprotective activity on the fruits of *Balanites roxburghii*.The hydroalcoholic (methanol 70%v/v) extract was prepared using Soxhlet apparatus. Preliminary phytochemical screening revealed the presence of various phytoconstituents such as phytosterols, triterpenes, saponins, glycosides and alkaloids. Antioxidant studies were performed using different models such as superoxide, hydroxyl radical and DPPH as per standard protocols using Ascorbic acid as standard. IC_{50} values were calculated. Hepatoprotective activity was carried out using thioacetamide model. Silymarin was taken as standard. Albino wistar rats of either sex were taken weighing about 130-250g and were divided into five groups. Groups 1 and 2 were normal and experimental controls, respectively. Groups 3, 4 and 5 received the alcoholic extract 50 mg/kg, 125 mg/kg and 250 mg/kg p.o. Hepatotoxicity was induced in Groups B, C, D and E on the eighth day using thioacetamide. The hepatoprotective effect was evaluated by performing % inhibition of the SGPT, SGOT, ALP, TOTAL PROTEIN, AND TOTAL BILURUBIN levels. Data were analyzed by using One way ANOVA test followed by Dunnetts post test. In groups 3, 4 and 5, liver enzymes ($P<0.001$) and protein and bilirubin levels were significantly ($P < 0.01$) closer to normal than in group 2.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Investigation Of Preliminary Phytochemical Constituents And Antibacterial Activity Of Herbal Formulation

Paper ID - 1119

A Paper Presented by:Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Investigation of preliminary phytochemical constituents and antibacterial activity of two herbal formulations was performed. Preliminary phytochemical screening was carried out for both formulations using different standard chemical tests to identify the phytoconstituents present in them. Antibacterial activity of the two formulations on different Gram positive and Gram negative organism (Escherichia coli, Protease, Klebsella) was carried out using Diffusion method. The standard drug, Ampicillin was used. The herbal formulae were made using different Combinations of plants powders. Formulation 1 is combination of *Cinnamomum zeylanicum, Punica granatum, Acorus calamus, Clerodendron paniculatum, Rubia cardifolia* and Formulation 2 is *Premna intgrefolia, Desmodium gangeticum, Hedychium spicatum, Mamojero,Oroxylum indicum.* Preliminary phytochemical screening revealed the presence of steroids, triterpenes, alkaloids, glycosides and saponins. Antibacterial activity studies indicated that the Zones of Inhibition for E.coli, Protease and Klebsiella shown by formula 1 was 1.2cm, 1.4cm, 1.1cm, respectively and that shown by formula 2 was 1.6cm, 1.3cm, 1.4cm, respectively. Both formulae tested revealed the presence of steroids, triterpenes, alkaloids, glycosides and saponins. Antibacterial activity studies revealed that formulation 2 produced higher zones of inhibition than formula 1 compared to Ampicillin.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Antidiabetic and Antihyperlipidemic Activities of the Latex Extract of *Aloe megalacantha* Baker (Aloaceae) in azadirachta indica Induced Diabetic Model

Paper ID - 1120

A Paper Presented by:Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Background. Diabetes mellitus has become a major public health and economic problem across the globe. The inadequacies, as well as serious adverse effects associated with conventional medicines, led to a determined search for alternative natural therapeutic agents. The latex extract of *Aloe megalacantha* has been used for the management of diabetes mellitus in Ethiopian folk medicine. This study aimed to evaluate the antidiabetic and antihyperlipidemic effects of the leaf latex extract of *A. megalacantha* in *Azadirachta indica* induced diabetic model. *Methods*. The experimental diabetes was induced in Swiss albino mice by the administration of a single dose of STZ (150 mg/kg), intraperitoneally. The leaf latex extract of *A. megalacantha* at three different doses (100, 200, and 400 mg/kg) was administered for a period of 14 days. Fasting blood glucose levels (BGLs) were measured by glucose-oxidase and peroxidase reactive strips. After fourteen days, mice from all groups fasted and the blood was collected through puncturing the retroorbit of the eyes under mild anesthetic condition. The collected blood sample was used to determine serum biochemical parameters such as total cholesterol (TC), triglycerides (TG), low-density lipoprotein (LDL), very low-density lipoprotein (VLDL), and high-density lipoprotein (HDL) cholesterol. The statistical analysis of results was carried out using one-way analysis (ANOVA) followed by post hoc multiple comparison tests. *Results*. Oral administration of *A. megalacantha* leaf latex extract at doses of 100, 200, and 400 mg/kg daily for 14 days results in a significant ($p < 0.05$) decrease in fasting BGL as compared to negative control STZ-induced diabetic mice. The leaf latex has significantly reduced the level of TC, TG, and LDL, VLDL cholesterol while a significant ($p < 0.05$) HDL cholesterol increment was observed. *Conclusions*. The findings of the present investigation indicated that the leaf latex of *A. megalacantha* possessed significant antihyperglycemic and antihyperlipidemic potential which may prove the claimed use of the plant in amelioration of diabetes and associated complications in Ethiopian folk medicine.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Antidiabetic activity and phytochemical screening of extracts of the leaves of *Ajuga remota* Benth on alloxan-induced diabetic mice

Paper ID - 1121

A Paper Presented by:A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Ajuga remota Benth is traditionally used in Ethiopia for the management of diabetes mellitus. Since this claim has not been investigated scientifically, the aim of this study was to evaluate the antidiabetic effect and phytochemical screening of the aqueous and 70% ethanol extracts on alloxan-induced diabetic mice.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Antidiabetic Activity of *Vinca rosea* Extracts in Alloxan-Induced Diabetic Rats

Paper ID - 1122

A Paper Presented by:A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present study was carried out to evaluate the antidiabetic activity of *Vinca rosea* methanolic whole plant extracts in alloxan induced diabetic rats for 14 days. The methanolic whole plant extract at high dose (500 mg/kg) exhibited significant anti-hyperglycemic activity than whole plant extract at low dose (300 mg/kg) in diabetic rats. The methanolic extracts also showed improvement in parameters like body weight and lipid profile as well as regeneration of -cells of pancreas in diabetic rats. Histopathological studies reinforce the healing of pancreas, by methanolic *Vinca rosea* extracts, as a possible mechanism of their antidiabetic activity.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Antidiabetic activity of extracts of Anacardium occidentale Linn. leaves on diabetic rats

Paper ID - 1123

A Paper Presented by:A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Anacardium occidentale L. (Anacardiaceae) is used in South Cameroon as well as in other tropical countries by traditional practitioners as a folk remedy for treatment of diabetes mellitus. We demonstrated the antidiabetic potential of the plant extracts in *n*-streptozotocin diabetic rats. The aim of the current study was to investigate the antidiabetic effects of ethanol extract of leaves of *A. occidentale* on neonatal diabetic rats. Two day old neonates were injected with 100 mg/kg of streptozotocin. At the end of the experimental period of 30 days, reduction in the fasting blood glucose levels, serum insulin, glycated hemoglobin levels, serum lipid parameters, and renal function biomarkers were estimated in the control and treated rats. Histopathological examination of liver, kidney and pancreas were also carried out. On administration of 100 mg/kg of plant extract, blood glucose levels of the rats showed 8.01% and 19.25% decrease in the fasting blood glucose levels on day 15 and day 30, respectively. The administration of extract showed that the effects of extract treatment are comparable to treatment with the standard drug Pioglitazone. These results demonstrate significant antidiabetic potential of the ethanol extract of leaves of *A. occidentale*, justifying the use of plant in the indigenous system of medicine. Further studies for investigating the specific compound(s) responsible for such beneficial role in diabetes would open new outlook in the therapy of type 2 diabetes.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Antioxidant and antidiabetic activities of methanolic extract of *Cinnamomum cassia*

Paper ID - 1124

A Paper Presented by:A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Cinnamomum cassia or *Chinese cinnamon* is one of the fundamental herbs in traditional Chinese medicine. *C. cassia* is used as astringent, antiseptic, and used for the treatment of metabolic disorders. The antioxidant and antidiabetic effects of its extracts are unclear. Hence, the present study is planned to investigate the antioxidant and antidiabetic effects of methanolic extracts barks of C. cassia. Materials and Methods: Bark of C. cassia was extracted with methanol, ethanol, and acetone and its antioxidant activity was studied using 2,2-diphenyl-1-picrylhydrazyl (DPPH) and 2,2-azino-bis-3-ethylbenzothiazoline-6-sulfonic acid (ABTS) free radical scavenging assays. Acute toxic effect of methanolic extract of *C. cassia* (MECC) carried out as Organisation for Economic Co-operation and Development guidelines. MECC was studied for its antidiabetic effect using streptozotocin (STZ)-induced diabetic rats. Results: In both DPPH and ABTS free radical scavenging assay, methanolic and ethanolic extracts exhibited free radical scavenging activity. In acute toxicity testing, MECC did not show any significant toxic signs up to 2000 mg/kg, hence the antidiabetic activity of MECC was carried out at the dose levels of 125, 250, and 500 mg/kg. MECC showed antidiabetic activity from 2nd week of the experiment onward. At the end of the study, diabetic animals showed significant increases in the levels of total cholesterol (TC), very-low-density lipoprotein, and TC/high-density lipoprotein radio compare with that of normal control and MECC prevented the STZ-induced hyperlipidemia. In the histopathological analysis, sections from the liver, pancreas, and kidney of the diabetic animals and the animals treated with MECC 500 mg/kg showed mid-to-moderate toxic effects. Conclusion: The MECC exhibited significant antioxidant and antidiabetic activities.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Anti-inflammatory activity of the leaf extracts of Gendarussa vulgaris Nees

Paper ID - 1125

A Paper Presented by:A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Inflammation is a reaction of living tissues towards injury, and it comprises systemic and local responses[1]. In spite of our dependence on modern medicine and the tremendous advances in synthetic drugs, a large number of the world populations (80% of people) cannot afford the products of the western pharmaceutical industry and have to rely upon the use of traditional medicines, which are mainly derived from plant material. The fact is well recognized by the WHO which has recently compiled an inventory of medicinal plants listing over 20 000 species. The family Apocynaceae consists of several important medicinal plants with wide range of pharmacological, biological activities and interesting phyto chemical constituents. The main action of anti-inflammatory agents is the inhibition of Cyclooxegenase enzymes which are responsible for the conversion of Arachidonic acid to prostaglandins. Since human red blood cell (HRBC) membranes are similar to these lysosomal membrane components, the prevention of hypotonicity induced HRBC membrane lysis was taken as a measure in estimating the anti-inflammatory property of various extracts of *Gendarussa vulgaris* (*G. vulgaris*) Nees. Thus, Human red blood cell membrane stabilization (HRBC method)[2] has been used as a method in estimating the anti-inflammatory property. In certain parts of Malabar the leaf of this plants was traditionally used in the treatment of inflammation. The present study aimed to authenticate that traditional information by both *in vitro* and *in vivo* anti-inflammatory screening. The alcoholic extract at a concentration of 300 mg/mL showed potent activity on comparing with the standard drug diclofenac sodium.

Keywords: *Gendarussa vulgaris*, Anti-inflamation, HRBC, Carrageenan

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Anti-inflammatory activity of aqueous extract of Mirabilis jalapa Linn. Leaves

Paper ID - 1126

A Paper Presented by:A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The objective of the present study was to evaluate the anti-inflammatory activity of aqueous extract of *Mirabilis jalapa* Linn. (MJL)(Nyctaginaceae) leaves for scientific validation of the folklore claim of the plant. The leaves are used as traditional folk medicine in the south of Brazil to treat inflammatory and painful diseases. Cosmetic or dermo-pharmaceutical compositions containing MJL are claimed to be useful against inflammation and dry skin.

Keywords: Anti-inflammatory activity, aqueous extract, *Mirabilis jalapa*, paw edema

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Antihypertensive Activity of the Total Alkaloids from the Leaves of Moringa oleifera

Paper ID - 1127

A Paper Presented by:A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Moringa oleifera leaves have traditionally been used in Ayurvedic medicine for their antihypertensive activity. Preliminary studies in our laboratory indicated that a water extract of leaves of this tree is efficacious in reducing the chronotropic and inotropic effects on the isolated frog heart. The alkaloids obtained by the fractionation of the water extract of the leaves of M. oleifera, converted into their salt form, were tested for their activity on the isolated frog heart. The total alkaloidal salts were found to have a negative inotropic effect on the frog heart. This activity was further characterised by testing it on the isolated guinea pig ileum.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Assessment of the antihypertensive and vasodilator effects of ethanolic extracts of some Colombian medicinal plants

Paper ID - 11128

A Paper Presented by:A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The antihypertensive and vasodilator effects of ethanolic extracts prepared from *Calea glomerata* Klatt, *Croton schiedeanus* Schlecht, *Curatella americana* L., *Lippia alba* (Mill)n N.E.Br. and *Lupinus amandus*, which are medicinal plants used in Colombian folk medicine for the treatment of hypertension, were assayed both in SHR and Wistar rats and in rat isolated aortic rings. At a dose of 20 mg/kg, intravenous bolus administration of the ethanolic extracts, from *C. schiedeanus*, *C. americana* and *L. amandus* showed significant antihypertensive activity in SHR, *C. schiedeanus* being the most active. *C. schiedeanus* elicited dose-dependent decreases in mean arterial pressure and heart rate (5–100 mg/kg, i.v.) in SHR but 200 mg/kg administered orally did not show any significant effects, even after 3 h of observation. In intact rat aortic rings, ethanolic extracts from *C. schiedeanus* and *Calea glomerata* relaxed the contractions induced by KCl (80 mM) and phenylephrine (10^{-6} M) in a concentration-dependent manner (10^{-6}–3×10^{-4} g/ml), with IC_{50} of 6.5×10^{-5} (7.3–5.8) g/ml and 7.1×10^{-5} (7.9–6.4) g/ml, respectively. Bioguided phytochemical fractionation of the ethanolic extract from *C. schiedeanus* was started. More than one active principle seems to be present, flavonoids and terpenoids compounds were detected.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Antihypertensive Activity of the Aqueous Extract of *Retama raetam* Forssk. Leaves in Spontaneously Hypertensive Rats

Paper ID - 1129

A Paper Presented by:A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The antihypertensive and diuretic effects of the aqueous extract of *Retama raetam* Forssk. (RR) leaves were studied in both normotensive (WKY) and spontaneously hypertensive rats (SHR). In SHR rats, daily oral administration of RR (20 mg/kg) for three weeks exhibited a significant reduction in blood pressure. The systolic blood pressure decreased significantly from the seventh day ($P<0.01$) and persisted through the end of treatment ($P<0.001$) in SHR rats. The RR significantly enhanced the diuresis in WKY rats ($P<0.001$). Furthermore, oral administration of RR at a dose of 20 mg/kg produced a significant increase on urinary excretion of sodium ($P<0.05$), potassium ($P<0.01$) and chlorides ($P<0.01$) in SHR rats. In WKY rats, RR treatment induced a significant increase on urinary potassium elimination ($P<0.05$) without affecting sodium and chloride excretion. Irbesartan (Avapro(r)) 20 mg/kg (body weight), an angiotensin II receptor antagonist, was used as reference drug. No significant changes were noted in heart rate after RR treatment in SHR as well as in WKY rats. Glomerular filtration rate showed a significant

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Comparative Study of the Antihypertensive Activity of Marrubium Vulgare and of the Dihydropyridine Calcium Antagonist Amlodipine in Spontaneously Hypertensive Rat

Paper ID - 11130

A Paper Presented by:A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Water extract of Marrubium vulgare is widely used as antihypertensive treatment in folk medicine. We have compared the effect of 10-week-long treatment with amlodipine or Marrubium water extract on systolic blood pressure (SBP), cardiovascular remodeling and vascular relaxation in spontaneously hypertensive rats (SHR). Both treatments produced similar decrease in SBP. Amlodipine treatment reduced left ventricle, aortic and mesenteric artery weight. Marrubium treatment had a significant antihypertrophic effect in aorta only. Relaxation to acetylcholine (ACh) of mesenteric artery was improved by Marrubium but not by amlodipine treatment. These results demonstrate that, in addition to its antihypertensive effect, Marrubium water extract improved the impaired endothelial function in SHR.

Keywords: Marrubium vulgare, Amlodipine, Hypertrophy, Vasorelaxation, Endothelium, SHR

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Effect of *Azadirachta indica* leaf extract on serum lipid profile changes in normal and streptozotocin induced diabetic rats

Paper ID - 1131

A Paper Presented by:A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Effects of *Azadirachta indica* leaf extract on serum lipid profile changes in normal and streptozotocin - induced diabetic rats have been studied with a view to elucidate its possible effect on cardiovascular disease induced by hyperglycemia. It was observed that *A. indica* leaf extract significantly reduced the total cholesterol, LDL- and VLDL-cholesterol, triglycerides and total lipids of serum in streptozotocin induced diabetic rats but HDL-cholesterol levels remained unchanged when compared with streptozotocin- induced diabetic control animals.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Screening and characterization of L-asparaginase producing microorganisms from tulsi (*Ocimum sanctum* L.)

Paper ID - 1132

A Paper Presented by:A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Studies were conducted to screen endophytic microorganisms isolated from tulsi (*Ocimum tenuiflorum*) for L-asparaginase activity. The screening was done using the rapid plate assay technique and enzyme activities were estimated in the culture filtrates using the Nesslerization method. As many as 17 isolates of tulsi endophytes were tested for the production of L-asparaginase by the rapid plate assay technique. Out of these, only 3 isolates were positive for the production L-asparaginase by forming a pink zone around the colony. The maximum zone was found in the isolate TRB4 (1.2 cm dia) and the minimum zone was produced by the isolate TLB2 (0.8 cm dia). All the isolates positive for L-asparaginase production were quantified. The isolate TRB4 showed the maximum enzyme activity of 0.45 IU/mg/ml and the isolate TLB2 showed the least activity of 0.30 IU/mg/ml.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Ethnopharmacology of Phyllanthus emblica

Paper ID - 1133

A Paper Presented by:A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

This papper peals with the ethnopharmacology of *P. emblica*, a traditional herbal medicine used by many peoples in the world. The paper introduces the biological characters, geographical distribution-patterns, chemical constitution and pharmacology of the plant. By cross-cultural comparative study, this paper indicates that there are 17 countries and nations of the world using various parts of *P.emblica* in their medical treatment. The medicinal plant is good for anti-hepatitis, anti-cancer, anti-tumor and regulation of stomatal function. The plant is also regarded as a traditional immunomodulator and a natural adaptogen. The result of the study reveals that *P.emblica* is an important traditional medicine with broad prospects.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Antidiabetic effect of Ficus religiosa extract in streptozotocin-induced diabetic rats

Paper ID - 1134

A Paper Presented by:A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

In Indian traditional system of medicine, *Ficus religiosa* (Family Moraceae) is prescribed for the treatment of diabetes mellitus. In the present study, the antidiabetic effect of aqueous extract of *Ficus religiosa* bark (FRAE) was investigated in normal, glucose-loaded hyperglycemic and streptozotocin (STZ)-induced diabetic rats.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

The Impact Of Diet And Lifestyle In Relation To Long-Term Weight Gain In Women And Men

Paper ID - 1135

A Paper Presented by:A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Specific dietary and other lifestyle behaviours may affect the success of the straightforward-sounding strategy "eat less and exercise more" for preventing long-term weight gain. We performed prospective investigations involving three separate cohorts that included 70,650 women and men who were free of chronic diseases and not obese at baseline, with follow-up periods from 2006 to 2010, 2011 to 2015, and 2009 to 2013. The relationships between changes in lifestyle factors and weight change were evaluated at 4-year intervals, with multivariable adjustments made for age, baseline body-mass index for each period, and all lifestyle factors simultaneously. Cohort-specific and sex-specific results were similar and were pooled with the use of an inverse-variance–weighted meta-analysis. Within each 4-year period; participants gained an average of 3.35 lb (5th to 95th percentile, −4.1 to 12.4). On the basis of increased daily servings of individual dietary components, 4-year weight change was most strongly associated with the intake of potato chips (1.69 lb), potatoes (1.28 lb), sugar-sweetened beverages (1.00 lb), unprocessed red meats (0.95 lb), and processed meats (0.93 lb) and was inversely associated with the intake of vegetables (−0.22 lb), whole grains (−0.37 lb), fruits (−0.49 lb), nuts (−0.57 lb), and yogurt (−0.82 lb) ($P \leq 0.005$ for each comparison). Aggregate dietary changes were associated with substantial differences in weight change (3.93 lb across quintiles of dietary change). Other lifestyle factors were also independently associated with weight change ($P<0.001$), including physical activity (−1.76 lb across quintiles); alcohol use (0.41 lb per drink per day), smoking (new quitters, 5.17 lb; former smokers, 0.14 lb), sleep (more weight gain with <6 or >8 hours of sleep), and television watching (0.31 lb per hour per day).

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Prescribing Pattern Of Drugs For Various Cardiovascular Conditions With Diabetes In A Tertiary Care Hospital

Paper ID - 1136

A Paper Presented by:A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

In recent years, India has become a country with the largest number of diabetics. Diabetes is an important and increasingly prevalent independent risk factor for cardiovascular diseases and stroke. It is reported that about 70-80% of the individuals with diabetes will eventually become hypertensives. Chronic complications of diabetes are dominated by ischemic heart disease (IHD), myocardial infarction, congestive heart failure, hypertension, and dyslipidemias, which necessitate intensive drug therapy along with lifestyle modifications. They are a much larger burden on both diabetic patients and overall medical costs than diabetes itself. Study of drug-prescribing pattern can give insight into the trends in using the drugs in diabetics in treating their co-morbid conditions. The knowledge of prescription pattern can lead us toward the rational drug use and help to take measures to improve prescribing habits. The present study was undertaken to analyze the prescribing pattern of drugs used in cardiovascular co-morbid conditions in diabetes mellitus. For that we have identified the prevalence of IHD, hypertension, and dyslipidemia in diabetic patients attending the outpatient department (OPD) of our teaching hospital. An attempt was also done to identify whether the number and pattern of the drug prescription vary with the control of diabetes.

This study was conducted in the OPDs of cardiology and general medicine of a tertiary care hospital. The study protocol was approved by the Institutional Ethical Committee. Diabetic patients of at least 1-year duration; between 30 and 75 years of age of either sex with history of IHD, hypertension or dyslipidemia were included in this study. Considering the increased prevalence of other co-existing disease conditions, the patients above 75 years were excluded. Data were collected from the medical records of 100 diabetic patients criteria who had visited the OPD from January to june, 2018 using a proform a to record the demographics of patients, their blood glucose/glycosylated hemoglobin (HbA1C) levels, diagnosis and drugs prescribed. The blood glucose levels/HbA1C was used to identify the glycemic control of the patients and they were classified as controlled fasting blood sugar (FBS) ≤100 mg/dL/HbA1C ≤6) and uncontrolled diabetics (FBS >110 mg/dL/HbA1C >8). A descriptive analysis of data was done to find the prescribing pattern of cardiovascular drugs in controlled and uncontrolled diabetics.Out of 100 patients, 64% were males and 36% were females with a mean age of 52.42 ± 13.59 and 50.42 ± 12.35 years respectively. In our study population, 23 patients had controlled diabetes and 77 patients had uncontrolled diabetes. Systemic hypertension was the most common cardiovascular co-morbidity among the diabetic.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Home Medicines Review In The Elderly

Paper ID - 1137

A Paper Presented by:A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Background. Old age is commonly associated with a high comorbidity index, polypharmacy and often DRPs, including adherence problems and potentially inappropriate medications (PIMs). Purpose to develop a university-based programme where students actively engage in managing the medication of elderly patients. To test the feasibility of such approach to evaluate the impact of medication review on selected patient outcomes (clinical and humanistic). Method A pilot study will be undertaken using a quasi-experimental design. Patients will be recruited in: old age homes and in rural areas. Inclusion criteria are to be 75 years of age and to be on 5 medicines, to live alone or with spouse. Exclusion criteria are to be institutionalized, to have a professional career or to be unable to understand what the study involves. Patients will be followed for 6 months with measurements made at baseline, 3 months and at the end of study. The intervention group will receive a weekly visit of a student who will prepare individualized medication using the DAA system. Medication will be reviewed using Beers, START and STOPP criteria. Recommendations to the clinician will be made whenever appropriate. Outcomes: adherence measured using pillcount and MMAS-4; PIMs detected and removed; potentially omitted medications (POMs) detected and added; proxy measures whenever appropriate (e.g. glycaemia, cholesterol, B.P.) Findings: The study will start in February. This presentation aims to discuss with peers the selected methodology. Conclusion: This project intends to demonstrate that students properly supervised may be a valuable resource to enhance the quality of care provided to the elderly, whilst giving the students a worthwhile experience that develops further their competencies in medication review and in direct patient care

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Anticancer Activity Of The Selective Leaves Extracts On Lung Cancer

Paper ID - 1138

A Paper Presented by:A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The goal of this research was to explore the preliminary anticancer properties of five plants namely *Calotropis procera*, *Moringa oleifera*, *Millettia pinnata*, *Basela alba* and *Euphorbia neriifolia* available in Jharkhand which is used for the medicinal purpose by local tribes. In the present study, plant leaves from five species were collected, dried and extracted with solvents of increasing polarity, followed by assessment of their cytotoxicity in A549 non-small-cell lung cancer cells. In the antimicrobial assay, the methanol extract of the *M. pinnata* leaves exhibited comparatively higher level of inhibition of 0.7 ± 0.20 cm against a *Salmonella typhi* culture than the other extracts. *M. pinnata* leaves extract also displayed the maximum percentage inhibition in the DPPH, 83.97 ± 0.01 FRAP, 193.14 ± 3.01 mM assays. Furthermore, the cytotoxicity of the chloroform (37.45 ± 1.04) and ethyl acetate extracts (34.20 ± 0.81) of *M. pinnata* against A549 cells was found relatively higher with respect to another extract. In contrast, a study with the L132 normal epithelial lung cell line revealed less toxicity from the chloroform extract (0.33 ± 0.19) compared to the ethyl acetate extract (6.65 ± 0.59). Based on these findings, phytochemical investigation on chloroform and ethyl acetate extract of *M. pinnata* was performed using UPLC-ESI-MS/MS analysis revealing the presence of β-sitosterol, lanceolatin B, karanjin, and stigmasterol. Congruently, a complete phytochemical and cytotoxic investigation of the *M. pinnata* extract constituents might infer the potency of this extract/s as anticancer, antioxidant and antimicrobial agents.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Management of Weight Gain in Pregnancy

Paper ID - 1139

A Paper Presented by:A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Health care providers who care for pregnant women should determine a woman's body mass index at the initial prenatal visit and counsel her regarding the benefits of appropriate weight gain, nutrition and exercise, and, especially, the need to limit excessive weight gain to achieve best pregnancy outcomes. Individualized care and clinical judgment are necessary in the management of the overweight or obese woman who is gaining (or wishes to gain) less weight than recommended but has an appropriately growing fetes.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Anticancer Activities Of Natural Substances

Paper ID - 1140

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Aim: This paper presents natural substances from plants, animals, and their aquatic environments. These substances include the vinca alkaloids, mistletoe plant extracts, podophyllotoxin derivatives, taxanes, camptothecin, combretastatin, and others including geniposide, colchicine, artesunate, homoharringtonine, salvicine, ellipticine, roscovitine, maytanasin, tapsigargin, and bruceantin. Compounds (psammaplin, didemnin, dolastin, ecteinascidin, and halichondrin) isolated from the marine plants and animals such as microalgae, cyanobacteria, heterotrophic bacteria, invertebrates (e.g., sponges, tunicates, and soft corals) as well as certain other substances that have been tested on cells and experimental animals and used in human chemotherapy.
Background: Cancer is a group of diseases involving abnormal cell growth with the potential to invade or spread to other parts of the body. Not all tumours are cancerous, benign tumours do not spread to other parts of the body. Possible signs and symptoms include a lump, abnormal bleeding, prolonged cough, unexplained weight loss and a change in bowel movements. The causes for cancer include use of tobacco, alocohol, infections such as hepatitis B, hepatitis C and HPV. Cancer is often treated with some combination of radiation therapy, surgery, chemotherapy, and targeted therapy and some drugs made of the plants which have anticancereous properties which can counteract the symptoms as well as capable of acting against the cancerous cells.
Reason : To explore the anticancer potential of the medicinal plants extracts for isolation and characterisation of the active anticancer principles so that better,safer and cost effective drugs can be developed for treating cancer.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation Study Of Antibiotics Use Prescribed In A Tertiary Care Hospital

Paper ID - 1141

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present study deals with drug use evaluation of antibiotics prescribed in a tertiary care teaching hospital. In hospitals, lack of implementation of auditing methods contributes to the irrational drug use. The irrational drug use means the benefits of drug therapy in patient care may not be achieved because of underuse; overuse or misuse of drugs ultimately may lead to an increased antimicrobial resistance, adverse effects and patient mortality. The study was conducted to determine the antibiotic prescribing trend by evaluating the current practice of drug use of antibiotics by comparing with the standard clinical guidelines. A Prospective, observational and qualitative study on utilization pattern of antibiotics drugs was conducted in 250 in-patients in various hospital departments. A data entry format for incorporating inpatient details was designed. In the current study, it was found that the use of beta -lactam antibiotics in this study was higher when compared to other antibiotics. These are prescribed for indications like gastroenteritis, meningitis, hepatitis, cirrhosis, alcoholic liver disease, gangrene, appendicitis, genital warts, pneumonia, pulmonary tuberculosis, chronic bronchitis, COPD and seizures. In comparison with the standard guidelines, many deviations and under practice of diagnosis and treatment was observed. From the study it is concluded that, though there is successful combat of infection using Antimicrobial agents in the study population, it is desirable to adopt treatment protocol to increase the success rate. Adhering to the standard guidelines for treatment will decrease antibiotic resistance and also helpful in achieving National goal of Pharmacoeconomics.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Anticancer Potential Of Extracts Of Grangea Maderaspatana Against Mcf-7 Breast Cancer Cell Line

Paper ID - 1142

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Background Grangea maderaspatana is an exotic and medicinal plant in India.
Aim of the Study: The main goal of this study was to evaluate the antiproliferative properties of leaf and leaf-derived callus extracts against human breast cancer cell line MCF-7.
Methods: The plant parts were sequentially extracted with hexane, chloroform, ethyl acetate, acetone, and methanol. The extract was concentrated to yield the crude extract, which was tested for anticancer potentials. The anticancer potential of cytotoxic extracts was determined by 3-(4,5-dimethylthiazole-2-yl)-2,5-diphenyl tetrazolium bromide (MTT) and DNA fragmentation assays in human breast cancer cell lines (MCF-7).
Results: All the tested extracts showed significant antiproliferative activities in a concentration- and time-dependent manner. The inhibitory concentration of extract was tested against target cell line, and the results show *in vitro* leaf of *A. javanica* has higher inhibitory effect against the tested cancer cells at lower concentration (about 11.89 and 22.45 µg/ml) followed by other samples extracts.
Conclusion: The results of the present study conclude *in vitro* plant sample having more potent anticancer property and support the need of further studies to isolate potential anticancer drug with cancer cell-specific cytotoxicity.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Effect Of Medicinal Plants For Anti-Obesity Activity

Paper ID - 1143

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Obesity is a complex health issue to address; it is a serious and chronic disease that can have a negative effect on many systems in your body. Overweight and obesity may increase the risk of many health problems, including diabetes, heart disease, osteoarthritis and certain cancers. Obesity is increasing at an alarming rate throughout the world. estimated that . The anti-obesity activity is estimated in terms of body weight gain, food intake, Lee-index, Serum triglycerides (TG), Total cholesterol (TC), LDL cholesterol (LDL-C), HDL cholesterol (HDL-C), VLDL cholesterol (VLDL-C) Obesity is regarded as a disorder of lipid metabolism and the enzymes involved in this process could be targeted selectively for the development of antiobesity drugs. However, most of the anti-obesity drugs that were approved and marketed have now been withdrawn due to serious adverse effects. The naturopathic treatment for obesity has been explored extensively since ancient times and gaining momentum in the present scenario. Traditional medicinal plants and their active phytoconstituents have been used for the treatment of obesity and their associated secondary complications. Some active medicinal plants and their respective bioactive compounds were also tested by clinical trials and are effective in traemnet of obesity. This review focus on natural phytoextracts with their mechanism of action and their preclinical experimental model for further scientific research.
increased the body weight, food intake, organ and fat pad weights, Lee index, atherogenic index, coronary risk efficacy.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation Of Anti-Obesity Activity Of Stereospermum Suaveolens By Progesterone Induced Obesity On Albino Mice

Paper ID - 1144

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The anti-obesity activity of Stereospermum suaveolens was studied on progesterone induced models of hyperlipedemia in mice. Hyperlipidemia condition established by progesterone, which changed various parameters in the body . An increase in food consumption and water consumption usually accompanies the body weight gain, which is the characteristic nature of progesterone stimulation. Increased consumption of food and water generally leads to elevated parameters like LDL, VLDL, serum cholesterol etc. Accumulation of fat in areas like inguinal, epididymal, neck etc. was observed. Ethanobotanical knowledge of medicinal plants is one of the most prominent sources of new drugs and has shown potential results for treatment of obesity. Preliminary phytochemical analysis of Stereospermum suaveolens revealed the presence of phyto constituents such as steroids, flavinoids, alkaloids, etc.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation On Dispensing Of Similar Brand Name /Genereic Name Drug In Prescription

Paper ID - 1145

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The brand names of some products have phonetic or orthographic similarity. Such names may cause confusion during dispensing. If pharmacist dispenses confusing brand name/generic name drug containing totally different active ingredient, if may result in adverse events that causes harm to patient. Thus objective of study was to carry out survey of the personnel working in pharmacies to find out their awareness about confusing brand name/generic name drug products, the chances of errors that may occur during dispensing of LA/SA drugs & suggest different means to avoid those errors. Major findings of the project are: 1) 80% of pharmacists are D.Pharm, 5% are B. Pharm and remaining 15% belong to other profession. 2) 75% of the pharmacists get confused due to spelling mistakes in the prescription whereas 25% do not get confused. 3) On confusion due to prescription 25% pharmacists send back the patient back to the doctor, 55% contact directly to the doctor, 10% assume themselves and remaining 10% take other measures. 4) 80% of pharmacists provide the non OTC drugs without prescription. 5) 55%of the pharmacists provide the drugs without prescription whereas 45% do not.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

The Risks Factors Linked To Use Of Alcohol And Alcoholism

Paper ID - 1146

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Alcohol consumption, particularly heavier drinking, is an important risk factor for many health problems and, thus, is a major contributor to the global burden of disease. In fact, alcohol is a necessary underlying cause for more than 30 conditions and a contributing factor to many more. The most common disease categories that are entirely or partly caused by alcohol consumption include infectious diseases, cancer, diabetes, neuropsychiatric diseases (including alcohol use disorders), cardiovascular disease, liver and pancreas disease, and unintentional and intentional injury. Knowledge of these disease risks has helped in the development of low-risk drinking guidelines. In addition to these disease risks that affect the drinker, alcohol consumption also can affect the health of others and cause social harm both to the drinker and to others, adding to the overall cost associated with alcohol consumption. These findings underscore the need to develop effective prevention efforts to reduce the pain and suffering, and the associated costs, resulting from excessive alcohol use.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

The Role Of The Clinical Pharmacist In Management Of Medication Cost In Cardiology Practice

Paper ID - 1147

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Cardiovascular disease (CVD) remains the leading cause of morbidity and mortality worldwide. In response, a multidisciplinary team approach, which includes clinical pharmacists, is recommended to improve patient outcomes. The purpose of the study was to describe interventions associated with integration of a clinical pharmacist, with an emphasis on pharmacist-generated patient cost avoidance. **Methods:** This is a prospective observational study detailing pharmacist-initiated interventions within an academic preventive cardiology service. Interventions targeting pharmacotherapy optimization, side effect management, patient education, medication adherence, and cost avoidance were implemented during shared office visits with providers and/or on provider consultation for remote follow-up. Clinical interventions implemented by the pharmacist. Money saved per clinical intervention was extrapolated from data previously published. **Results:** Over 12 months the pharmacist intervened on 974 patients, totalling 3725 interventions. Cost avoidance strategies resulted in yearly savings of $830 748. **Conclusions**: Addition of a clinical pharmacist within an academic preventive cardiology clinic generated substantial pharmacotherapy interventions, resulting in significant cost avoidance for patients. The resulting cost avoidance may result in improved medication adherence and clinical outcomes.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Potential Drug Interactions In Patients Admitted To Cardiology Wards Of A Indian Hospital

Paper ID - 1148

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The potential drug-drug interaction (pDDI) increases as the number of concomitant medications increases. Patients with cardiovascular disorders are at higher risk for drug- drug interactions because of the types and number of drugs they receive. While drug interactions are reported to be common, there is no published report of the prevalence of such interactions among Indian cardiac patients. The aim of the present study was to identify the pattern of pDDI and document any observed interaction. It was also planned to evaluate the demography of patients and correlate it with the drug-drug interactions. Method: A prospective observational study from Oct 2013 to Apr 2014 was carried out in 'cardiology department' of a hospital in South India. Those patients who were taking at least two drugs and had a hospital stay of at least 48 hours were included in the study. The medications of the patients were analyzed for possible interactions. Factors associated with pDDI were studied. The actual interactions that were observed during the hospital stay in the study subjects were documented. Results: A total of 912 patients were included in the study. 488 pDDIs were identified among 249 patients. The incidence of pDDI was 40.67%. The most common potential interactions were between aspirin & heparin (29.38%), and clopidogrel & heparin (7.21%). Drug classes most commonly involved were antiplatelets, anticoagulants and diuretics. Majority of interactions were of moderate severity, delayed onset, and pharmacodynamic in nature. Total 68 actual interactions were observed in the observed cases. Conclusion: The present study identified pDDIs and also documented interactions in cardiovascular patients. Factors which had correlation with adverse drug interactions were identified. This study highlights the need for screening prescriptions of cardiovascular patients for pDDIs and proactive monitoring of patients who have identified risk factors; this helps in detection and prevention of possible adverse drug interactions.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation Of Treatment For Patients With Congestive Heart Failure By Cardiologists Versus Noncardiologists

Paper ID - 1149

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The medical records of 227 patients admitted to tertiary care hospital between January and June 2010 with a discharge diagnosis of CHF were retrospectively reviewed. Data collected included demographic information and medical history, severity of illness, prescribed level of hospital care at the time of admission, diagnostic evaluations conducted during admission, medications prescribed at admission and discharge, and any noted contraindications to these medications. Data for patients treated by cardiologists versus noncardiologists were compared.

Results. Patients treated by cardiologists were significantly more likely to be admitted to an intensive care unit; receive chest x-rays, electrocardiograms, nuclear medicine tests, cardiac catheterizations, and stress tests; and have their weight monitored daily than were patients treated by noncardiologists. The majority of patients with CHF who were eligible for an angiotensin-converting-enzyme (ACE) inhibitor, a β-blocker, or an aldosterone antagonist did not receive these medications, regardless of the treating physician. Cardiologists prescribed significantly more β-blockers and aldosterone antagonists for eligible patients at hospital admission. Greater differences were seen in discharge medications, as cardiologists were significantly more likely to prescribe ACE inhibitors, digoxin, β-blockers, and aldosterone antagonists.

Conclusion: Hospitalized patients with CHF were more likely to receive HFSA-recommended medications on admission and discharge when treated by cardiologists versus noncardiologists. Neither cardiologists nor noncardiologists prescribed ACE inhibitors to all eligible patients as frequently as recommended by HFSA guidelines.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Activity of Quinones from Teak (*Tectona grandis*) on Fungal Cell Wall Stress

Paper ID - 1150

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Teak (***Tectona grandis*** L.f., Verbenaceae) sawdust extract inhibited the growth of ***Aspergillus niger***. Centrifugal partition chromatography was used to isolate the active compounds. By ^{1}H-NMR the active compounds were identified as deoxylapachol and tectoquinone. Two ***A. niger*** transgenic strains which show induction of 1,3-α-***D***-glucan synthase were used as a cell wall damage model. The result showed that deoxylapachol from ***T. grandis*** extract induced fungal cell wall stress.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Contraceptive pills dispensing and counseling and assessing hormonal imbalance provided by community pharmacists in different states in INDIA: A simulated patient study

Paper ID - 1151

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Hormonal contraceptive pills have evolved as a common form of contraception worldwide. Pharmacists play a vital role in providing safe and effective access to these medicines. In many developing countries such as India these medicines are available to the general public without the presentation of a prescription which requires the pharmacist to shoulder responsibility by assessing and educating patients to assure their appropriate use.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

In Vitro Antioxidant Activity And Hptlc Finger Print Analysis Of Phytocompounds Of Catharanthus Roseus.

Paper ID - 1152

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

This paper has reported the preliminary phytochemical screening, HPTLC analysis of phytocompounds and in vitro antioxidant activities of ethanol extract of catharanthus roseus (L.)G. leaves. This is the first report on the antioxidant activity of this plant. The preliminary phytochemical analysis showed the presence of alkaloids, coumarin, catechin, steroids, flavonoids, saponins, phenols, glycosides and terpenoids. HPTLC analysis also confirmed the presence of alkaloids, steroids, flavonoids, saponins, phenols, glycosides and terpenoids. The antioxidant activities of the leaves in ethanol extract are assessed using different models like DPPH, superoxide radical, hydroxyl radical and ABTS+ cation radical and reducing power at different concentrations. The ethanol extract at 800µg/ml showed maximum scavenging activity. Results obtained revealed that, ethanol extract of leaves of catharanthus roseus (L.) G. possess highly antioxidant activity. Thus his study suggests that, catharanthus roseus (L.) G. plant can be used as a potent source of natural antioxidant.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

In Vitro Antioxidant And Antibacterial Activity Of Flower Extracts And Phytochemical Investigation Of Tiliacora Acuminate

Paper ID - 1153

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present study was carried out to investigate the phytochemical, in vitro antioxidant and antibacterial activity of Tiliacora acuminate flower an important medicinal plant. Qualitative phytochemical analysis of the methanol and ethanol extracts prepared from T. acuminata flower revealed the presence of alkaloids, anthraquinones, catechins, coumarins, flavonoids, phenols, quinones, saponins, steroids, sugar, glycosides, tannins and xanthoproteins. The FT-IR spectrum confirmed the presence of hydroxyl group, alkyl group, alcohols, ethers, esters, carboxylic acid and anhydrides. Antioxidant activity of petroleum ether, benzene, ethyl acetate, methanol and ethanol extracts of the flower of T. acuminata have been tested using various antioxidant model systems viz, DPPH, hydroxyl, superoxide, ABTS and reducing ability. This study indicates significant free radical scavenging potential of T. acuminata flower which can be exploited for the treatment of various free radical mediated ailments. The petroleum ether, benzene, ethyl acetate, methanol and ethanol extracts of flower of T. acuminata were tested against Bacillus thuringiensis, Bacillus subtilis, Streptococcus faecalis, Streptococcus pyogens, Staphylococcus aureus, Staphylococcus aureus (Methicillin sensitive), Enterococcus faecalis, Salmonella paratyphi A and B, Salmonella paratyphi, Proteus mirabilis, Proteus vulgaris, Escherichia coli, Escherichia coli (ESBL), Klebsiella pneumoniae, Pseudomonas aeruginosa, Pseudomonas aeruginosa (ESBL) and Mycobacterium smegmatis, by the agar disc diffusion method.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation Of Antipsychotic Activity Of Ethanolic Extract Of Mimusops Hexandra On Wistar Albino Rat

Paper ID - 1154

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

An increased inclination has been observed for the use of herbal drugs in chronic and incurable diseases. Treatment of psychiatric diseases like Schizophrenia is largely palliative and more importantly a prominent adverse effect prevails with the majority of antipsychotic drugs, which are the extrapyramidal motor disorders. This study was a trial to evaluate the neuroleptic activity of the ethanolic extracts of Mimusopshexandra with different antipsychotic animal models. Two doses of the extract (100 and 200mg/kg) were used for this study with 5 different animal models. After that, the concentration of the dopamine neurotransmitter was estimated in two different regions of the brain viz. Frontal cortex and Striatum. The result of the study indicated a significant reduction of amphetamine induced stereotype and conditioned avoidance response for the extracts compared with the control group, but did not have any significant effect in phencyclidine induced locomotor activity and social interaction activity. However the extract showed minor signs of catalepsy compared to the control group. The study also revealed that the neuroleptic effect was due to the reduction of the dopamine concentration in the frontal cortex region of the rat brain. The results largely pointed out the fact that the extract may be having the property to alleviate the positive symptoms of Schizophrenia by reducing the dopamine levels of dopaminergic neurons of the brain. The estimation of dopamine in the two major regions of brain indicated the alteration of dopamine levels was the reason for the antipsychotic activity as demonstrated by the different animal models.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation Of Antipsychotic Activity Of Ethanolic Extract Of Mimusops Angel On Wistar Albino Rat

Paper ID - 1155

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

An increased inclination has been observed for the use of herbal drugs in chronic and incurable diseases. Treatment of psychiatric diseases like Schizophrenia is largely palliative and more importantly a prominent adverse effect prevails with the majority of antipsychotic drugs, which are the extrapyramidal motor disorders. This study was a trial to evaluate the neuroleptic activity of the ethanolic extracts of Mimusopshexandra with different antipsychotic animal models. Two doses of the extract (100 and 200mg/kg) were used for this study with 5 different animal models. After that, the concentration of the dopamine neurotransmitter was estimated in two different regions of the brain viz. Frontal cortex and Striatum. The result of the study indicated a significant reduction of amphetamine induced stereotype and conditioned avoidance response for the extracts compared with the control group, but did not have any significant effect in phencyclidine induced locomotor activity and social interaction activity. However the extract showed minor signs of catalepsy compared to the control group. The study also revealed that the neuroleptic effect was due to the reduction of the dopamine concentration in the frontal cortex region of the rat brain. The results largely pointed out the fact that the extract may be having the property to alleviate the positive symptoms of Schizophrenia by reducing the dopamine levels of dopaminergic neurons of the brain. The estimation of dopamine in the two major regions of brain indicated the alteration of dopamine levels was the reason for the antipsychotic activity as demonstrated by the different animal models.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Cheminformatics study used for structure-based design and different Web services and desktop applications used for structure-based design

Paper ID - 1156

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Nowadays, computational approaches are an integral part of life science research. Problems related to interpretation of experimental results, data analysis, or visualization tasks highly benefit from the achievements of the digital era. Simulation methods facilitate predictions of physicochemical properties and can assist in understanding macromolecular phenomena. Here, we will give an overview of the methods developed in our group that aim at supporting researchers from all life science areas. Based on state-of-the-art approaches from structural bioinformatics and cheminformatics, we provide software covering a wide range of research questions. Ourall-in-one web service platform Proteins Plus (http://proteins.plus) offers solutions for pocket and druggability prediction, hydrogen placement, structure quality assessment, ensemble generation, protein–protein interaction classification, and 2D-interaction visualization. Targeting cheminformatics problems like file format conversion, molecule data set processing, SMARTS editing, fragment space enumeration, and ligand-based virtual screening. Furthermore, it also includes structural bioinformatics solutions for inverse screening, binding site alignment, and searching interaction patterns acrossstructure libraries.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Potential of Natural anti-obesity agents and analyze their mechanisms.

Paper ID - 1157

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Obesity is a complex disease caused by the interaction of a myriad of genetic, dietary, Lifestyle, and environmental factors, which favors a chronic positive energy balance, and leads to increased body fat mass. The incidence of obesity is rising at an alarming rate and is becoming a major public health concern with incalculable social costs. Indeed, obesity facilitates the development of metabolic disorders such as diabetes, hypertension, and cardiovascular diseases in addition to chronic diseases such as stroke, osteoarthritis, sleep apnea, some cancers, and inflammation based pathologies. Recent researches demonstrated the potential of natural products to counteract obesity. Multiple-natural product combinations may result in a synergistic activity that increases their bioavailability and action on multiple molecular targets, offering advantages over chemical treatments.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Cheminformatics and its Applications on the study of Modern Drug Discovery

Paper ID - 1158

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Discovering drugs to a disease is still a challenging task for medical researchers due to the complex structures of biomolecules which are responsible for disease such as AIDS, Cancer, Autism, Alzimear etc. Design and development of new efficient anti-drugs for the disease without any side effects are becoming mandatory in the recent history of human life cycle due to changes in various factors which includes food habit, environmental and migration in human life style. Cheminformaticds deals with discovering drugs based in modern drug discovery a technique which in turn rectifies complex issues in traditional drug discovery system. Cheminformatics tools, helps medical chemist for better understanding of complex structures of chemical compounds. Cheminformatics is a new emerging interdisciplinary field which primarily aims to discover Novel Chemical Entities [NCE] which ultimately results in design of new molecule [chemical data]. It also plays an important role for collecting, storing and analyzing the chemical data. This paper focuses on cheminformatics and its applications on drug discovery and modern drug discovery techniques which helps chemist and medical researchers for finding solution to the complex disease.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Modern Computational approaches in target identification, Lead identification in drug discovery

Paper ID - 1159

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

In the big data era, voluminous datasets are routinely acquired, stored and analyzed with the aim to inform biomedical discoveries and validate hypotheses. No doubt, data volume and diversity have dramatically increased by the advent of new technologies and open data initiatives. Big data are used across the whole drug discovery pipeline from target identification and mechanism of action to identification of novel leads and drug candidates. Such methods are depicted and discussed, with the aim to provide a general view of computational tools and databases available. We feel that big data leveraging needs to be cost-effective and focus on personalized medicine. For this, we propose the interplay of information technologies and (chemo)informatics tools on the basis of their synergy.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Therapeutics, phytochemical and pharmacological studies of Alsi (Linum usitatissimum Linn): An important Drug which is having medicinal value.

Paper ID - 1160

A Paper Presented by:G. Chakravarthi, A. Rajasekhar Reddy, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Linum usitatissimum Linn is one of the most important medicinal plants traditionally used for various health as well as nutritional purposes. It is an annual herbaceous plant growing up to 60-120 cm of height. Its flowers are small and are blue, bluish violet or white in terminal panicles. The fruits are capsular with five cells, each containing 2 seeds. It is cultivated mainly for the purpose of oil and fibre and usually with wheat plant. It grows in almost all types of soil where sufficient moisture is available. Flaxseed has been classified as functional food because it provides numerous health benefits in addition to serving as a source of nutrients. The plant has shown diverse biological and pharmacological activities. It has been used in Unani Medicine (*Tibb-e-Unani*) from time immemorial. Keeping in view the high medicinal importance of the drug in Unani Medicine, this review provides available information on traditional uses, phytochemistry and pharmacological properties of Unani drug *Alsi*.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation Of Antioxidant Activity Of Cadaba Indica Lam Extracts For Phenolic And Flavonoid Contents With Various Solvents.

Paper ID - 1161

A Paper Presented by:G. Chakravarthi, A. Rajasekhar Reddy, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Antioxidant activity of the aerial part of *Cadaba indica* was studied for its free radical scavenging property on different *in vitro* models via; DPPH, hydroxyl, superoxide, ABTS radical cation scavenging and reducing power by using different solvents. Total phenolic and flavonoid contents were estimated. The methanol extract showed strong antioxidant activity by inhibiting scavenging activity of DPPH, superoxide and ABTS. This antioxidant potency may be related to the presence of antioxidant phenolic and flavonoid compounds present in the extract. These results clearly indicate that *Cadaba indica* aerial part is effective against free radical mediated disease.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

In Vitro Evaluation Of Antioxidant Activity Of Aerial Part Of Maerua Apetala. Roth (Jacobs) (Capparaceae)

Paper ID - 1162

A Paper Presented by:G. Chakravarthi, A. Rajasekhar Reddy, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Objective: To determine the total phenolics, flavonoids and *in vitro* antioxidant activity of petroleum ether, benzene, ethyl acetate, methanol and ethanol extracts of whole plant of *Maerua apetala* using various antioxidant model system viz, DPPH, hydroxyl, superoxide, ABTS and reducing power. **Methods:** Total phenolic content was estimated by folin-ciocalteau method. Flavonoids were determined by Aluminium chloride method. *In vitro* antioxidant activity of petroleum ether, benzene, ethyl acetate, methanol and ethanol extracts was evaluated by studying 1,1-diphenyl-2- picrylhydrazyl (DPPH) radical scavenging activity, hydroxyl radical scavenging activity, superoxide radical scavenging activity, ABTS radical cation scavenging activity and reducing power using standard procedure. **Result:** The total phenolics and flavonoids in methanol extract were found to be 1.25g100g-1 and 2.44g100g-1 respectively. Among the solvent tested, methanol and ethanol extracts of whole plant of *M. apetala* showed potent *in vitro* antioxidant activities. **Conclusion:** This investigation explored immense free radical scavenging potential of whole plant of *M. apetala* which can be used for the treatment of various free radical mediated ailments.

1.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Total Phenolic, flavonoid contents and in vitro antioxidant activity of leaf of Sesuvium portulacastrum. L (Aizoaceae)

Paper ID - 1163

A Paper Presented by:G. Chakravarthi, A. Rajasekhar Reddy, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Antioxidant activity of the leaf of Sesuvium portulacastrum was studied for its freeradical scavenging property on different in vitro models eg DPPH, hydroxyl,superoxide, ABTS radical cation scavenging and reducing power by usingdifferent solvents. Total phenolic and flavonoid contents were estimated. Themethanol extract showed promising free radical scavenging activity in dosedependent manner. This antioxidant potency may be related to the presence ofantioxidant phenolic and flavonoid compounds present in the extract. Theseresults clearly indicate that S.portulacastrum leaf is effective against free radicalmediated disease

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Total Phenolics And Flavonoids Antioxidant Acvity Of Salicornia Brachiata Roxb.Leaf Extracts (Chenopodiaceae)

Paper ID - 1164

A Paper Presented by:G. Chakravarthi, A. Rajasekhar Reddy, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

In vitro antioxidant activity of petroleum ether, benzene, ethyl acetate, methanol and ethanol extracts of mangrove herb Salicornia brachiata Roxb. leaf have been tested using various antioxidant model system viz, DPPH, hydroxyl, superoxide, ABTS and reducing power. Methanol extract of S. brachiata is found to possess higher DPPH radical scavenging activity while methanol and ethyl acetate extracts are found to possess higher hydroxyl radical scavenging activity. Ethanol and methanol extracts of S. brachiata exhibited highest superoxide and ABTS radical cation scavenging activity. Methanol extract of leaf of S. brachiata showed the highest reducing ability. This study indicates significant free radical scavenging potential of S. brachiata leaf which can be exploited for the treatment of various free radical mediated ailments.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Medicinal plants possessed antioxidant and free radical scavenging effects

Paper ID - 1165

A Paper Presented by:G. Chakravarthi, A. Rajasekhar Reddy, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Antioxidants are substances that remove, prevent or delay oxidative damage to a target molecule. Therefore, an antioxidant may act to control the level of free radicals to counteract oxidative damage. The effects of medicinal plants in prevention and treatment of many diseases have been widely attributed to their antioxidants activities. This review was designed to highlight the antioxidant effects and free radical scavenging activity of medicinal plants as a third part of our previous reviews

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation and Evaluation of Transdermal Patches of Terbutaline Sulphate

Paper ID - 1166

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The prepared transdermal patches incorporating terbutaline sulphate .The pseudolatex patches were formulated using combinations of Eudragit RS 100 and R L 100 and Eudraflex as plasticizer. The physicochemical characterization of the films were evaluated for suitability and drug release profile from the films as well as skin permeation aspects were evaluated for therapeutic efficacy. The resulted medicated patches were of average thickness (95-155 mium), and content uniformity of the drug varied from 94.5 to 99.1 percent. The formulation F3 showed least and F7 showed highest percentage of elongation. The percentage of moisture absorption varied from 2.91 to 3.65 at 63 percent relative humidity. The release profiles from the patches followed apparent zero order pattern up to a period 12 h, after which it leaves off.

Keywords: Trans dermal patches, terbutaline sulphate, Eudragit RS 100 and R L 100, Eudraflex

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Fabrication and Evaluation of Transdermal Patches of carvedilol

Paper ID - 1167

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The fabricated transdermal patch using different concentrations (1:7 to 1:10) of carvedilol and chitosan, a natural cationic polymer, by solvent casting method (4 % lactic acid v/v solution). Permeation characteristics of the drug were evaluated across neatly excised rat and human cadaver skin fixed between donor and receptor compartments of a modified Franz diffusion cell. Drug content was measured at absorbance at 332 nm in UV spectrometer (Shimadzu 1601). The optimized formulation was subjected to primary skin irritation studies in rabbits. (control/optimized). In-vivo pharmacokinetic studies in rats (Intraperitoneal/Patch) were carried out .Among the prepared formulations, the optimized formulation of release across the rat and human cadaver skin respectively. Primary skin irritation studies showed no skin reaction and erythema. The average Css was 7.300 ± 0.004 µg/mL with patch as compared to 11.420±0.007 µg/mL with intraperitoneal (ip) administration.

Keywords: Trans dermal patches, Cravedilol, solvent casting method,franz diffusion cell,, Eudraflex

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation and Evaluation of Microcapsules of Diclofenac Sodium

Paper ID - 1168

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The prepared and evaluated Diclofenac sodium was microencapsulated with stearic acid, paraffin wax, cetyl alcohol, beeswax and carnauba wax by meltable dispersion technique and with ethyl cellulose and gelatin by coacervation techniques and the microcapsules were studied. Ethyl cellulose and wax/lipid microcapsules gave slow release of diclofenac over longer periods of time, whereas release was very rapid with gelatin microcapsules. In the case of ethyl cellulose microcapsules linear relationship was observed between percent coat material and T50 values. Release was diffusion controlled in the case of wax/lipid and ethyl cellulose microcapsules.

Keywords: Microcapsules, Diclofenac sodium, ethyl cellulose, Gelatin, bees wax.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation and Evaluation of Buccal tablets of Nifediine

Paper ID - 1169

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The developed buccal delivery of Nifedipine using a novel, natural mucoadhesive polymer as an excipient in buccal tablets. This was done firstly to determine the influence of the incorporation of natural flax seed polymer, on the bioavailibility of nifedipine and secondly to compare the bioavailibility of nifedipine after per oral administration with the buccal administration. Buccal tablets were prepared by using Nefidifin, MCC, Magnesium sterate and Flax seed polymer. Backing layer is Ethyl cellulose. *In vitro* and *in vivo* studies were studied. The dissolution studies showed maximum percentage release of 98.20% in formulation of 40mg Flax seed polymer

Keywords: Buccal tablets, Nifedipine, ethyl cellulose, Flax seeds, magenisum sterate.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation and Evaluation of Mucoadhesive Buccal tablets of Lignocaine

Paper ID - 1170

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

formulated Lignocane hydrochloride buccal tablet to provide prolonged relief from pain associated with tooth extraction. The tablet was prepared using suitable mucoadhesive polymers. Optimized tablets contained Lignocane Hydrochloride 15mg, Mannitol 4mg, Polyvinyl pyrrolidone K30 5mg, Magnesium stearate 2mg, Saccharin sodium 0.2mg and Mint flavor 0.1mg. Dissolution studies showed 86.66% release of drug in 360 min. Bioadhesive strength was found to be 31.96g. Adhesion time was greater than 6hrs. Surface pH was found to be 7.02. The formulation was also subjected to *in-vitro* permeation studies, *in-situ* release, *in-vitro* swelling studies and *in-vivo* evaluation in healthy volunteers. The optimized tablets were also subjected to other quality control tests. Stability studies showed that the formulation was stable for more than two years.

Keywords: Buccal tablets, Lignocaine, Polyvinyl pyrrolidone, magenisum stearate, Bioadhesive strength

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation and Evaluation of Fast release enteric-coated tablets of Celecoxib

Paper ID - 1171

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The formulated fast release enteric-coated tablets of Celecoxib for drug delivery to the colon. Two different approaches were used for the preparation of these tablets. The first included making use of superdisintegrant in the tablet. The amount of super disintegrant (cross-linked PVP) in the tablet and the coat weight were varied to formulate a suitable time-controlled release system that would provide colon-specific drug delivery. The second approach consisted of development of osmogen-based tablets for drug delivery into the tracts of the colon. Two different osmogens, sodium chloride and potassium chloride, were used. In vitro drug release studies showed that superdisintegrants were more effective in showing burst effect in the tablets and therefore showed a rapid drug release as compared with osmogens, which would show a sustained drug release all through the colon.

Keywords: Celecoxib, Enteric coated tablets, Polyvinyl pyrrolidone, magenisum stearate, osmogen

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation and Evaluation of Mucoadhesive bccal tablets of Pentazocine

Paper ID - 1172

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The prepared Pentazocine hydrochloride buccal tablets by direct compressing chitosan with sodium alginate or sodium carboxymethyl cellulose in weight ratios 5:0, 4:1, 2:3, 3:2, 1:4. The tablets were evaluated for weight variation, hardness, thickness uniformity, drug content uniformity and swelling index. Swelling of SCMC batches was grater than sodium alginate. *In-vitro* bio adhesive strength studies showed that formulations containing chitosan and SCMC were more bioadhesive than chitosan and sodium alginate. *In-vitro* dissolution studies revealed that all the formulations exhibited non-Fickian release kinetics. Further, *in-situ* drug diffusion studies were carried using porcine cheek pouch. The formulation containing a mixture of chitosan and sodium alginate (4:1) showed 100% release in 8 hrs in *in-vitro* dissolution studies and 52.1% in drug diffusion studies. Incorporation of sodium glycodeoxycholate (3%) resulted in 17.9% enhancement in drug diffusion.

Keywords: Pentazocine , sodium alginate, sodium carboxymethyl cellulose, chitosan

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation and Evaluation of Acyclovir Niosomes

Paper ID - 1173

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The current study aims to formulate and evaluate acyclovir loaded niosomes for sustained release of acyclovir. Stable Acyclovir loaded Niosomes can be prepared by hand shaking method and ether injection method with Span 80 and cholesterol in the ratio of 1:1, 2:1, and 3:1. Preformulation studies and drug excipients compatibility studies was done initially and results directed the further course of formulation. Most of the vesicles are spherical in shape, the size range of the vesicles, fall in the narrow size range of 0.5-5µ and 0.5-2.5 µ by hand shaking method and ether injection method respectively. A high % of Acyclovir can be encapsulated in the vesicles (75-84%) prepared by hand shaking method. Drug release studies showed that the niosomal preparation was stable at refrigeration temperature (4^0 C). The vesicles prepared by hand shaking method were found to be larger in size as compared to vesicles prepared by ether injection method. Almost constant drug release was observed in all formulations indicating zero order release pattern.

KEY WORDS: Acyclovir, Niosomes, Hand shaking method, Ether injection method, Osmotic shock

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation and Evaluation of Zidovudine Niosomes

Paper ID - 1174

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The current study aims to formulate and evaluate zidovudine loaded niosomes for sustained release of acyclovir. Stable zidovudine loaded Niosomes can be prepared by hand shaking method and ethanol injection method with Span 20 and cholesterol in the ratio of 1:1, 2:1, and 3:1. Preformulation studies and drug excipients compatibility studies was done initially and results directed the further course of formulation. Most of the vesicles are spherical in shape, the size range of the vesicles, fall in the narrow size range of 0.6-8μ and 0.9-2.5 μ by hand shaking method and ether injection method respectively. A high % of Acyclovir can be encapsulated in the vesicles (85-94%) prepared by hand shaking method. Drug release studies showed that the niosomal preparation was stable at refrigeration temperature (4^0 C). The vesicles prepared by hand shaking method were found to be larger in size as compared to vesicles prepared by ethanol injection method. Almost constant drug release was observed in all formulations indicating zero order release pattern.

KEY WORDS: Zidovudine, Niosomes, Hand shaking method, Ethanol injection method, Osmotic shock

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation And In-Vitro Evaluation Of Liposomes Of Valacyclovir

Paper ID - 1175

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present research work was to formulate and evaluate the site specific delivery of valacyclovir liposomes in order to overcome the problem of avoid the first pass effect, improve the bioavailabilty of drugs, reduced side effects and to produce a better therapeutic response valacyclovir liposomes were formulated by an ether injection method using different concentrations of drug, and phospholipids . The formulations were evaluated from the various methods like vesicle shape, particle size, entrapment efficiency, drug content, compatibility studies and in-vitro drug release. Thin film hydration was found to be most satisfactory with respective to liposomes particle size, drug entrapment efficiency, in-vitro drug release and its release mechanism was non ficikian diffusion mechanism.

Keywords: valacyclovir, Phospho lipids, Cholesterol, ethanol, Diethyl ether.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation And Evaluation Of Metoprolol Succinate Fast Dissolving Tablets

Paper ID - 1176

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Metoprolol succinate is a Anti-hypertensive drugs which is insoluble in water, hence the drug may be slowly or incompletely absorbed in the gastrointestinal tract. So the rate of dissolution and therefore its bioavailability is low (bioavailability 45%). The drug release of Metoprolol succinate can be increased by formulating it into fast dissolving tablets, as these dosage forms disintegrate very rapidly into fine of drug particles resulting in higher surface area of drug. The present research work involves preparation, characterization and evaluation of sodium alginate as a super Disintegrant. The prepared sodium alginate was found to be free flowing properties revealed the formation of ester. In the present research work, 23 factorial design was used for optimization of level of independent variables (Sodium alginate, sodium starch glycolate) on dependent variables (disintegration time and percent released in 10 minutes) in the formulation Metoprolol succinate fast dissolving tablets with less experimentation. From the results it was concluded that Sdium alginate (5%), sodium starch glycolate (5%) were favourable for formulation of Metoprolol succinate fast dissolving tablets. Therefore, Sodium alginate a new modified starch was found to be a promising disintegrant in the formulation of fast dissolving tablets of poorly soluble drugs.

KEYWORDS: Metoprolol succinate Sodium alginate, sodium starch glycolate

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation and Evaluation of Ofloxacin Nanosponges by Solvent Evopration technique Method

Paper ID - 1177

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Targeted drug delivery system is based on a method that delivers a certain amount of a therapeutic agent for a prolonged period of time to a targeted diseased area within the body. The purpose of present study was to formulate nanosponges of ofloxacin having bioavailability of 15% with half life 4-5 hours and protein binding 85%.Nanosponges are targeted drug delivery systems applicable to solve the bioavailability problems by releasing the drug at specific target site. In this study, nanosponges are prepared by double emulsion technique method using different ratios of HPMCK 100 and SCMC. The elevated characteristics can be estimated Particle size analysis and surface morphology of nanosponges were performed. The scanning electron microscopy of nanosponges showed that they were spherical in shape and spongy in nature. The particle size of the optimized formulations was in the range of 200-400nm and the drug entrapment efficiency was found to be in the range of 95.6 % to 98.8%. Among all the formulations prepared F6 were found to show the maximum drug release of 98.04%.

Keywords: Nanosponges, Ofloxacin, hyper cholesteremia, targeted drug delivery system, slvent evopration method.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation And Evaluation Of Sustained Release Matrix Tablets Of Nifedipine

Paper ID - 1178

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Conventional drug delivery system for treating the angina and hypertension are not much effective as the drug do not reach the site of action in appropriate amounts. Thus potent and guarded therapy of this angina and hypertension disorder using specific drug delivery system is a challenging task to the pharmaceutical professionals. Most oftenly used method of regulating the drug release is to include it in a matrix system because of their pliability, hydrophilic polymer matrices are widely used in oral controlled drug delivery to obtain a desirable drug release pattern, methodical, and broad regulatory compliance. Formulation of Nifedipine sustained release matrix tablet was prepared by the polymers blend with to get desirable drug release profile. Evaluation parameters of formulated tablets were hardness, friability, thickness, drug content uniformity weight variation, and the in vitro drug release rate pattern. Formulation prepared with HPMC K100M showed 97% of drug release at 24 hrs and with Eudragit indicates 99% of drug release at 20 hrs release of Nifedipine drug.

Keywords:Nifedipine; Eudragit; HPMC; Suatained release; Martix tablet

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation And Evaluation Of Floating Tablet Of Captopril

G. Chakravarthi, A. Rajasekhar Reddy, V Aparna

Paper ID - 1179

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present study was undertaken to prolong the release of orally administer. Captopril in the floating tablets by using different grade of hydroxypropylrmethylecellulose. Formulations were optimized using different viscosity grades of HPMC, Lactose and citric acid were used in different concentration as a channeling and chelating agent to obtain best optimized formulation and designed to prolong the gastric residence time (GRT). Formulations were evaluated by floating lag time and in vitro drug release method.. It was observed that different viscosities not only influence the drug release from hydrophilic matrix but they also affect the floating properties of tablets. Dissolution profiles were subjected for various kinetic treatments to analyze the release pattern of the drug and we found that drug release by diffusion mechanism and followed square root kinetics or Higuchi's kinetics. The in vitro release profiles of drug from all the plots shows high linearity (r2 = 0.9813 to 0.9954). Optimized formulations were again subjected for thickness, friability, hardness, uniformity of content, uniformity of weight, in vitro dissolution.

Key Words: Floating drug delivery system, gastric retention time, HPMC, Lactose, and captopril.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation And Evaluation Of Sustained Microcapsules Of Ibuprofen

G. Chakravarthi, A. Rajasekhar Reddy, V Aparna

Paper ID - 1180

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The release kinetics of ibuprofen from sustained release microcapsules. microcapsules were prepared by an emulsification and organic solvent evaporation technique reported earlier by jalil and nixon. the continuous phase was gelatin gel in distilled water and the dispersed, non-aqueous phase consisted of polymers (ec and hpmcp) and ibuprofen solution in dichloromethane. microcapsules of same formulation were more or less uniform in size with spherical or oval shape when observed in a light microscope. the reason for gradually decreasing release rate may be due to the plasticization of the ec polymer thereby forming films around the core ibuprofen crystal. the increase in "higuchian" release rate constant with the increase of hpmcp proportion to ec was due to higher rate of permeability of hpmcp in the dissolution medium of ph 7.2 as well as increased surface area due to decreased particle size.
Key Words: Microcapsules, solvent evaporation technique HPMC, Lactose, and ibuprofen.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Comparative Studies for Nateglinide Gastro Retentive Controlled Release Tablets

Paper ID - 1181

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Nateglinide is an anti-diabetic drug, used as a post-prandial agent at the dose of 60-120 mg twice or thrice a day. It belongs to BCS class II drugs with very short biological half-life and the absorption window is epical part of the intestine, because of these characteristics it is unable to maintain the drug in therapeutic window for longer duration of period by using conventional tablets. For this reason the various gastro retentive tablets were prepared and compared between them to find out the best system. In the present study effervescent & non-effervescent floating controlled release tablets were prepared using CEMC, Carbopol and HPMC and raft forming controlled release tablets were prepared using Guar gum, HPMC and Carbopol, and bio-adhesive Controlled release tablets were prepared using carrageenan gum, HPMC and Carbopol as rate release retardants. All the tablets were evaluated and final formulation i.e. suitable gastro retentive system was selected base on in-vitro dissolution parameters. The selected system was Nateglinide raft forming system i.e. Nateglinide raft forming controlled release tablets.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation And Evaluation Of Atenolol And Atorvastatin Sublingual Tablets

Paper ID - 1182

A Paper Presented by:
B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Oro dispersible tablets are gaining more importance in the recent days, they are more useful in administration of geriatrics. As Sub lingual tablets show immediate release pattern they are convenient to administer in emergency conditions. In this work combination of atenolol and atorvastatin were tried with different techniques like sublimation and direct compression, super disintegrants were used to enhance their solubility and release pattern. Atenolol belongs to BCS III and Atorvastatin belongs to BCS II and they are having solubility and permeability problems. It can be overcomed by these formulations which can enhance solubility and permeability

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Development And Characterization Of Newer Floating Film Bearing 5-Fluorouracil As A Drug

Paper ID - 1183

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The prime object of this study was to develop such a film which could float on gastric content releasing the 5-fluorouracil (5-FU) in nearby region for local action in stomach. These films may provide better retentivity of drug in the stomach. 5-FU loaded floating films were prepared by solvent casting technique employing mercury as substrate and cellulose acetate as film forming polymer. The films were evaluated for weight uniformity, thickness, drug content uniformity, floating characteristics, and in vitro drug release. To access the in vivo floating characteristic albino rabbits were used for radio imaging. The thickness of film was found to be ranging from 0.341 ± 0.110 to 0.717 ± 0.031 mm. Maximum floating lag time was 142.6 ± 2.41. The floating films were found to be floated up to maximum period of 23.65 ± 0.86 h. Cumulative % drug release was found to be ranging from 85 to 99 %. All optimized formulations were also subjected to release kinetics study.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Anti Diabetic Activity Of Roots Of Michelia Champaca

Paper ID - 1184

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

To know the anti hyper glycemic activity of various extracts, Petroleum ether, chloroform, acetone, ethanol and crude aqueous of roots of Michelia champaca and also known the anti diabetic activity of active anti hyper glycemic extract the ethanol extract of michelia champaca exhibited significant anti hyperglycemic activity but did not produced hypoglycemic in fasted normal rats. The crude aqueous and petroleum ether extracts were found active only at the end of the first hour. Treatment of diabetic rats with ethanlolic extract of this plant restored the elevated biochemical significantly and activity shows their dose dependent. The anti diabetic activity of flower buds of michelia champaca tells about. The traditional claim and ethanol extract of this plant could be added in traditional preparation for the aliment of various diabetes and it related disease.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Role Of Kinases In Cancer Development And Development Of Cancer Therapy Through Kinase Inhibotirs.

Paper ID - 1185

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Kinases are probably the most signaling enzymes. The protein kinase family, encircling more than 500 members, in this more than 150 kinases are known. Most of our diseases are related to intra (or) intercellular signaling by kinases. Especially cardiovascular diseases, immunodeficiency, rheumatoid arthritis, endocrine disorders, neurogenerative diseases and cancer. So, kinase inhibition therapy has become a very important area of drug research. Inhibition of kinase compounds can mainly classified into small-molecule inhibitors and monoclonal antibodies. Monoclonal antibodies has restricted use because of their size. Small molecule inhibitors are having some unique advantages . Inhibotors are act on the protein kinase by binding to the ATP-binding site of the active (or) inactive conformation of the enzyme. Inhibitors are binding to the Allosteric sites show the highest degree of selectivity. A number of small molecule kinase inhibitors like Sorafenib and Imatinib has been approved for the treatement of cancer and also A number of drugs in the research work SU5416, SU5614, SU6668 etc….

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Enhancement Of Dissolution Properties Of Olmesartan Medoxomil By Solid Dispersion Technique

Paper ID - 1186

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

In the present study, an attempt has been made to increase the solubility of poorly water soluble drug, Olmesartan medoxomil (OLM), by solid dispersion (SD) technique using Kneading method (KM). Therefore, SD of Olmesartan with surface active carriers, i.e cros-carmellose sodium (CCS), Sodium starch glycolate (SSG), Microcrystalline cellulose (MCC) and Crospovidone (CP) were prepared in three ratios (1:1, 1:3, 1:5). The effects of several variables such as type of surface active carrier used and drug:carrier ratios were studied. The evaluations of SDs (KM) were done by solubility and dissolution studies. Olmesartan medoxomil was released at a much higher rate from its SDs as compared to that of the pure drug. The dissolution rate of Olmesartan medoxomil was directly proportional to the increment in proportion of surface active carrier. The order of improvement of dissolution properties is SSG>CP>CCS>MCC>OLM.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Synthesis, Antibacterial and Antimitotic Activity of Some New Pyrido[2,3-d] Pyrimidines

Paper ID - 1187

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Pyridines, pyrimidines, pyridopyrimidines and their fused heterocyclic ring systems are of current interest by virtue of their exceptional and versatile biological activities as calcium antagonists, arteriolar vasodilators, herbecide antidotes, anti bacterial agents, antitumor agents and hypotensive agents. Among all, pyridopyrimidine moiety was considered as the best known tyrosin kinase inhibitor for the treatment of chronic myelogenous leukemia Also pyridopyrimidines have antimicrobial activity against a number of bacteria and fungi.
These compounds also exhibit immense chemotherapeutic importance as PDE inhibitors, DHF reductase inhibition etc. In recent years, there has been significant interest in the synthesis of nucleosides of various heterocyclic bases as antiherpes, antifungal, antibacterial, antiviral and anti-inflammatory agents. The utility of pyridopyrimidines and their nucleoside analogues leads to discover some potential compounds of medicinal importance.
These findings encouraged to undertake the synthesis of some novel pyrido[2,3-*d*]pyrimidine ring systems in hoping that they could have some chemical and biological interest.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Preliminary Phytochemical Screening, Biological Evaluation, Hand Wash Formulation And Evaluation For *Couroupita Guianensis* Abul Flowers

Paper ID - 1188

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Couroupita guianensis Abul was identified in south American tropics and introduced in most of tropical and sub tropical parts of the world.As per the literature suvey,our study plant species ethanomedically to have various activities such as analgesic,local anaesthetic,anti-bacterial,cytotoxic and immunomodulatory effects. The antibacterial activity of extracts from couroupita guianesis Abul was measured against gram positive and gram negitve bacteria. For this plan, we have done preliminary phytochemical screening, *couroupita guianensis* antibacterial activity,hand wash formulation and local anaesthetic activity of flower portion of.chloroform and ethanol extracts are exploring potential as well as different phytoconstituents such as anthracene glycosides,phenols,volatile oils,steroids,carbohydrates in both the extracts.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Determination Of Antimicrobial Activity And Estimation Of Phenolic Compounds In A *Glycyrrhiza Uralensis* Plant Roots By Spectrophotometer.

Paper ID - 1189

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Glycyrrhiza lepidota belonging to family Fabaceae (Leguminosae) is well known for control of cough, chest pain, diarrhea, fever in children, stomachaches activity etc. Antioxidants are involves in disease controlling activity. Phenolic compounds are the major antioxidants present in the plan and involve in control of disease and protect the plants. FCM (Folin-Calciocaltio reagent) test was used to Estimate the Phenolic compounds in roots of *Glycyrrhiza uralensis.* FCM reagent was added to the Ethanolic extract and absorbence was measured at 720nm with spectrophotometer. And Phenolic compound was expressed as mg/gr of Gallic acid. About 23.92mg/100gr of Phenolic compounds are present in the ethanolic extract of roots of *Glycyrrhiza uralensis*. Antimicrobial property of methanolic extracts was studied by Disc plate method. Four Gram $^{+ve}$ and four Gram^{-ve} bacteria are selected and discs containing methanolic extract were added in the plate. After incubation a clear zone formation reveals that plant roots of *Glycyrrhiza uralensis* has antimicrobial property. Among six it has inhibition activity against five bacterial species. May be due to the presence of high amount of phenolic compound the plant roots has high antimicrobial activity.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Synthesis And Antimicrobial Activity Of Novel Chalcones Containing 4-Nitrophenyl

Paper ID - 1190

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

4-nitroacetophenone were allow to react with different aromatic aldehydes in presence of alkaline medium to the corresponding 4-nitrophenyl substituted chalcones. They were separated through column chromatography by gravimetric method and are identified as 1-(4 nirophenyl)-3-phenyl-2propene-1-one, 1-(4-nitrophenyl)-3-(4"dimethylaminophenyl)-2-propene-1-one, 1-(4[1]nirophenyl)-3-(2",4"-dimethoxyphenyl)-2-propene-1-one and 1-(4[1]-nitrophenyl)-3-(3"4"-dimethoxyphenyl)-2-propene-1-one and 1-(4[1]-nitrophenyl)-3-(4"-chlorophenyl)-2-propene-1-one by spectral data and screened for antimicrobial activity against gram+ve Bacillus Subtilis and gram-ve Escherichia coli.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Protective Effect Of *Tridax Procumbens* On Urolithiasis - Calcium Oxolate Induced Stress

Paper ID - 1191

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

In the Indian traditional system, Tridax procumbens Linn. Is used for treating kidney stone disorders .Ethanolic extract of Tridax procumbens evaluated against 0.75% v/v Ethylene glycol and 2% w/v ammonium chloride induced calcium oxalate urolithiosis and hyperoxoluria induced oxidative stress in male albino rats. Treatment with the extract was able to reduce caluculogenisis induced urinary excretion and renal deposition of calcium and oxalate and resultant lipid peroxidation indicating it's antiurolithiatic and antioxidant effects. Results of the present study provide evidence for the claimed use of Tridax procumbens in the treatment of renal stone disease.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Wound Healing Activity Of Fruits Of Cuminum Cyminum

Paper ID - 1192

A Paper Presented by:
G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The shade dried fruits of Cuminum cyminum were subjected to solvent extraction with 90% ethanol, and successively fractionated by petroleum ether (40-60^{o}) and ethyl acetate. Extract and fractions were screened for wound healing properties on excision, incision and granuloma wound models in albino rats. From the results, it is observed that (250mg/kg b.w) ethanolic extract and its petroleum ether fraction of fruits of Cuminum cyminum showed significant wound healing property.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Influence Of Aqueous Extract Of *Allium Sativum* On Pharmacodynamics And Pharmacokinetics Of Gliclazide In Rats And Rabbits

Paper ID - 1193

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Many patients suffering from diabetes were often unaware of the risks involved when taking a medication in combination with other drugs/herbs leading to food-drug interactions ,where optimum blood glucose levels should be maintained. Garlic is one of the most widely using herbal medicine and in fast foods as spices Studies were conducted in normal rats, streptozotocin induced diabetic rats and normal rabbits with oral administration of selected doses of gliclazide, garlic and their combination with adequate wash out periods in between treatments. Blood samples were collected from rats and rabbits at regular intervals of time and were analysed for glucose by GOD/POD method and for gliclazide by HPLC method. Garlic enhanced the mean percent blood glucose reduction of gliclazide in both rats and rabbits, this interaction due to either pharmacokinetic or pharmacodynamic in nature. For further confirmation of pharmacokinetic interaction, serum gliclazide levels were estimated using HPLC. The overall serum gliclazide levels were increased from 1-24 h. Same time there was significant change in C max, AUC(0-24), AUC(0-α), AUMC(0-24), Kel and t½. Indicates garlic(*Allium sativum)* increases bio-availability of gliclazide, basing on this data the interaction may be at metabolism/excretion phases ,as there was no change in clearance the possible route of interaction may be at metabolism. Since interaction found was similar in two dissimilar species(rodents and non-rodents) it is likely to be same in humans also. Hence diabetic people are cautioned about the use of high quantities of garlic while taking anti-diabetic medications particularly sulphonylureas(ex:gliclazide).

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation Development And Evaluation Of Dry Suspension Of Itopride (Ready For Reconstiution)

Paper ID - 1194

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The main objective of the current study was to develop dry suspension of Itopride using locust bean gum, sodium alginate and sodium CMC as suspending agents. Dry suspension can offer greater chemical stability. The suspension should be reconstituted at the time of usage with warm water. Locust bean gum is freely soluble in hot water and partially soluble in cold water. Sodium alginate dissolves slowly in water. Sodium CMC is freely soluble in both hot and cold water. Sodium saccharin is an artificial sweetening agent, sodium benzoate is used as preservative. The dry powder was evaluated for flow properties. Later the reconstituted suspension was characterized for physical characteristics like appearance of phases, pourability, sedimentation volume, ease of redispersibility, pH, viscosity, drug content, dissolution. The drug content was analyzed on 1^{st} and 7^{th} day. The dissolution medium used was 0.1N Hcl. All formulations showed good flow properties such as car's index, tapped density, bulk density and sedimentation volume of >0.8, 80-90% of redispersibility, drug release was > 90%, 98-100% of drug content was found.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation Development And Evaluation Of Lamotrigine Generic Suspension Formulation

Paper ID - 1195

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The main objective of the present study was to develop generic formulation of lamotrigine as suspension dosage form using water soluble polymers as suspending agents. Locust bean gum, sodium alginate and sodium carboxy methyl cellulose are used as different viscosity enhancers. Sodium benzoate is used as a preservative and sodium saccharin as sweetener. Formulations showed good organoleptic properties, redispersibility and best stability. The suspension was evaluated for rheological parameters, sedimentation volume and invitro drug release pattern. The drug release was studied by dissolution test with 0.1N HCl using USP 24 type II apparatus at 50 rpm. The suspensions were found to be easily redispersible even after 7 days and showed 97% drug release in 10 min. The sedimentation volume was found to be between 0.5-1. All the formulations showed good stability, rheological behavior, sedimentation characteristics, pourability and redispersibility.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

An Observational Study on Medication Adherence and Medication Compliance to Insulin Therapy Type II Diabetic Patients in Tertiary care hospital

Paper ID - 1196

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Adherence is the main component that affects patients therapeutic outcome Non-adherence to therapy is an important and often unrecognized risk factor that contributes to reduced control of blood sugar hence this study aims at assessing the level of medication adherence and compliance to insulin in diabetic patients. It also determines to investigate factors affecting non adherence to insulin and to improve the patient's knowledge towards their disease and medication. **Objectives:** To assess the medication adherence and compliance to insulin in Type I and Type II diabetic patients and to find out the factors affecting non adherence to insulin. **Materials and Methods:** This was a prospective observational study. It was carried out for a period of six months at General Medicine in-patient Department of Katuri medical college and hospital,Guntur District.Patients were selected based on inclusion and exclusion criteria. **Results:** A total of 150 patients enrolled in the study of type II diabetes mellitus and the data was collected in General medicine department. In which 17 patients were dropped from the study. Human Actrapid, Human Mixtard and Insugen are the main analogues of insulin prepatations used for the treatment. 81% of the patients has administered insulin subcutaneously. Most common comorbidity observed in diabetic population is hypertension. The Morisky medication adherence Scale (MMAS-8) results showed the P value was 0.000*. Inconvenience is the main factor which affected for Non-adherence to the treatment. **Conclusion:** In conclusion it is evident from our study that 75% of the population was adherent to insulin and 81% of the population was compliant after follow up.

Key Words: Insulin, Medication Adherence, Human Actrapid, Prospective.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

An Observational Study on Medication Adherence and Medication Compliance to Anti-hypertensive therapy in teritiary care hospital

Paper ID - 1197

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Adherence is also termed as compliance. Ineffective taking of drug is termed as non adherence or non compliance **Objectives:** To assess the medication adherence and compliance to atenolol and to find out the factors affecting non adherence to anti-hypertensive therapy. **Materials and Methods:** This was a prospective observational study. It was carried out for a period of six months at General Medicine in-patient Department of Katuri medical college and hospital, Guntur District. Patients were selected based on inclusion and exclusion criteria. A total of 150 patients enrolled in the study of which 19 patients were dropped from the study. Socio economic, cultural literacy, poverty were taken into consideration.. **Results:** Most common comorbidity observed in hypertensive population is stroke. The Morisky medication adherence Scale (MMAS-8) results showed the P value was 0.001*. Inconvenience , illiteracy and poverty are the main factor which affected for Non-adherence to the treatment. **Conclusion:** In conclusion it is evident from our study that 35% of the population was non adherent to treatment due to illiteracy and 81% of the population was compliant after follow up.

Key Words: Atenolol, Medication Adherence, Compliance

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

An Observational Study on Medication Adherence and Medication Compliance to Thyroid replacement therapy in teritiary care hospital

Paper ID - 1198

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Hypothyroidism is a hormonal disorder which affects metabolic rate of the body.Non adherence to thyroid therapy leads to thyroid induced diabetes. **Objectives:** To assess the medication adherence and compliance to Thyroxine and to find out the factors affecting non adherence to Thyroid replacement therapy. **Materials and Methods:** This was a prospective observational study. It was carried out for a period of six months at Endocrinology in-patient Department of Katuri medical college and hospital, Guntur District. Patients were selected based on inclusion and exclusion criteria. A total of 150 patients enrolled in the study of which 9 patients were dropped from the study. Socio economic, cultural, literacy, poverty, Pharmacist intrervention ,Patient education were taken into consideration.. **Results:**Most common comorbidity observed in thyroid population is hormonal related non communicable deiseases. The Morisky medication adherence Scale (MMAS-8) results showed the P value was 0.001*. Inconvenience , illiteracy and poverty are the main factor which affected for Non-adherence to the treatment. **Conclusion:** In conclusion it is evident from our study that 35% of the population was non adherent to treatment due to illiteracy,15% is due to lack of patient education ,25% is due to socio economic status and 81% of the population was compliant after follow up.

Key Words: Thyroxine, Medication Adherence, Compliance

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

An Observational Study on Medication Adherence and Medication Compliance to captopril therapy in teritiary care hospital

Paper ID - 1199

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Captopril is an ACE inhibitor used in the management of angina. It cause bronchospasm and cough is the major adverse effect . **Objectives:** To assess the medication adherence and compliance to Captopril and to find out the factors affecting non adherence to captopril therapy. **Materials and Methods:** This was a prospective observational study. It was carried out for a period of six months atCardiology in-patient Department of Katuri medical college and hospital, Guntur District. Patients were selected based on inclusion and exclusion criteria. A total of 150 patients enrolled in the study of which 19 patients were dropped from the study. Demographic factors like age,gender, cultural, literacy, poverty, Pharmacist intrervention ,Patient education inconvenience,pallatabilty were taken into consideration.. **Results:**. The Morisky medication adherence Scale (MMAS-8) results showed the P value was 0.001*. Inconvenience , is the major factor for Non-adherence to the treatment. **Conclusion:** In conclusion it is evident from our study that 35% of the population was non adherent to treatment due to inconvenience,15% is due to lack of patient education ,25% is due to socio economic status and 81% of the population was compliant after follow up.

Key Words: Captopril, Medication Adherence, Compliance

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

ABC and VED Analysis of the Pharmacy Store of a Tertiary Care Teaching, Research and Referral Healthcare Institute of Andhra Pradesh.

Paper ID - 1200

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The ABC(always best control) and VED (vital, essential, desirable) analysis of the pharmacy store of Katuri medical college and Hospital , was conducted to identify the categories of items needing stringent management control. The annual consumption and expenditure incurred on each item of pharmacy for the year 20018-19 was analyzed and inventory control techniques, i.e. ABC, VED and ABC-VED matrix analysis, were applied. The drug formulary of the pharmacy consisted of 521 items. The total annual drug expenditure (ADE) on items issued in 2018-19 was Rs. 50,012,412. ABC analysis revealed 18.78%, 20.85% and 65.37% items as A, B and C category items, respectively, accounting for 72.97%, 29.95% and 11.08% of ADE of the pharmacy. VED analysis showed 11.11%, 55.38% and 27.51% items as V, E, and D category items, respectively, accounting for 16.14%, 73.38% and 11.48% of ADE of the pharmacy. On ABC-VED matrix analysis, 23.09%, 53.63% and 22.28% items were found to be category I, II and III items, respectively, accounting for 72.21%, 23.23% and 5.56% of ADE of the pharmacy. The ABC and VED techniques need to be adopted as a routine practice for optimal use of resources and elimination of out-of-stock situations in the hospital pharmacy.

Keywords: ABC analysis, ABC-VED matrix, inventory management, pharmacy, VED analysis

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Prescription Pattern and Drug Utilization Analysis in Patients with Unstable angina

Paper ID - 1201

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Angina pectoris is one of the major causes of morbidity and mortality in developing countries, which illustrates the need for rational prescribing of drugs to the patients. **Aim:** The aim of the study is to analyse the prescription pattern and drug utilisation for the drugs prescribed to the patients with Angina by checking the compliance with the standard guidelines provided by the American College of Cardiology/American Heart Association (ACC/AHA). **Materials and Methods:** A prospective observational study for a period of 6 months was conducted in the cardiology and cardiothoracic departments of a tertiary care hospital. The sample size was determined by using Rao software and percentage of the data was calculated using Microsoft Excel 2007. **Results:** A total of 290 patients were enrolled in the study in which males (230) dominated females (60) and were found in the age group of 60-69 years (92). Diabetes (62.9%) followed by hypertension (54.8%) were found to be the dominant risk factors. The prescribing frequency of dual antiplatelet therapy, statins, beta blockers, angiotensin converting enzyme inhibitors/angiotensin receptor blockers and nitrates was 93.3%, 97.3%, 94.1%, 76.3% / 14.1% and 41.2%. The treatment given to the patients was not completely in compliance with the ACC/ AHA guidelines (18.14%). **Conclusion:** The study provides an overall insight of the pattern of drugs prescribed to the patients with ACS which reveals the necessity of improving the rational prescribing of drugs in accordance with the standard guidelines.

Key Words: Angina pectoris, Prescription pattern, ACC/AHA guidelines, Rational drug use, Compliance.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

HML and SME Analysis of the Pharmacy Store of a Tertiary Care Teaching and Research Institute of Andhra Pradesh.

Paper ID - 1202

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The HML(High ,Medium,Low) and SME (Based on inventory) analysis of the pharmacy store of Katuri medical college and Hospital , was conducted to identify the categories of items based on high, medium and low price drugs and also on based on inventory. The annual consumption and expenditure i on each item of pharmacy for the year 20018-19 was analyzed and inventory control techniques, i.e. HML and SME matrix analysis, were applied. The drug formulary of the pharmacy consisted of 621 items. The total annual drug expenditure (ADE) on items issued in 2018-19 was Rs. 51,012,412. HML analysis revealed 19.78%, 19.85% and 65.37% items as H, M and L category items, respectively, accounting for 72.97%, 29.95% and 11.08% of ADE of the pharmacy.SME analysis showed 10.11%, 56.38% and 27.51% based on inventory, accounting for 15.14%, 74.38% and 11.48% of ADE of the pharmacy. On HML=SME matrix analysis, 24.09%, 52.63% and 21.28% items were found to be category I, II and III items, respectively, accounting for 71.21%, 24.23% and 5.56% of ADE of the pharmacy.

Keywords: HML analysis, HML-SME matrix, inventory management, pharmacy,

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

A Prospective Observational Study of Adverse Drug Reactions Of Anti-Neoplastic Agents In Different Stage Of Cancer

Paper ID - 1203

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

To evaluate the clinical adverse drug reactions (ADRs) reported in cancer patients taking anticancer drugs in different stage of cancer. Adverse drug reactions (ADRs) are common in all stages of cancer. As there is lack of Pharmacovigilance data on such drugs the present prospective observational study was undertaken to monitor possible ADRs in the chemotherapy of different stage of cancer. Adverse drug interactions maybe pharmacokinetic or pharmacodynamics .It may increase the therapeutic efficacy or leads to treatment failure. Precaution must be taken when prescribing other therapeutic agents to patients undergoing active anticancer therapy. The study is done by Naranjo's ADR probability scale after the clinical pharmacist intervntion of a government hospital. We have conducted the prospective study to analyze the ADRs in the oncology department for the period of six months in Government Headquarters, Guntur. The study population consists of 200 patients in total. Among them 54.6 % (n=194) of the patients were females. On classifying the patients on age 35 % of the patients were of age group 50-59. From the total prescription 44.66% patients were diagnosed as stage II cancer. From this clinical study it has been concluded that a close intervention on adverse effects reduces the incidence of toxic effects.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation of In vitro anti-urolithiatic activity *of Bacillus sphearicus*

Paper ID - 1204

A Paper Presented by:R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present study was carried out for phytochemical extraction, preliminary phytochemical analysis, and in vitro anti urolithiatic studies on the aqueous extract (leaf) of *B.sphaericus*. The results of preliminary phytochemical screening indicated the presence of saponin glycosides, tropane alkaloids and acidic compounds .Anti urolithiatic activity was studied as percentage inhibition of stones by nucleation, growth aggregation assays for aqueous extract at 100-500µg/ml cystone is taken as standard. The results indicated a dose-dependent inhibition of crystal growth.

Keywords: In vitro, anti urolithiatic study, B.sphaericus.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation of anti-inflammatory activity of aqueous extract of polyherbal formulation

Paper ID - 1205

A Paper Presented by:R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present investigation was carried out to evaluate the anti-inflammatory activity aqueous extract of *polyherbal formulation* Materials and methods: Mice (Swiss albino) of either sex and albino rats (wistar strain) of either sex were used for the study. In vitro anti-inflammatory activity was studied by albumin denaturation inhibition, antiproteinase action, membrane Stabilization action, heat induced haemolysis, hypotonicity-induced haemolysis, antilipoxygenase activity. Carrageenan induced Paw edema and Hot Plate Tests were used for in vivo study. Aspirin (100ug/ml), Diclofenac (100ug/ml), Indomethacin (100ug/ml) were used as standards. The results showed that AMEH has significant *in vitro* anti-inflammatory activity ($P<0.001$) at a dosage of 100,250 and 500 µg/ml .Within three hours of carragenan induced inflammation 500mg/kg showed prominent anti inflammatory activity. Latent period of pain was also increased in dose dependent manner.

Key Words: Indomethacin, Carragenan, Polyherbal formulation

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation of wound healingand microbial activity of plyherbal extract.

Paper ID - 1206

A Paper Presented by:R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Aim of the present study was to assess the wound healing potential and antimicrobial activity of polyherbal formulation and their blend in excision, and dead space wound models in rats in comparison to a marketed ointment (gentamycin). The natural extracts were used in formulation of ointments alone or in a combination of three extracts at a total concentration of 15% w/w in medications. The percent of wound contraction in case of the blend and gentamycin (10 mg/kg) were 85.90–96.5%, 84.35–97.62%, 93.55–100%, 95.30–100%, and 92.35–100% from days 16 to 20, respectively. The blended formulation showed the highest wpound healing potency compared to other formulations and showed comparable results to the standard ointment. The histological studies of excision biopsy at day 24 showed healed skin structures with normal epithelisation, the restoration of adnexa and fibrosis within the dermis in all of the formulation- and gentamycin-treated groups while the control group had nopt showed any granulation. The formulations showed antimicrobial activity against *Candida*, *Staphylococcus aureus*, mucous membrane infections and *E. coli* topical infections. The study proved the wound healing potential and antimicrobial activity of the herbal extract.

Keywords: Wound healing, polyherbal extract,Herbal extract

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation of Anti Inflammatory Activity of Aityardi Chooranam by Formalin Induced Paw Odema Method in Albino Rats

Paper ID - 1207

A Paper Presented by:R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Aityardi chooranam is a poly herbal Ayurvedic medicinal formulation mentioned in "Ayurvedic system of pharmacopoeia" with indication for treatment of all types of vata diseases. The aim of the study is to evaluate the anti-inflammatory activity of the herbal medicine churnam by formalin induced paw edema method in albino rats. The animals are divided into three groups with six animals in each group. Group 1 is normal control ,group 2 and group 3 received the drugs Indomethacin (25mg/kg) in distilled water, Amrtadi chooranam (500mg/kg) in 2 % CMC p.o respectively one hour before the onset of inflammation in the animals. The mean increase in the volume of the paw odema is measured using a plethysmometer and the percent of inhibition is calculated .The results show that Ai chooranam has significant anti-inflammatory activity ($P<0.05$) at a dosage of 500 mg/kg within three hours of formalin induced inflammation.

Keywords: Aityardi chooranam, Ayurvedic, Anti inflammation, formalin

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation Of Anti Diabetic Activity, Cns Activity And Antioxidant Activity Of Methanolic Extract Of *Mimusops Hexandra*

Paper ID - 1208

A Paper Presented by:R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Objective of the present study is to evaluate antidiabetic activity, CNS activity, antioxidant activity of methanolic extract of Mimusops hexandra. Materials & Methods: Male white Albino strain rats weighing 250–300 g were used for the experiment. Chemicals and reagents were purchased from local market Results: The results of anti-diabetic activity, CNS activity and antioxidant activity of Methanolic extract of *Mimusops hexandra* were significantly compared with the standard compounds. The extract show decreasing the blood glucose levels of diabetic induced rats. It shows better results on the CNS stimulating activity and DPPH free radical activity. Conclusion: The result of our study indicates that the Methanolic extract of *Mimusops hexandra* significantly decreased serum glucose level in hyperglycaemic animals. CNS activity, high DPPH free radical antioxidant activity. In this context, *Mimusops hexandra* can rightly be mentioned as a plant of considerable interest.

Key Words: Anti diabetic activity, Mimusops hexandra, Hyperglycemia

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation of the anti–depressant activity of *polyherbal formulation* in male rats

Paper ID - 1209

A Paper Presented by:R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Objective: The present study was undertaken to evaluate anti-depressant activity of *polyherbal formulation* **Materials and Methods:** Male Wistar rats were subjected to imipramine and herbal extract of BP for their antidepressant activity using Forced Swimming Test (FST), Reserpine Reversal Test (RRT), Haloperidol-Induced Catalepsy (HIC), and Pentobarbitone Sleeping Time (PST). **Results:** Administration of MS and imipramine revealed a statistically significant reduction in immobility time in FST, RRT, and protection against HIC, compared to the control group. However, there was no significant potentiation of PST. **Conclusion:** Our study demonstrated the potential antidepressant activity of MS.

Key Words: Antidepressant activity, Imipramine, *poyherbal formulation*

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation Of Antipsychotic Activity Of Ethanolic Extract Of Mimusops Hexandra On Wistar Albino Rat

Paper ID - 1210

A Paper Presented by:R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

ABSTRACT: An increased inclination has been observed for the use of herbal drugs in chronic and incurable diseases. Treatment of psychiatric diseases like Schizophrenia is largely palliative and more importantly a prominent adverse effect prevails with the majority of antipsychotic drugs, which are the extrapyramidal motor disorders. This study was a trial to evaluate the neuroleptic activity of the ethanolic extracts of Mimusops hexandra with different antipsychotic animal models. Two doses of the extract (100 and 200mg/kg) were used for this study with 5 different animal models. After that, the concentration of the dopamine neurotransmitter was estimated in two different regions of the brain viz. Frontal cortex and Striatum. The result of the study indicated a significant reduction of amphetamine induced stereotype and conditioned avoidance response for the extracts compared with the control group, but did not have any significant effect in phencyclidine induced locomotor activity and social interaction activity. However the extract showed minor signs of catalepsy compared to the control group. The study also revealed that the neuroleptic effect was due to the reduction of the dopamine concentration in the frontal cortex region of the rat brain. The results largely pointed out the fact that the extract may be having the property to alleviate the positive symptoms of Schizophrenia by reducing the dopamine levels of dopaminergic neurons of the brain. The estimation of dopamine in the two major regions of brain indicated the alteration of dopamine levels was the reason for the antipsychotic activity as demonstrated by the different animal models.

Keywords: Anti-psychotic, Mimusops hexandra, Neuroleptic

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Preparation and evaluation of Telmisartan microparticles for targeted drug delivery.

Paper ID - 1211

A Paper Presented by:
R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present study involves the preparation and evaluation of Telmisartan loaded microparticles by Ionotropic gelation method, using calcium-chloride as cross-linking agent. Telmisartan (Angiotensin II receptor antagonist) falls into BCS class-II having poor aqueous solubility. To improve solubility of Telmisartan and thereby enhancing its bioavailability different formulations were prepared by optimizing the concentration of chitosan and cation and concentration of drug. The prepared microparticles were characterized by FTIR, DSC, SEM, Particle size analysis. The particle size of prepared microparticles are in the range of 1 to 25 nm.

Keywords: Microparticles, Ionotropic-gelation method, Targeted drug delivery

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Comparative *In Vitro* Drug Release Study Of Ciprofloxacin Gel

Paper ID - 1212

A Paper Presented by:R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The aim of the present work was to study ciprofloxacin in situ gels drug release for the treatment of conjunctivitis. Ciprofloxacin ophthalmic solution has been shown to be effective in several ocular infections and may be used in patients with chronic conjunctivitis or ocular irritation. Ciprofloxacin in situ gel was prepared using various concentrations of polymers as a pH triggered gelling system, with the objectives of increasing contact time, achieving controlled release, reducing the frequency of administration and obtaining greater therapeutic efficacy of the drug. The prepared in situ gels were then measured with Open ended cylinder and Franz cell.

Key Words: Ciprofloxacin, gel, ocular infections.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Design And Evaluation Of Controlled Release Tablets Of Losartan Potassium

Paper ID - 1213

A Paper Presented by:R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The objective of the present study is optimization of Losartan potassium controlled release tablets by 2^3 factorial design. Controlled release tablets of Losartan potassium tablets were formulated employing HPMCK100 as matrix forming polymer, sodium bicarbonate as gas generating agent and beeswax and starch acetate as floating enhancers. Losartan potassium is an ACE inhibitor and is widely prescribed for the treatment of hypertension and congestive heart failure. Eight Losartan potassium controlled release tablet formulations were prepared employing selected combinations of the levels of the three factors as per 2^3 factorial design. The three factors involved in the 2^3 factorial design are sodium bicarbonate (Factor A), polymer (Factor B) and channelling agent (Factor C). The two levels of sodium bicarbonate (Factor A) are 10 and 20 %, the two levels of polymer (Factor B) are 2 % and 5 % and the two levels of channelling agent (Factor C) are 1% and 2%. All the floating tablets prepared were evaluated for drug content, hardness, friability, disintegration time, floating lag time, floating time and drug release characteristics. Optimization of Losartan Potassium floating tablet formulation was done taking floating lag time as the parameter for optimization. The optimized formulation exhibited a floating time of 12 h with a lag time of 60-80 seconds.

Key Words: Controlled release, Floating tablets, Losartan potassium, Optimization, Factorial design, Sustained release

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Antimicrobial, Analgesic And Anti-Inflammatory Activity Of Quinoxaline Derivatives

Paper ID - 1214

A Paper Presented by:R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Quinoxaline-2,3-dione was prepared by using oxalic acid. The mixture was subjected to microwave radiation to get acetylated derivative of quinoxaline prepared by Fridel-Craft's acylation method. All the synthesized compounds were subject for the different biological activities such as antimicrobial activity by agar disc diffusion method, analgesic activity by acetic acid induced writhing in mice and anti-inflammatory activity by using carrageenan induced paw edema in rats. The experiments have given promising results for the said analgesic, anti-inflammatory and anti-microbial activities.

KEY WORDS: Anti-inflammatory, analgesic, anti-microbial, quinoxaline derivatives.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Anticancer activity of novel quinoline-thiazole molecules

Paper ID - 1215

A Paper Presented by:R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

A series of **quinoline-thiazole molecules** were synthesized by the nucleophilic addition of 2-chloroquinoline-3-carbaldehyde**(1)** with 4-(substituted) phenyl2-amino thiazole**(2)** in the presence of glacial acetic acid in ethanol. The starting precursor CQC was prepared by the mixture of acetanilide and dimethylformide in phosphorous oxytrichloride on mild condition. The structures of these newly synthesized were characterized by elementary analysis, IR, ^{1}H NMR and Mass spectroscopy. The frequency of carbonyl stretching of aldehydic group was disappeared in FTIR spectral data of all the products. All the Schiff base products were evaluated for their in-vitro anticancer activity by MTT assay method. Due to the structure containing thiazole and 2-chloro quinoline with azomethine which might be responsible for significant action against cancer cell lines viz. MCF-7 and K562. The IC50 was determined by nonlinear regression analysis using the equation for a sigmoid plot.

Key Words: Anti-cancer, quinoline derivatives, MCF-7, K562

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Studies on the application of Quercetin nanoparticles as supplement for cancer therapy

Paper ID - 1216

A Paper Presented by:R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Flavonoid was selected based on its *in vitro* inhibition of CYP-450 enzyme and P-gp. Piperine, Genistien and Quercetin were selected for evaluation. The *in vitro* inhibitory effect of flavonoids on rat liver enzyme was examined by using UV- spectrometry. The % inhibition of quercetin, piperine, and genistien on CYP-450 enzyme was found to be 64.88%, 59.26% and 57.82% respectively. Similarly, the P-gp efflux inhibition study was examined on a chicken intestine by fluorometric analysis. The inhibitory activity of flavonoids was in order of Quercetin > Piperine > Genistien. Due to safety and efficacy, well studied nanoparticles was selected as drug-delivery system. Both ethanol injection method and thin film hydration method were utilized for formulation. The nanoparticles were optimized by Box-Behnken design utilizing four factors - three levels. The optimized formulation was evaluated for physicochemical characteristics (DSC, XRD, SANS, Entrapment efficiency, surface morphology by SEM, drug loading and release), *in vitro* hemolysis and effect on resistant cancer cell line like U87 MG (Resistant glioma cell line). The high cytotoxicity and drug uptake by U87 MG compared to conventional therapy points towards development of a novel promising therapy for resistant cancer.

Key Words: Quercetin, anticancer, nanoparticles.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Method development and validation of residual solvents in sumatriptan succinate by using gas chromatography

Paper ID - 1217

A Paper Presented by:
B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Sumatriptan succinate is a selective 5-HT1 receptor agonist. Sumatriptan presumably exerts its therapeutic effects in the treatment of migraine headache through agonist effects at the 5-$HT_{1B/1D}$ receptors on intracranial blood vessels and sensory nerves of the trigeminal system, which result in cranial vessel constriction and inhibition of pro-inflammatory neuropeptide release. A single, rapid and highly selective GC method was developed and validated for the quantification of residual solvents present in Sumatriptan succinate through an understanding of the synthetic process, nature of solvents and nature of stationary phases of columns. The residual solvents methanol, acetone and toluene were determined. The developed method is specific, accurate, precise and robust as per ICH guidelines. The Head space gas chromatography (HSGC) method described utilized a DB-624Capillary (30.0 m × 0.53 mm ID, 3.0 µm) column with total run time 25 min. using DMSO as sample diluents. Nitrogen at a constant flow rate of 3.0mL/min was used as a carrier gas. The method was validated to be specific, linear, precise, sensitive and showed excellent recovery.

Keywords: Sumatriptan, GC, method development, validation

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Development and validation of stability indicating RP-HPLC assay method of sildenafil

Paper ID - 1218

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

A simple, rapid, selective & precise RP-HPLC stability indicating method has been developed and validated for the quantitative estimation of sildenafil (API) & their degradation products. Chromatographic separation was achieved using Sephadex (5µ) column with mobile phase consisting of ACN:Water (50:50v/v) flow rate was 1 ml/min and the detection wavelength was 282 nm. The method was validated for accuracy, precision, linearity, LOD, LOQ, robustness, ruggedness and system suitability parameters. The API was subjected to stress conditions viz hydrolysis (1M Methanolic HCl/1M Ethanolic NaOH for 48h @ room temperature), oxidative decomposition (6% H_2O_2 for 48 h @ room temperature), photolysis (24 h @ UV light) and thermal decomposition (Drug at 80ºc for 8hrs). It is stable in photolytic condition. No inference of degradation products was found at the retention time of principal peak. The developed method was validated as per ICH Q2A guidelines.

Key Words: Sildenafil, RP-HPLC, Validation, ICH

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Design and implementation of adverse drug reactions reporting system in Vijayawada based private hospital

Paper ID - 1219

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

This study aims at designing and implementation of ADR reporting system in Vijayawada based private hospital. The study was conducted over a period of 6 months in Vijayawada based private hospital. A request made for spontaneous reporting of ADRs by healthcare professionals. The patient demographic data, current medication history was collected from the patient profile. ADRs detected during the ward rounds were notified by health care professionals and documented in yellow form. The Naranjo algorithm scale was used for causality assessment. Reported ADRs were classified according to the Rawlins and Thompson method and severity of ADRs assessed by using Hartwig and Seigal scale. From the total of 1000 cases 12 ADRs reported from 23 patients. CNS ADRs were found to be more, followed by dermatology, GIT. Our study indicated that the implementation of ADR reporting system in Vijayawada based private hospital contribute towards safer use of medicines in patients.

Key Words: Adverse drug reactions, spontaneous reporting, safe use of drugs

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

BRIC clinical trials: opportunities and challenges

Paper ID - 1220

A Paper Presented by:
B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The four 'BRIC' countries together account for 59.7% of the world population, Yet they account for only 5.9% of industry sponsored clinical trial sites globally - and only 22.2% of among emerging countries Russia has more phase II-IV trials than any of the other three BRIC countries. Brazil and India both account for about 75% of Russia's total. Opportunities in BRIC countries is large patient pools, mainly companies have their own regulatory processing to govern clinical trials. Variation in medical practices can vary substantially. Operating costs are often not what they seem initially. Some hurdles that companies would face include cultural differences, one of the big differences is time differences, there could be some language barriers, and you could potentially have some less experience, import export challenges, training in your area. Despite these challenges the number of clinical trials being conducted in BRIC countries is set to grow.

Key Words: BRIC countries, clinical trials

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

A market survey on a leading brand of various OTC segments

Paper ID - 1221

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Nowadays many brands of OTC have reached the stagnation as far as prescription growth is concerned owing to emergence of newer therapies for the same ailment and high incidence of repeat purchase / chemist push at the same time, legalities or internal policies may not permit direct communication of the brand to the patients. Hence, clients resort to trade incentives / loading / schemes, and loyalty programs for doctors. The main objective of this study was to screen the top leading OTC brands of various segments (5 segments) and to investigate the factors like prize, behavior, advertisement, and competition of OTC brands. The consumers are being significantly influenced by onscreen as well as active advertisement for their preference in buying the OTC products. Knowing which product sells better at a given place is always useful to local pharma companies to know their exact competitive position and to know who the market leader is and whom Customers are Brand Loyal. From the present survey, it could be concluded that the investigations on different factors which influences the buying behavior of consumers and also about leading brands of various top selling OTC products are required. Thus, if any pharmaceutical company wants to launch the new OTC product in the market then it should focus on the buying behavior and taste of the consumers to resist against cut-throat competition.

Key Words: OTC, Brands, Generics, Market competition

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Monitoring of Adverse Drug Reactions in wards of a Govt. hospital

Paper ID - 1222

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Adverse Drug Reactions (ADRs) cause patient harm and create burden on healthcare resources.
This study was conducted for monitoring of ADRs in wards of a public teaching hospital. Patients' data was collected from case files in standard case record forms. Data was studied for identification of ADRs and analyzed for causality, severity and preventability. The results of 200 patients' data had shown that 26 patients had experienced ADRs. Out of these, most commonly occurring ADRs were hypokalemia, constipation and skin rashes. Type 'A' and type 'B' ADRs were 80% and 20% respectively. According to Naranjo's ADR probability scale, half of the ADRs were probable and half were possible. According to WHO scale, 57% of ADRs were possible and 33% were probable. Severity assessment done using modified Hartwig's scale concluded that mild and moderate ADRs were 31% and 69% respectively. The study concluded that as most of the ADRs were not preventable, continuous monitoring is required to protect patients from fatal outcomes.

Key Words: ADRs, Hospital, WHO

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Pharmacoeconomic analysis of statin tablets by *in-vitro* methods

Paper ID - 1223

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Statins are one of the most commonly used anti hyperlipidemic agents. And the tablets of STATINS are available in varying prices. The range of cost is from Rs.15 to Rs.130. By considering all these, statins were selected for the present study of pharmacoeconomic analysis. The increased incidence and prevalence of coronary heart disease (CHD) in recent years has been increased. The present study was aimed at evaluation of the selected brands of different statin tablets of dose 10 mg with varying prices by *in vitro* tests like weight variation, friability, hardness, disintegration time and dissolution rate. Then, the *in vitro* performance was compared by suitable statistical test (ANOVA and coefficient of correlation [r]) for application of CMA of pharmacoeconomics. Then, the relation between the cost and effectiveness was concluded. From the present study, it can be concluded that there is no significant correlation between cost and performance as there is no excellent *in vitro* performance found from the costliest tablets vice versa.

Key Words: Statins, market survey, pharmacoeconomics

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Applying Pharmacoeconomics in Indian Health Care System

Paper ID - 1224

A Paper Presented by:**K. Venkata Gopaiah, A. Rajasekhar Reddy, G. Kalyani**
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India

Abstract

India has one of the fastest growing economies in the world especially relating to pharmaceuticals. Hence modern young pharmacists need to expand his role in Pharmacoeconomics which is a set of methods to evaluate the Economic, Clinical and Humanistic Outcomes of pharmaceutical products and health care service. It allows comparison of economic resources consumed (inputs) to produce the health and economic consequences of products or services (outcomes) which makes types of pharmacoeconomic analyses (COI, CMA, CBA, CEA, CUA) and their similarities, differences, and appropriate application should be familiar before conducting a Pharmacoeconomic evaluation. Pharmacoeconomics and outcome research plays a very important role in drug expenditure management. As per the literature survey, approximately 37.2% of Indians live below the country's poverty line. Cost of medicines are growing constantly as new medicines are marketed and are under patent law, preference of drug therapy over invasive therapy and the irrational drug prescription. The role of pharmacoeconomics in India is in infancy at present, although clinical research organizations are being formed rapidly. Certain methodology, training and initiatives are needed for its development. Higher budgetary allocation and stronger legislation are needed along with interagency and international coordination and co-operation to harmonize.

Key Words: Pharmacoeconomics, health care, market survey.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Treatment of Cancer by Nanobiotechnology

Paper ID - 1225

A Paper Presented by:
B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Nanotechnology has led to the development of novel materials and devices with a wide-range of applications, especially in imaging, diagnostics, and therapy, which contributed to the early detection and treatment of cancer and metastasis. Although Nanotechnology is thought to be a new branch of Science that has only emerged over the past decade, nanoparticles (for example, gold nanoparticles) have been used, even though inadvertently, for several thousand years. Today, nanotechnology is a flourishing field that is helping to address critical global problems from cancer treatment to climate change. Nowadays, nanomaterials and nanoparticles have gained increasing interest due to their extraordinary electrical, optical, and chemical properties, high stability and biological compatibility, controllable morphology and size dispersion, and easy surface fictionalization. Cancer is the one of first leading causes of mortality worldwide, with more than 14 million new cases and 8.2 million cancer-related deaths only in 2012. The global cancer rates could increase by 50% to 15 million by 2020, according to a report from the World Health Organization. Nanotechnology is playing a pivotal role in providing new types of nanotherapeutics for cancer that have the potential to provide highly active and specific therapies with minimal side effects and maximum therapeutic outcome. Smart and multifunctional nanomaterials are one of those nanosystems that represent non-toxic and multipurpose mediators for a variety of biomedical applications, such as diagnostic and imaging assays, phototherapy and radiotherapy improvement, gene silencing and drug delivery. Nanotechnology will undoubtedly be crucial for identifying useful drug target candidates and for validating their importance and efficacy in disease states, such as cancer (Conde *et al.*, 2015). Actually, cancer nanotechnology may offer new opportunities for personalized oncology in which diagnostics and therapy are based on each individual's molecular and cellular profile.

Keywords: Nanobiotechnology, cancer treatment, World Health Organization, nanomaterials, nanosystems.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Spectrophotometric and liquid chromatographic determination of fenofibrate and vinpocetine and their hydrolysis products

Paper ID - 1226

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Several spectrophotometric and HPLC methods are presented for the determination of fenofibrate, vinpocetine and their hydrolysis products. The resolution of either fenofibrate or vinpocetine and their hydrolysis products has been accomplished by using numerical spectrophotometric methods as partial least squares (PLS-1) and principal component regression (PCR) applied to UV spectra; and graphical spectrophotometric methods as first derivative of ratio spectra (1DD) or first (1D) and second (2D) derivative spectrophotometry for vinpocetine and fenofibrate, respectively. In addition HPLC methods were developed using ODS column with mobile phase consisting of acetonitrile-water (80:20 %v/v, pH 4) with UV detection at 287 nm for fenofibrate and a mobile phase consisting of acetonitrile-10 mM KH_2PO_4, containing 0.1% diethylamine (60:40 %v/v, pH 4.6) with UV detection at 270 nm for vinpocetine. The proposed methods were successfully applied for the determination of each drug and its hydrolysis product in laboratory-prepared mixture and pharmaceutical preparation. The proposed HPLC and derivative spectrophotometric methods were used to investigate the kinetics of acidic and alkaline hydrolytic processes of each drug. The pH-rate profile of hydrolysis of each drug in Britton-Robinson buffer solutions was studied.

Key Words: Fenofibrate, Vinopectine, HPLC, Acetonitrile and Diethylamine etc.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Fenofibrate raw materials: HPLC methods for assay and purity and an NMR method for purity

Paper ID - 1227

A Paper Presented by:
B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

HPLC methods for drug content and HPLC and NMR methods for related compounds in fenofibrate raw materials were developed. The HPLC methods resolved 11 known and six unknown impurities from the drug. The HPLC system was comprised of a Waters symmetry ODS column (100×4.6 mm, 3.5µm), a mobile phase consisting of acetonitrile: water: trifluoroacetic acid 700/300/1 (v/v/v) at a flow rate of 1 ml min^{-1}, and a UV detector set at 280 nm. Minimum quantifiable amounts were about 0.1% for three of the compounds and less than 0.05% for the other eight. Individual impurities in 14 raw materials ranged from trace levels to 0.25%, and total impurities from 0.04 to 0.53% (w/w). Six unknown impurities were detected by HPLC, all at levels below 0.1%, assuming the same relative response as fenofibrate. An NMR method for related compounds was also developed and it was suitable for 12 known and several unknown impurities. It requires an NMR of 400 MHz, or greater, field strength. Individual impurities in the raw materials analyzed ranged from trace levels to 0.24%, and total impurities from trace levels to 0.59%. Several lots contained small amounts of unknown impurities at trace levels. Three lots, all from the same manufacturer, contained an unknown impurity, not detectable by HPLC, which was not present in the other raw materials. It was estimated to be present at a level greater than 0.2%. The results for related compounds by the two techniques were consistent.. A fifteenth raw material was not homogeneous in its content of impurity VI, a synthetic intermediate and possible degradation product. The HPLC/MS results provided information on the peak purity (number of components) for minor HPLC peaks, as well as structural data such as the molecular ions and diagnostic fragment ions. The HPLC/MS results showed that there were five unknown drug related impurities, for which there were no standards available. Results for the assay of 15 raw materials by HPLC were within the range 98.5-101.5%.

Keywords: Fenofibrate, Drug impurities, Assay, Related compounds, HPLC and NMR etc.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Method development and validation of Fenofibrate by HPLC using human plasma

Paper ID - 1228

A Paper Presented by:R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The objectives of the study were to develop a rapid, simple, and economical HPLC method for the estimation of Fenofibrate in plasma and to validate the developed bioanalytical method. This research paper describes an specific procedure for determination of Fenofibrate in human plasma. The method employs reverse phase liquid chromatography with UV detection. The mobile phase used was simple and column friendly and was sufficiently sensitive to quantify Fenofibrate in amounts as low as 0.095 µg/ml. This limit of quantitation (LOQ) was determined as the lowest concentration with a coefficient of variation lower than 20% and the total accuracy of the method ranged from 101.99 to 107.41%. The LOQ of this method is better than those of other reported methods. The calibration curve plotted concentration versus area and was linear from 0.095 µg/ml to 19.924 µg/ml, having r^2 greater than 0.98 during the course of validation. The above method is valid for the analysis of drug in human plasma. The method with slight modification could be used for the drug analysis in various dosage forms.

Key Words: Fenofibrate, HPLC, LOQ, Bioanalytical method, Validation etc.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Validated spectrophotometric determination of Fenofibrate in formulation

Paper ID - 1229

A Paper Presented by:R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The aim of present work is to develop and validate spectrophotometric methods for the determination of fenofibrate, an anti-hyperlipidemic, fibric acid derivative in pharmaceutical formulation. Methanol was used as a solvent throughout the study. Quantitative determination of fenofibrate in pharmaceutical formulation was carried out by UV-spectrophotometric method using the absorbtivity values at 287.5 nm and by comparison with standard (method 1a and 1b) and the first order derivative absorbance values at 249.2 nm were utilized for estimation of drug (method 2). The method showed high specificity in the presence of formulation excipients and good linearity in the concentration range of 0-60 µg/mL. Percent recovery values at 287.5 nm were 100.3% while it was 100.18% at in 1st order derivative spectrophotometry at 249.2nm (n=3). SD values showed that both spectrophotometric methods were reproducible. The intra and interday precision data demonstrated that method is precise.

Key Words: Fenofibrate, capsules, tablets, derivative spectrophotometry and linearity etc.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

In vitro and *in vivo* evaluation of tegaserod maleate pH-dependent tablets

Paper ID - 1230

A Paper Presented by:R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The purpose of this study was to prepare tegaserod maleate (TM) pH-dependent tablets and evaluate their advantages as a sustained release delivery system. TM, insoluble in water and unstable in gastric milieu, was formulated into pH-dependent tablets coated with combinations of two methacrylic acid copolymers-Eudragit® L100 and Eudragit®S100. The influence of core tablet compositions, polymer combination ratios and coating levels on the *in vitro* release rate of TM from coated tablets was investigated. The optimum formulation was evaluated for *in vitro* release rate and *in vivo* bioavailability study on beagle dogs. In addition, physico-chemical properties of the drug, including solubility at different pH and temperatures, and dissociation constant were determined. The results showed that no drug was released in 0.1 mol/L hydrochloric acid within 2 h, and about 90% of the drug was released in the pH 6.8 phosphate buffer within 12 h in a sustained manner. The pharmacokinetic investigation showed that TM pH-dependent tablets exhibited a sustained plasma concentration, a lag time of approximately 2.3 h and a relative bioavailability of 159% compared to plain tablets. A close correlation existed between the *in vitro* release rate of the pH-dependent system and its *in vivo* absorption percentage. The results of the present study have demonstrated that the pH-dependent tablet system is a promising vehicle for preventing rapid hydrolysis in gastric milieu and improving oral bioavailability of TM for the treatment of irritable bowel syndrome.

Keywords: Tegaserod maleate, pH-dependent, Bioavailability, Phosphate buffer etc.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Neuroprotective potentials and efficacy on neurodegenerative disorders of standardized dried fruit extract of *Aegle marmelos* in various experimental models

Paper ID - 1231

A Paper Presented by:
R Subhakar Raju, G. Chakravarthi, A. Rajasekhar Reddy, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Herbal medicine is the natural system of medicine that has been practiced for more than 5000 years. Ayurvreda is a Sanskrit word and its meaning is 'science of life (or) practice of longevity'' this system of health care was conceived and developed by the rishis and natural scientist through centuries of observation, discussion and medication based on trial and error. The present studies has revealed that the Neuroprotective effect of standard drug (Dextromethorphan) and *Aegle marmelos* dry fruit extract on sodium nitrite induced hypoxia deficits in rats. *Aegle marmelos* is a medicinal plant with antioxidant properties. Previous studies revels that oral administration for seven days protect against cerebral ischemia damage, cerebral energy metabolism, brain Na^+K^+ATP ase activity, malondialdehyde content, total adenine nucleotides in dependent manner. Na^+K^+ATP ase responsible for establishing the electrochemical gradient of Na^+ and k^+ ions across the cell membrane in central nervous system.

Key Words: Nepuroprotective, anti-oxidant, Dextromethorphan, *Aegle marmelos* dry fruit.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Anti alzheimer activity of standardized dried fruit extract of *Aegle marmelos* in various experimental models

Paper ID - 1232

A Paper Presented by:G. Chakravarthi, A. Rajasekhar Reddy, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Herbal medicine is the natural system of medicine that has been practiced for more than 5000 years. Ayurvreda is a Sanskrit word and its meaning is 'science of life (or) practice of longevity'' this system of health care was conceived and developed by the rishis and natural scientist through centuries of observation, discussion and medication based on trial and error. The present studies has revealed that the Neuroprotective effect of standard drug (Dextromethorphan) and *Aegle marmelos* dry fruit extract on sodium nitrite induced hypoxia deficits in rats. *Aegle marmelos* is a medicinal plant with antioxidant properties. Previous studies revels that oral administration for seven days protect against cerebral ischemia damage, cerebral energy metabolism, brain Na^+K^+ATP ase activity, malondialdehyde content, total adenine nucleotides in dependent manner. Na^+K^+ATP ase responsible for establishing the electrochemical gradient of Na^+ and k^+ ions across the cell membrane in central nervous system.

Key Words: Nepuroprotective, Anti-oxidant, Dextromethorphan, *Aegle marmelos* dry fruit.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Drug-Loaded PLGA microspheres for pulmonary delivery

Paper ID - 1233

A Paper Presented by:G. Chakravarthi, A. Rajasekhar Reddy, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Poly lactic-co-glycolic acid (PLGA) has been among the most attractive polymeric candidates used to fabricate devices for drug delivery and tissue engineering applications. PLGA is biocompatible and biodegradable, exhibits a wide range of erosion times, has tunable mechanical properties and most importantly, is a FDA approved polymer. In particular, PLGA has been extensively studied for the development of devices for controlled delivery of small molecule drugs, proteins and other macromolecules in commercial use and in research. The pulmonary drug delivery system offers several merits over other drug delivery systems and therefore, this delivery route has been in prime focus for various applications like local and systemic therapeutics delivery. The overall development of drug delivery system depends on its efficacy, quality and safety and to achieve such attributes there is a need of reliable evaluation methods to test them.

Keywords: Pulmonary drug delivery, aerosol, aerodynamic particle size, dissolution studies, cell culture, drug deposition, pharmacokinetics.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Design, synthesis and biological evaluation as anticancer agents

Paper ID - 1234

A Paper Presented by:G. Chakravarthi, A. Rajasekhar Reddy, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

A series of new isatin-linked chalcones was synthesized from isatin. The synthesized compounds were screened for their in vitro anticancer activity against human breast (MCF-7), liver (HepG-2), and colon (HCT-116) cancer cell lines. Test compounds exhibited antitumor activity, with IC50 ranging from 2.18 to 55.88 lM in comparison to the reference drug used in this study, Imatinib. Two compounds were the most active, with IC50 ranging from 2.88 to 18.12 lM for the three cell lines. The compounds were also screened for their cytotoxic activity against normal breast cell line MCF-12A, and were found to possess mild cytotoxicity. A docking study was performed for the most active compounds, inside the active site of CDK2. In the docking study the compounds showed favorable binding interactions and energy scores. These findings may be extended for the cytotoxic activity of the target compounds.

Keywords; Isatin, Chalcones, Indolines, MCF-7, HepG-2 and anticancer.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

UV-spectroscopic method development and validation for simultaneous estimation of Doxylamine succinate and Pyridoxine hydrochloride in bulk and pharmaceutical dosage form

Paper ID - 1235

A Paper Presented by:
G. Chakravarthi, A. Rajasekhar Reddy, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Simple and precise UV-spectrophotometric methods were developed and validated for the simultaneous estimation of Doxylamine succinate and Pyridoxine HCl in combined dosage forms. A combination of these drugs is being used in the treatment of morning sickness associated with pregnancy. In the current study, both the drugs estimated by simultaneous equation and Q-absorbance ratio methods with the help of 260 and 290 nm as maximum absorption wavelengths, respectively for Doxylamine and Pyridoxine. Linearity was achieved in the concentration range of 10-35 µg/mL for both drugs with correlation coefficient (r^2) of 0.9949 and 0.9935, respectively. The % RSD for accuracy and precision were lies within the acceptable limits. The percentage recoveries found for both drugs were in the potency range (98.14-100.5 %). LOD and LOQ values indicated the good sensitivity of the methods. The assay of the commercial sample was in good agreement with the standards and the developed methods can enable for routine analysis of both drugs in combined dosage forms.

Keywords: Doxylamine succinate, Pyridoxine hydrochloride, Simultaneous equation method, Linearity, Validation, etc.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Simple liquid chromatographic method for simultaneous estimation of azithromycin, fluconazole and ornidazole in bulk and pharmaceutical dosage forms

Paper ID - 1236

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The objective of the study was to develop and validate a new rapid and sensitive Reverse Phase High Performance Liquid Chromatographic (RP-HPLC) method for the simultaneous estimation of Azithromycin, Fluconazole and Ornidazole in bulk and pharmaceutical dosage forms. Separation was achieved with a Cap Cell Pack C18 column (250 x 4.6 mm, 5µ) with an isocratic mobile phase containing a mixture of acetonitrile and phosphate buffer pH 4.8 [adjusted with orthophosphoric acid] (50:50 v/v) at the flow rate of 1 mL/min and detection was monitored at 210 nm. The retention times of Azithromycin, Fluconazole and Ornidazole was found to be 4.8, 5.2 and 6.3 mins respectively. The method was validated with respect to specificity, linearity, accuracy, precision, robustness, detection & quantification limits. The precision results were with <1.5% of %RSD. The calibration curve was linear over the concentration ranging from 500-1000 µg/mL for AZI, 75-150 µg/mL for FLU and 375-750 µg/mL for ORN with a correlation coefficient (r2) of 0.999. The recovery was found to be within the specified range i.e., 98-102 % for three drugs. The detection limits (LOD) were found to be 5.810, 1.790 and 4.924 µg/mL, whereas quantification limits (LOQ) were found to be 9.834, 2.667 and 7.980 µg/mL, respectively.

Keywords: Azithromycin, fluconazole and ornidazole, method development, validation.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

RP-HPLC method for pyridoxine hydrochloride and doxylamine succinate soft gelatin capsules

Paper ID - 1237

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Drug sample of pyridoxine and doxylamine was analyzed by means of reverse phase (RP-HPLC) using a Zodiac C-18, (250 × 4.6 mm, 5 µ), and the mobile phase consists of a pH 6.0 buffer: methanol (85:15). The flow rate is 1.0 ml/min. The column temperature was maintained at 30˚C and sample temperature was maintained at ambient and wavelength fixed at 245 nm UV-detection. It is found that the method of RP-HPLC with UV detection system for the analysis of pyridoxine hydrochloride and doxylamine succinate is straight forward and applied in qualitative and quantitative analysis. The developed LC method was validated with respect to specificity, precision, linearity, ruggedness, stability of analytical solution and robustness. Validation study compared as per ICH guideline.

Keywords: HPLC, pyridoxine hydrochloride, doxylamine succinate, linearity and validation etc.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulation and evaluation of tacrolimus transdermal gel

Paper ID - 1238

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present investigation is concerned with formulation and evaluation of Transdermal gels of Tacrolimus, anti-psoriasis drug, to circumvent the first pass effect and to improve its bioavailability with reduction in dosing frequency and dose related side effects. Twelve formulations were developed with varying concentrations of polymers like Carbopol 934P, HPMCK4M and Sodium CMC. The gels were tested for clarity, Homogeneity, Spreadability, Extrudability, Viscosity, surface pH, drug Content uniformity, in-vitro drug diffusion study and ex-vivo permeation study using rat abdominal skin. FTIR studies showed no evidence on interactions between drug, polymers and excipients. The best in-vitro drug release profile was achieved with the formu lation F4 containing 0.5 mg of exhibited 6 hr drug release i.e. 98.68 % with desired therapeutic concentration which contains the drug and Carbopol 934p in the ratio of 1:2. The surface pH, drug content and viscosity of the formulation F4 was found to be 6.27, 101.3% and 3, 10,000cps respectively. The drug permeation from formulation F4 was slow and steady and 0.89gm of tacrolimus could permeate through the rat abdominal skin membrane with a flux of 0.071 gm hr-1 cm-2. The in-vitro release kinetics studies reveal that all formulations fit well with zero order kinetics followed by non-Fickian diffusion mechanism.

Keywords: Transdermal gel, Viscosity, In-vitro drug release, In-vitro drug release kinetics study, Ex-vivo permeation study.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

UV-Spectrophotometric method development and validation for simultaneous estimation of Azithromycin and Cefpodoxime in bulk and pharmaceutical dosage form

Paper ID - 1239

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

A simple, reliable, rapid, sensitive and precise UV-Spectrophotometric method has been developed for estimation of Azithromycin and Cefpodoxime in tablet dosage form using solvent medium consisting of methanol: water (70:30 % V/V) was used and detection monitored at 246 nm. The method gave good resolution and rapid analysis time for both analytes. The linearity of calibration graphs and adherence of the system to Beer's law was validated by high value of correlation coefficient. The data of regression analysis and calibration curve were shown in Correlation co-efficient (r^2) of the linearity study were found to be 0.999 and 0.999 with linear regression equations y = 0.0536x+0.0002 and y = 0.0476x+0.001, for Azithromycin and Cefpodoxime respectively, which proves that the method is linear over the working concentration range of drugs. Percentage recovery shows that the method is free from interference of excipients used in formulation. Therefore, the proposed method can be used for routine analysis of Azithromycin and Cefpodoxime their combined dosage form.

Key Words: Linearity, Correlation co-efficient, accuracy, Azithromycin and Cefpodoxime

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Neuroprotective Effects Of Ferrulic Acid

Paper ID - 1240

A Paper Presented by:
G. Chakravarthi, A. Rajasekhar Reddy, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Neurodegenerative diseases result in the loss of functional neurons and synapses. Although future stem cell therapies offer some hope, current treatments for most of these diseases are less than adequate and our best hope is to prevent these devastating diseases. Neuroprotective approaches work best prior to the initiation of damage, suggesting that some safe and effective prophylaxis would be highly desirable. Ferrulic acid has an outstanding safety profile and a number of pleiotropic actions with potential for neuroprotective efficacy, including anti-inflammatory, antioxidant, and antiprotein-aggregate activities. These can be achieved at sub-micromolar levels. Ferrulic acid dose– response curves are strongly dose dependent and often biphasic so that in vitro data need to be cautiously interpreted; many effects might not be achievable in target tissues in vivo with oral dosing. However, despite concerns about poor oral bioavailability, Ferrulic acid has at least 10 known neuroprotective actions and many of these might be realized in vivo. Indeed, accumulating cell culture and animal model data show that dietary Ferrulic acid is a strong candidate for use in the prevention or treatment of major disabling age-related neurodegenerative diseases like Alzheimer's, Parkinson's, and stroke. Promising results have already led to ongoing pilot clinical trials.

Keywords: Neurodegenerative, prevention, clinical trials,Ferrulic acid

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Neuroprotective activity of Ethanolic Extract of Sapindus laurifolia on LPS induced Neuroinflammation

Paper ID - 1241

A Paper Presented by:G. Chakravarthi, A. Rajasekhar Reddy, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Background: Neuroinflammation has been implicated in the pathogenesis or the progression of the variety of acute and chronic neurological and neurodegenerative disorders including Alzheimer's disease. Aim: The present study is to investigate the ethanolic extract of Sapindus laurifolia on LPS induced behavioral alterations, oxidative stress and neuronal damage in rats. Methods: Adult male Wistar rats were divided into five groups six in each. Group I treated with normal saline (0.9% NaCl i.p.), group ii treated with normal saline + LPS (100 µg/kg i.p.), group iii treated with Aspirin (200 mg/kg) + LPS (100 µg/kg), Group IV treated with EESL (200 mg/kg) + LPS (100 µg/kg) and Group V treated with EESL (400 mg/kg) + LPS (100 µg/kg) for 14 days followed by single challenged of LPS to all the groups except control rats. On 15th day onwards, various behavioral assessment such as body weight, rectal temperature, locomotor activity, cognitive and memory assessment were carried out. Rats were sacrificed, and brain was isolated and estimated antioxidant levels (GSH, SOD, TBARS and CAT) and neuronal damage in the region of hippocampus were analyzed. Results: LPS treated rats significantly ($P<0.001$) decreased the body weight, locomotor activity, latency period in passive avoidance test and anti-oxidant levels in GSH, SOD and CAT and increased the rectal temperature and lipid peroxidase level (TBARS) compare to control rats. Pretreated with Aspirin 200 mg/kg rats and EESL (200 and 400 mg/kg) rats significantly attenuated the LPS induced behavioral alteration, oxidative damage and neuronal damage. Conclusion: The ethanolic extract of Sapindus laurifolia showed neuroprotective activity due to the presence of phytochemical constituents such as alkaloids, glycosides, diterpenoid lactones, berberine, flavonoids, saponins.
Keywords: Neuroinflammation; Sapindus laurifolia ; Hippocampus; Lipopolysaccharide

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Effects of Chlrogenic acid on memory deficits and brain oxidative stress in streptozotocin-induced diabetic mice

Paper ID - 1242

A Paper Presented by:G. Chakravarthi, A. Rajasekhar Reddy, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present study aimed to evaluate the Chlrogenic acid effect on memory impairment, oxidative stress, and cholinergic dysfunction in streptozotocin (STZ)-induced diabetic model in mice. In this experimental study, 48 male Naval Medical Research Institute (NMRI) mice (30-35 g) were chosen and were randomly divided into six groups: control, Chlrogenic acid (20 mg/kg day, i.p.), diabetic, and Chlrogenic acid treated diabetic (10, 20 and 40 mg/kg day, i.p.). Memory was impaired by administering an intraperitoneal STZ injection of 50 mg/kg. Chlrogenic acid was injected for 40 days starting from the 21st day after confirming STZ-induced dementia to observe its therapeutic effect. Memory function was assessed using cross-arm maze, morris water maze and passive avoidance test. After the administration, biochemical parameters of oxidative stress and cholinergic function were estimated in the brain. Present data indicated that inducing STZ caused significant memory impairment, whereas administration of Chlrogenic acid caused significant and dose-dependent memory improvement. Assessment of brain homogenates indicated cholinergic dysfunction, increase in lipid peroxidation and reactive oxygen species (ROS) levels, and decrease in glutathione (GSH), superoxide dismutase (SOD), and catalase (CAT) activities in the diabetic group compared to the control animals, whereas Chlrogenic acid administration ameliorated these indices in the diabetic mice. The present study demonstrated that Chlrogenic acid improves memory by reducing the oxidative stress and cholinergic dysfunction in the brain of diabetic mice.

Key Words: Chlrogenic acid Diabetes Memory Oxidative stress Streptozotocin

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Neuroprotective effect of Conessinin on elevated oxidative stress induced Alzheimers'disease in rats

Paper ID - 1243

A Paper Presented by:G. Chakravarthi, A. Rajasekhar Reddy, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Background: Alzheimer disease (AD) is a progressive dementia affecting a large proportion of the aging population. There is evidence that brain tissue in patients with AD is exposed to oxidative stress during the course of the disease. Conessine is a natural steroidal glycoside, which has been reported to exert various biological activities such as antioxidant and anti-inflammatory effect. **Aim:** The present study aimed to investigate the effects of Conessine on neurobehavioral activity and superoxide dismutase (SOD), glutathione reductase (GRx) and catalase (CAT) enzymes activity, malondialdehyde (MDA) levels in hippocampal area of rats in an experimental model of AD. **Methods:** The AD was induced in animals by intracerebroventricular injection of STZ (icv-STZ) unilaterally. Animals were treated with the Conessine (20 mg/kg body weight), then after three successive weeks, recognition memory was examined (passive avoidance test and novel object recognition test) and antioxidant parameters were evaluated. **Results:** In our study behavioural testes showed improvement on memory retrieval and recognition memory consolidation. Furthermore the Conessine increased the activity of antioxidant enzymes SOD, glutathione GRx and CAT levels and decreased MDA in the hippocampal area. **Conclusion:** These results suggested that Conessine may inhibit STZ-induced oxidative stress, and that it may possess therapeutic potential for the treatment of AD

Keywords: Alzheimer's, Oxidative stress, Memory, anti oxidant, Conessine.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Preclinical evaluation of Fluvastatin for treatment of osteoporosis in ovariectomized rats

Paper ID - 1244

A Paper Presented by:G. Chakravarthi, A. Rajasekhar Reddy, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Aim of the study:Preclinical evaluation of Fluvastatin for treatment of osteoporosis in ovariectomized rats Methods: The albino Wistar female rats were divided into 4 groups of 6 rats in each and treated as follows. Group-I Sham operated receive vehicle (5% Tween 80); Group-II Ovariectomized control receives vehicle (5% Tween 80); Group-III Estrogen (0.0563mg/kg) in ovariectomized rats; Group-VI Fluvastatin (80mg/kg) in ovariectomized rats.). At the end of 42 days, all the rats were deprived of food for whole night. On the next day, urine (0–24h) was collected, then the animals were anesthetized by Ketamine HCl (50mg/kg, ip) and blood samples were taken from common carotid artery loss, ash content, biomechanical, biochemical and histopathological observation were carried out for antiosteoporosis activity. Results: The significant increase in BMD,Ash content and lumbar hardness were observed.In addition,increased levels of calcium and phosphorous is decreased in OVX group and increased levels in Fluvastatin treated animals.The histopathological results also confirm the protective effect of drug. Conclusion: The present findings strongly suggest that Fluvastatin possess the potent antiosteoporosis activity in ovariectomized rats and substantiates the ethnic use in treatment of postmenopausal osteoporosis

Keywords: Estrogen, Postmenopausal osteoporosis, Ash content. Bone mineral density, Calcium.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Formulations of Cinnamic acid Nanoparticles for Brain Diseases

Paper ID - 1245

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Cinnamic acid has important anti-inflammatory and antioxidant properties that allow it to be applied as treatment for several emerging pathologies. Remarkably, there are an elevated number of publications deriving from the terms "Cinnamic acid " and "Cinnamic acid brain diseases", which highlights the increasing impact of this polyphenol and the high number of study groups investigating their therapeutic actions. However, its lack of solubility in aqueous media, as well as its poor bioavailability in biological systems, represent limiting factors for its successful application. In this review article, the analysis of its chemical composition and the pivotal mechanisms for brain applications are addressed in a global manner. Furthermore, we emphasize the use of nanoparticles with Cinnamic acid and the benefits that have been reached as an example of the extensive advances in this area of health.

Keywords: Cinnamic acid ; nanoparticles; inflammation; protein aggregation; brain diseases; Alzheimer's disease; Parkinson's disease

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Neuroprotective Effect of Green Synthesized Iron Oxide Nanoparticles Using Aqueous Extract of Biophytum reinwardtii Plant in the Management of Alzheimer's Disease

Paper ID - 1246

A Paper Presented by:B V Nagarjuna Yadav, K Venkata Gopaiah, Sk Nayab Rasool
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

To evaluate the neuroprotective effect of green synthesized iron oxide nanoparticles using aqueous extract of whole plant of Biophytum reinwardtii iron oxide nanoparticles in scopolamine induced amnesia model. Biophytum reinwardtii iron oxide nanoparticles were orally tested at the dose of 100 mg/kg, 200 mg/kg and 400 mg/kg for neuroprotective effect in scopolamine induced amnesia mice. In addition, neurobehavioral studies were carried out using elevated plus maze, Morris water maze to evaluate learning and memory in mice in normal and scopolamine induced amnesia mice. Biophytum reinwardtii iron oxide nanoparticles 400 mg/kg showed a significant improvement in learning and memory in the normal and scopolamine induced amnesia mice in exteroceptive models. Significant differences were observed in lipid peroxidation, catalase and acetylcholinesterase by 400 mg/kg of Biophytum reinwardtii iron oxide nanoparticles treated amnesic animals, when compared with untreated and scopolamine group animals. The highest dose of Biophytum reinwardtii iron oxide nanoparticles exhibited significant neuroprotective effect in normal and scopolamine induced amnesia mice. They also showed significant improvement in learning and memory in exteroceptive and interoceptive models and so might be of value in Alzheimer's treatment.

Keywords: Green synthesis, Biophytum reinwardtii, iron oxide nanoparticles, neurobehavioral, neuroprotective, Alzheimer's

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Neuroprotective effect of isolated fraction from *Sapindus laurifolia* extract in hippocampal neuronal HT22 cells

Paper ID - 1247

A Paper Presented by:Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The aim of the this research work was to estimate the neuroprotective activity of *Sapindus laurifolia* (MESL) Fraction A on HT22 mouse hippocampal cells against oxidative stress induced neurotoxicity by glutamate. In Central nervous system glutamate is a one of the endogenous excitatory neurotransmitter. When the levels of glutamate are increased in brain that leads to loss of memory and learning and it causes to formation of neurodegenerative disorders like Alzheimer's disease (AD) and Parkinson's disease (PD).The HT22 cells were cultured by using DMEM medium. The cultured cell lines are incubated with 10 and 100 ug/ml concentrations of MESL Fraction A for 24hrs.After 24 hrs incubation estimate the cell viability, ROS levels, Intracellular calcium, mitochondrial membrane potential and glutathione levels for elucidation of neuroprotective activity of MESL Fraction A. MESL Fraction A significantly reduces the HT22 cells death by glutamate induced neurotoxicity (88.23±1.65% relative neuroprotection).MESL Fraction A also significantly reduces the Calcium and reactive oxygen species levels, MESL Fraction A diminished the mitochondrial membrane potential and increase the glutathione levels. So based on results MESL Fraction A posses the neuroprotective activity in HT22 cells hippocampal neuronal cells against oxidative stress induced neurotoxicity by glutamate.

KEYWORDS: Neuroprotective,glutamate,oxidative stress, hippocampal cells,antioxidant.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Neuroprotective effect of isolated fraction of *Biophytum sensitivum* on recognition memory impairment and the elevated oxygen stress in rat model of Alzheimer's disease

Paper ID - 1248

A Paper Presented by:Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Background: Traditionally the parts of the plant have been known to possess a wide spectrum of medicinal properties namely antiseptic properties, including positive effects in variety of skin infections and in the treatment of diabetes. Antibacterial, antifungal and antidiabetic activities have been proved by the scientific research work. *Biophytum sensitivum* is widely prescribed for the treatment of diabetes in Ayurvedic system of Medicine. The whole plant is also used traditionally in the treatment of various ailments**. Aim:** The present study aimed to investigate the effects of MEBS Fraction A on neurobehavioral activity and superoxide dismutase (SOD), glutathione reductase (GRx) and catalase (CAT) enzymes activity, malondialdehyde (MDA) levels in hippocampal area of rats in an experimental model of AD. **Methods:** The AD was induced in animals by intracerebroventricular injection of STZ (icvSTZ) unilaterally. Animals were treated with the MEBS Fraction A (100 mg/kg body weight), then after three successive weeks, recognition memory was examined (passive avoidance test and novel object recognition test) and antioxidant parameters were evaluated. **Results:** In our study behavioral testes showed improvement on memory retrieval and recognition memory consolidation. Furthermore the MEBS Fraction A increased the activity of antioxidant enzymes SOD, glutathione GRx and CAT levels and decreased MDA in the hippocampal area. **Conclusion:** These results suggested that MEBS Fraction A may inhibit STZ-induced oxidative stress, and that it may possess therapeutic potential for the treatment of AD

Keywords: Alzheimer's, Oxidative stress, Memory, anti oxidant, Streptazocine.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

An Evaluation Of The Protective Role Of Escitalopram In Streptozotocin-Induced Diabetic Neuropathy

Paper ID - 1249

A Paper Presented by:Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

ABSTRACT: Objective: The aim of the present study was the evaluation of the protective role of escitalopram in streptozotocin-induced diabetic neuropathy. Materials and Methods: Diabetes was induced in Wistar rats with streptozocin 70 mg/kg and animals were divided into four groups namely normal control, diabetic vehicle control, glibenclamide control and escitalopram group. After the 4th week of diabetes induction treatment was started for further 28 days (5th to 8th week) with escitalopram 20 mg/kg. Evaluation of diabetic neuropathy was performed after 8 weeks of single injection of streptozotocin (70 mg/kg i.v.) in rats. Blood glucose level, grip strength, locomotor activity, pain sensitivity and threshold in diabetic rats were measured. Results: The results of the present study indicate that the 8 weeks treatment of escitalopram demonstrates hypoglycemic effect; it marked decreases the blood glucose level in diabetic treated animals. There was also decrease in the grip strength in diabetic rat indicates to induction of neuropathy or nerve damage. Escitalopram increases the grip strength of diabetic rats. There was also found loss of pain perception in diabetes rats which measured using hot plate and tail-flick methods. Escitalopram increases the licking time, and withdrawal latency in hot plate and tail-flick test respectively indicates the presence of pain perception and prevention of nerve damage demonstrates its protective effect in diabetic neuropathy. Conclusion: Our study concludes the chronic treatment of escitalopram significantly decreases the glycemic level as well as it protected from the development of diabetic neuropathy.

Keywords: Diabetic neuropathy, Diabetes mellitus, Pain perception and Escitalopram

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Anti- Convulsant Profile Of Aqueous Extract Of Mitragyna Inermis In Experimental Animals

Paper ID - 1250

A Paper Presented by:Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Objective: The aim of the present study was to evaluate the anti convulsant property of aqueous extract of MITRAGYNA INERMIS in Pentylenetetrazole (PTZ) and MES induced convulsions in experimental models. Materials & Methods: The purpose of this study is to explore the anticonvulsant activity of ethanolic extract of Momordica tuberosa using Pentylenetetrazole and maximal electric shock induced convulsions in rats. MES Model: rats were divided into 4 groups of 6 rats each. GROUP-I (NC) received 2% GA 2ml, GROUP-II (STD) received Phenytoin 25mg/kg, GROUP-III, IV received low dose (300 mg/kg) & high dose (600 mg/kg) of MITRAGYNA INERMIS respectively orally Convulsions were produced in all groups by giving maximal electric shock of 150 mA for 0.2sec after 1 hour of giving test and standard drugs orally. Tonic clonic seizures were produced after giving electric shock. Recovery time was noted. The percentage of inhibition of convulsions by drugs was measured and compared between the control, standard and test. PTZ model: Rats were divided and test drugs were given same as above model but standard drug was Sodium valproate (50mg/Kg). Convulsions were induced by giving the Pentylenetetrazole IP 1 hr after giving test and standard drugs intraperitoneally (IP). The onset of convulsions, duration of action, and type of seizures were noted and compared between standard and test groups. Results: In MES Model, ethanolic extract of MITRAGYNA INERMIS significantly ($p<0.001$) decreased the duration of tonic clonic seizures and recovery time. The percentage of inhibition was 66%. In PTZ Model the onset of seizures was delayed ($p<0.002$) with low and high doses and the duration of convulsions was reduced effectively ($p<0.001$). Type of seizure was controlled in initial phase and number of seizures was also reduced. Conclusion: MITRAGYNA INERMIS was shown anticonvulsant property in both MES and PTZ animal models.

Keywords: Convulsions, Sapindus Laurifolia, Phenytoin, Sodium valproate

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

In Vitro Antioxidant and free Radical Scavenging activity of the Ethanolic extract of Aesculus hippocastanum

Paper ID - 1251

A Paper Presented by:
Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The aim of the present study was to evaluate the antioxidant and free radical scavenging activity of the ethanolic extract of Aesculus hippocastanum (Horse chest nut). Highly reactive free radicals and oxygen species are present in biological systems from a wide variety of sources. These free radicals may oxidize nucleic acids, proteins, lipids or DNA and can initiate degenerative disease. Antioxidants play an important role in protecting cellular damage caused by reactive oxygen species. Plants containing phenolic compounds have been reported to possess strong antioxidant properties. Antioxidant potential of the ethanolic extract of Aesculus hippocastanum was studied using different in vitro free radical scavenging models like DPPH and Hydrogen Peroxide. The DPPH results have been compared with the standard Ascorbic acid .The extract showed good dose dependent free radical scavenging property in both the models used in this study.

Keywords: Horse chest nut, Free Radical Scavenging, Antioxidant Activity, DPPH, Hydrogen Peroxide, Plant Extract.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation of Anti Cataractogenic Activity of Zinc oxide Nanoparticles in Corticosteroid Induced Cataract

Paper ID - 1252

A Paper Presented by:Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Aim: To investigate the anti cataractogenic activity of Zinc oxide nanoparticles on Prednisone induced cataract by using isolated goat lens. Methods: Anti cataract activity is done by using isolated goat lens. Goat lens were divided into four groups. Group I lens were incubated in artificial aqueous humor (normal control). Group II lens were incubated with Prednisone 100mg (toxic control). Group III and IV lens were incubated with Prednisone and Zinc oxide nanoparticles (10mg and 20mg) and subjected to photographic evaluation for opacity, lens was homogenized by using tris phosphate buffer and sodium, potassium, total protein and catalase concentrations were determined Results: The grades of opacity was 0,3,1 in group I, II and III respectively. The present study showed higher total proteins ($P < 0.05$ at all concentration) and K+ ions ($P<0.05$ at all concentration) whereas lower concentrations of Na+ ions ($P<0.05$ at all concentration) with Zinc oxide nanoparticles treated groups. The level of Catalase was found to be less in experimentally induced cataract lenses as compared to normal control group. The lenses treated with Zinc oxide nanoparticles showed significant rise in enzyme level suggesting maintenance of antioxidant enzyme integrity. Conclusion: The Present investigation suggests that Zinc oxide nanoparticles effectively prevent the cataractogenic condition. Thus, the goat lens model and prednisone induced cataract model could be used for testing of various anti cataract agents.

Keywords Cataract, artificial aqueous humour, lens, prednisone, nanoparticles

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation of anti cataractogenic activity of of Biophytum Reinwardtii on olanzapine induced cataract on isolated goat lens

Paper ID - 1253

A Paper Presented by:Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Aim of Study: Evaluation of anti cataractogenic activity of of Biophytum Reinwardtii(HEMBR) on olanzapine induced cataract on isolated goat lens Materials and Methods: Goat eye lenses were divided into 4 groups; Group I served as Navie control,Group II as toxic vehicle control, Group III HEMBR(250µg/ml) and Group IV HEMBR(500µg/ml) . Group II, III and IV were incubated in olanzapine(10mg) in artificial aqueous humor to induce lens opacification. Estimation of total protein, catalase, and glutathione e along with histological evaluation of lens were done to measure the lens opacification. Results: olanzapine treated Group II lenses showed low amount of protein, decreased catalase and glutathione levels compared to navie control, while lenses treated with HEMBR (Group III and Group IV) showed significant (*$p < 0.05$) increased level of catalase, glutathione, total and decreased amount protein. Conclusion: The present study findings suggest HEMBR exhibit anti cataract effect in olanzapine induced cataract.

Key Words: In Vitro anticataract, lens, Biophytum Reinwardtii,, olanzpine

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation of Anti-Inflammatory and AntiBacterial Activities of Different Solvent Extracts of Ehretia laevis Roxb

Paper ID - 1254

A Paper Presented by:Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Aim: To evaluate the anti-inflammatory and anti-bacterial activities of different solvent extracts of Ehretia laevis Roxb. Methods: In this study we evaluate the anti evaluate the anti-inflammatory and anti-bacterial activities of different solvent extracts of Ehretia laevis Roxb,for the anti-inflammatory activity inflammation is induced by Carrageenan induced rat paw edema method and anti-bacterial activity done by using Agar well diffusion method. For anti bacterial activity the microorganisms used were as follows, Pseudomonas aeruginosa NCIM 2036, Staphylococcus aureus ATCC BAA 1026, Bacillus subtilis ATCC 11774 and Escherichia coli ATCC 10536 and Aspergillus niger- NCIM 616.In anti inflammatory activity The percentage inhibition of edema volume was calculated and in anti bacterial activity Diameter of the zone of inhibition was measured and the average diameter for each sample was calculated. Results: The chloroform extract ,methanolic and aqueous extract of of Ehretia laevis show good anti inflammatory activity by reducing paw volume at different dosese. All extract has shown excellent antibacterial activity against gram negative and gram positive organism. When compared to chloroform, methanaol and aqueous methanolic extract showed the high antibacterial activity on gram positive and gram negative bacteria. Conclusion: The present study reveals the existence of anti-inflammatory and antimicrobial activities of different solvent extracts of Ehretia laevis Roxb.This investigation is limited and these results helpful for further investigation of Ehretia laevis Roxb plants to assess their chemical prospective in future research.

Key Words: anti-inflammatory, antimicrobial, Carrageenan, diffusion ,Ehretia laevis Roxb.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Treatment of Alzheimer Disease with Anti-Oxidants

Paper ID - 1255

A Paper Presented by:Siva Prasad Panda, Uttam Prasad Panigrahy, A. Rajasekhar Reddy

K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Alzheimer's disease is a neurological syndrome that showed in cognitive and behavioral impairment. An initial stage of diagnosis and treatment of this brain disease is the main challenge, which is mainly stopped by the lack of validated process. The brain is vulnerable to oxidative stress when we compared with other organs and utilization of neurons components such as lipids, proteins, and nucleic acids, it can be oxygenized in Alzheimer Disease regarded to
mitochondrial dysfunction, improved metal levels, inflammation, and ß-amyloid (Aß) peptides. often several theories cautioned to AD etiology, reactive oxygen species (ROS) technology is noted as a not unusual element. They try to lessen the pathology linked with reactive oxygen species (ROS) beneath antioxidants as a result it provides new selfassurance to patients tormented by this devastating disorder.

KEYWORDS:
Alzheimer disease, oxidative stress, antioxidant, and ROS

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Treatment of Alzheimer Disease with Anti-Oxidants

Paper ID - 1256

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Alzheimer's disease is a neurological syndrome that showed in cognitive and behavioral impairment. An initial stage of diagnosis and treatment of this brain disease is the main challenge, which is mainly stopped by the lack of validated process. The brain is vulnerable to oxidative stress when we compared with other organs and utilization of neurons components such as lipids, proteins, and nucleic acids, it can be oxygenized in Alzheimer Disease regarded to
mitochondrial dysfunction, improved metal levels, inflammation, and ß-amyloid (Aß) peptides. often several theories cautioned to AD etiology, reactive oxygen species (ROS) technology is noted as a not unusual element. They try to lessen the pathology linked with reactive oxygen species (ROS) beneath antioxidants as a result it provides new selfassurance to patients tormented by this devastating disorder.

KEYWORDS:
Alzheimer disease, oxidative stress, antioxidant, and ROS

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation of Antioxidant potentials and Antiasthmatic activity of Strychnos nux vomica seed extract

Paper ID - 1257

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The main aim of this study is to clarify the benefits of poisonous plant Nux Vomica L. in asthma. Asthma is one of the major public health problems for the developed and developing countries. Worldwide, it is estimated that 300 million people are affected with bronchial asthma. India has an estimated 15-20 million asthmatics with a prevalence of about 10% and 15% in 5-11 year old children. Asthma is a allergy which cause inflammation so we need the drug which poses anti allergic and anti-inflammatory action. The objectives of the study are screening the strychnos nux-vomica for its in vivo anti-asthmatic and antioxidant activity. The activity will be correlated with the various phytoconstituents present in the plant which might be responsible for the activity. Three different in vivo screening models are used these are clonidine-induced catalepsy in mice, clonidine-induced mast cell degranulation in rats, milk-induced leukocytosis and Eosinophilia in mice to get the best result of the prepared extract. All three models work on different receptor and also have different mechanism of acting on asthma or inflammation. Nux vomica is the plant which shows its action on both allergy and inflammation so it is chosen for this study and asthma is diseases which also have allergy and inflammation. The findings will be justified with the traditional claims of the plant. Strychnos nux vomica seed extracts showed the positive result of in vivo activity. From this study it was identified that hydro alcoholic seeds extract of this crude drug could be used to control the asthma.

KEYWORDS:
Asthma, inflammation, anti-asthmatic, medication.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Hepatoprotective activity of Dipteracanthus patulus extract against Paracetamol induced Hepatotoxicity in rats

Paper ID - 1258

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Dipteracanthus patulus (DP) is an important medicinal plant and popularly known as black weed. Dipteracanthus patulus belongs to Acanthaceace family and very important indigenous medicinal plant. The earlier study reported that hepatoprotective activity leaves of DP, hence there is no report on hepatoprotective activity of whole plant of DP and the hepatoprotective hytoconsituents like lupeol, ß-carotene, ß-sitosterol and rutin are already reported in this plant material. Therefore this current research is aimed to evaluate the hepatoprotective effect of whole plant of Dipteracanthus patulus. The paracetamol induced rat model was used to evaluate the hepatoprotective activity an Silymarin was used for standard. The treatment with the ethyl acetate and chloroform extracts of Dipteracanthus patulus to the paracetamol induced liver toxic rats shows the significant reduction of SGOT, SGPT, ALP, total cholesterol, triglycerides, urea and uric acid levels. However the CAT, GSH, GPx and SOD levels were significant increase in ethyl acetate and chloroform extracts of Dipteracanthus patulus treated paracetamol induced liver toxic rats. Results of current research concluded that the hepatoprotective activity of Dipteracanthus patulus through antioxidant mechanism.

KEYWORDS:
In vivo, Antioxidant, Black weed, Silymarin, Acanthaceace and Hepatoprotective.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Phytochemical Investigation and Pharmacognostical Studies of Gmelina arborea Roots

Paper ID - 1259

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Gmelina arborea Roxb (Family verbenaceae) commonly known as Gamhar is a beautiful fast growing deciduous tree throught in India and with vast medicinal properties. The plant has been traditionally used for the treatment of various ailments. Gmelina arborea root has been used traditionally for the treatment of anthelmintic, laxative, fever, piles, diarrhoea and urinary discharges .The present work attempts to carry out preliminary phytochemical investigation, detailed pharmacognostic study and physicochemical evaluation of root of Gmelina arborea. Fresh root and dried powder of the roots were used to studied for macroscopy, microscopy, preliminary phytochemical screening and florescence analysis of powder drug. Other physicochemical parameters were also performed as per WHO guide lines. These studies provided referential information for correct identification and standardization of this plant material and detection of adulterants of this plant material.

KEYWORDS:
Gmelina arborea, Phytochemical Screening, microscopy, physicochemical.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Study and evaluation of Preliminary Phytochemicals and Antioxidant activity of Calocybe indica

Paper ID - 1260

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Calocybe indica are edible mushroom and used in the ailments of various disease. The physiochemical, phytochemical and antioxidant activity of hydroalcoholic lyophilized and oven dried extract of Calocybe indica were investigated. The total ash, water soluble, acid insoluble, alcohol soluble extractive, water soluble extractive, moisture content and fluorescence property of Calocybe indica powder were evaluated. The hydroalcoholic lyophilized and oven dried extract of Calocybe indica were prepared; and phytochemical investigation was performed to check the presence of various phytoconstituents in both extracts. The capacity of antioxidant property of lyophilized and oven dried extract were evaluated by using DPPH, Superoxide anion Scavenging, total phenolic and total flavonoids model. The findings of physiochemical properties can be used for the identification and purity of the drug. This study revealed the presence of proteins in lyophilized extract, while carbohydrates, glycosides, alkaloids, flavonoids, saponins and tannins were present in both the extracts. The lyophilized extract demonstrated higher antioxidant activity compared to oven dried extract. The outcomes suggest that the therapeutic activities of Calocybe indica can be attributed to its antioxidant property.

KEYWORDS:
Physiochemical, Phytochemical, Antioxidant, Calocybe indica, lyophilized, Oven dried.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Evaluation of Anti-inflammatory and Antinociceptive activity of Coriander sativum Leaves

Paper ID - 1261

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The chloroform extract of the leaves of Coriander sativum Linn (Umbelliferae) was investigated for the possible antinociceptive activity in mice and anti-inflammatory effect in rats. The antinociceptive effect of the extract was carried out using two models. The hot plate method, Acetic acid induced writhing method in mice. The anti-inflammatory effect was investigated employing the carrageenan induced paw oedema in rats. Results of the study revealed that the inhibitions of acetic acid induced abdominal constrictions were observed at the i.p. doses of 100 mg/kg (66.7%) 150 mg/kg (84.0%) and 200 mg/kg (98.4%) compared to control. In hot plate method the extract exhibited significant ($p<0.001$) antinociceptive effect at the dose level of 200 mg/kg i.p in mice. The same extract also exhibited anti-inflammatory effects which were found to be significant ($p<0.001$) at the dose level of 200 mg/kg p.o. in rats.

KEYWORDS:
Coriander sativum; Antinociceptive; Anti-inflammatory.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Analgesic and antiulcer activity of the Ethanolic leaf extract of Cleome gynandra

Paper ID - 1262

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The ethanol extract of Cleome gynandra Linn., was investigated for its anti-ulcer and analgesic activity. Anti-ulcer activity was evaluated by various model like Aspirin-induced gastric ulcer in rats, Ethanol induced ulcer in rats, Gastric Secretion study in pylorus ligation in rats. Analgesic activity was evaluated by acetic acid-induced writhing model in mice. The ethanol extract of Cleomegynandra Linn. Leaf extract at 300 mg/kg body weight (b.wt.) was found to produce significant anti ulcer activity in all the models compared to vehicle control animals. Pylorus ligation showed significant reduction in gastric volume, free acidity and ulcer index as compared to control. It also showed 55.76% ulcer protection index in ethanol induced ulcer and 61.01% ulcer protection index in aspirin induced model. The Ethanol extract showed significant analgesic activity (50.00 % protection) at 300 mg/kg b.wt. dose level comparable to the reference standard indomethacin (69.50 % Protection) at 10 mg/kg b.wt on oral administration in mice.

KEYWORDS:
Cleomegynandra, Antiulcer, Analgesic.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Phytochemical Screening and Anthelmintic Activity of Eupatorium odoratum of leave extracts

Paper ID - 1263

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Eupatorium odoratum Linn is found all over tropical Asia, western Africa and in parts of Australia. Extraction of the leaves of the plant Eupatoriun odoratum using different solvents like petroleum ether, chloroform, ethanol and their anthelmintic activity studies has been envisage in this present research work. All the different extracts such as petroleum ether extract, chloroform extract and ethanolic extract has been subjected to anthelmintic activity studies. The present studies reveals that the ethanolic extract was endowed with potent anthelmintic property as compared to other extracts. The petroleum ether and chloroform extract were also possesses significant activity. The activity reveals concentration dependent nature of the different extract.

KEYWORDS:
Eupatorium odoratum, Helminthes, Anthelmintic, Albendazole.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Antiulcer Activity of *Cassia angustifolia* Bark Extract in Rats.

Paper ID - 1264

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Methanolic extract of Cassia angustifolia bark was tested for its anti gastric ulcer and compared with anti ulcer of ranitidine in shay rat model. Oral dose with 5mg/kg body weight of ranitidine showed complete absence of ulceration in rats. The anti gastric ulcer activity of Cassia angustifolia Methanolic extract (800mg/kg) body weight was found equal to the effect produced by 5mg/kg Ranitidine in this model. Oral administration of methanol extract (800 Mg. /Kg) Cassia angustifolia bark showed complete inhibition of ulceration and significant reduction in free acidity, Total acidity peptic activity and volume of gastric juice secreted were found.

KEYWORDS:
Cassia angustifolia, total acidity, free acidity, peptic activity and ulcer index.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Hepato-Protective Activity of Launaea Intybacea aqueous extract on Paracetomol Induced Hepato-Toxicity in Albino Rats

Paper ID - 1265

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

The present study was conducted to evaluate the hepato-protective activity of water extract of aerial parts of Launaea intybacea are evaluated in paracetamol-induced hepatotoxicity in albino rats. Silymarin (200mg/kg) was given as reference standard. The water extract of aerial parts of Launaea intybacea have shown very significant hepatoprotection against paracetamol-induced hepatotoxicity in albino rats in reducing serum total bilirubin, SALP, SGPT , SGOT levels and liver homogenates LPO, SOD, CAT, GPX, GST and GSH levels.

KEYWORDS:
Launaea intybacea, hepatotoxicity, paracetomol and silymarin

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Hepatoprotective Activity of Stem and Leaves extracts of Boerhaavia diffusa Against Carbon Tetra Chloride Induced Hepatotoxicity in Rats.

Paper ID - 1266

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

An aqueous extract of stem and leaves of Boerhaavia Diffusa (AEBD) was studied for hepatoprotective activity against Swiss albino rats with liver damage induced by Carbon tetrachloride (CCl4) at two dose levels 150 and 300 mg kg-1. AEBD exhibited a significant protective action on the liver evident by a reduction in the elevated levels of serum lyosomal enzymes namely Serum Glutamate Pyruvate Transaminase (SGPT), Serum Glutamate Oxaloacetate Transaminase (SGOT), Alkaline Phosphatase (ALP) in CCl4 induced hepatotoxicity. Thus AEBD showed a dose dependent hepatoprotective activity.

KEYWORDS:
Hepatoprotective activity, AEBD, Carbon tetrachloride.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Anti-Mycobacterial Effect of Leaf Extract of Centella asiatica

Paper ID - 1267

A Paper Presented by:G. Kalyani, A. Rajasekhar Reddy, N Sri Lakshmi
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Centella asiatica is a small herbaceous annual plant of the family Mackinlayaceae (Apiaceae) and subfamily Mackinlayoideae and is native to India. The ethanolic extract of Centella asiatica was screened against Mycobacterium tuberculosis by microdilution bioassay in L-J (Lowenstein -Jensen) media and Versa- Trek rapid culture system. The leaf extracts showed significant inhibitory activity against Mycobacterium tuberculosis. The both conventional L-J and Versa- Trek rapid culture methodologies were found effective to inhibit the growth of Mycobacterium tuberculosis. The major bioactive compounds in ethanol extract of Centella asiatica were Octadectrienoic acid and n-Hexadecanoic acid by GC-MS analysis.

KEYWORDS:
Medicinal plants, Tuberculosis, Antimycobacterial activity, Mycobacterium tuberculosis.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Anti-inflammatory Activity of Acorus calamus Linn. Leaves Ethanolic Extract in Albino Rats

Paper ID - 1268

A Paper Presented by:A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Acorus calamus Linn, (family: Acoraceae) is used in traditional medicine to treat mental fatigue, memory loss, anxiety, bronchitis, sinusitis, headache, flatulence, joint pains febrifuge, hallucinogen, hypotension. It is also used internally in the treatment of digestive complaints, bronchitis, sinusitis diseases in humans. The anti-inflammatory activity of the 80% ethanolic extract of the leaves was investigated with experimental animal models using the carrageenan-induced paw oedema and cotton pellet granuloma tests in rats. The extract (100 and 200 mg/kg) at 240 min post-treatment caused a significant ($p<0.05$) reduction in the paw oedema in rats. The effect of the extract was most pronounced at the dose of 200 mg/kg and was closer to that of indomethacin (10 mg/kg). The exudate formation inhibited by 200 mg/kg of the extract in the cotton pellet granuloma test was comparatively significant. The findings of the study indicate that the 80% ethanolic extract of Acorus calamus leaves possesses anti-inflammatory activity which is probably related to the significant reduction of various biochemicals, viz. histamine, 5-HT, various kinins which are involved in early phases of inflammation. This is a possible rationale for its folkloric use as an anti-inflammatory agent.

KEYWORDS:
Acorus calamus, Anti-inflammatory activity, Paws oedema, Exudates, Carrageenan.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Anti-Depressant Activity of Citrullus vulgaris Seeds in Experimentally Induced Depression in Mice

Paper ID - 1269

A Paper Presented by:A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Mental depression is a chronic illness that affects a person's mood, thoughts, physical health and behaviour. Currently used antidepressant drugs such as tricyclic antidepressants and selective serotonin reuptake inhibitors (SSRI) are showing various side effects and thus, the search for a new antidepressant herb without side effects is important. The present work was aimed to study the antidepressant activity of ethanolic extract of Citrullus vulgarsis (Cucurbitaceae) at doses of 100mg and 200mg/kg against forced swimming test and tail suspension test in mice. Imipramine (30mg/kg, i.p) was used as reference standard and it showed significant antidepressant activity in rodents. The anti-depressant effects of Citrullus vulgaris in FST and TST were more prominent at 200 mg/kg when compared to lower dose of same fraction. The significant antidepressant effects of Citrullus vulgaris could be due to strong and effective concentration of the active constituent. In conclusion, the present study suggested that Citrullus vulgarsis extract possesses potential antidepressant effects which could be of therapeutic interest for using in the treatment of patients with depressive disorders.

KEYWORDS:
Citrullus vulgarsis, antidepressant activity, tail suspension test, forced swim test, Imipramine.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Neuroprotective effect of salvianolate on cerebral ischaemia-reperfusion injury in rats by inhibiting the Caspase-3 signal pathway

Paper ID - 1270

A Paper Presented by:A. Rajasekhar Reddy, N Sri Lakshmi, V Aparna
K L College of Pharmacy, Konneru Laxmaiah Education Foundation, Green fields, Vaddeswaram-522502. AP, India AP, India

Abstract

Salvianolate has been widely used for the treatment of cerebrovascular diseases. However, the detailed molecular mechanism of how it alleviates cerebral ischaemia-reperfusion injury is not well understood. In the present study, we investigated the neuroprotective effects of salvianolate in acute cerebral infarction using the PC12 cell oxygen-glucose deprivation (OGD) model *in vitro* and the rat transient middle cerebral artery occlusion (MCAO) model *in vivo.* The results showed that the salvianolate significantly reduced the level of reactive oxygen species and inhibited the Caspase-3 signalling pathway *in vitro;* at the same time, *in vivo* experiments showed that salvianolate obviously reduced the infarct area (12.9%) and repaired cognitive function compared with the model group (28.28%). **In conclusion,** our data demonstrated that the salvianolate effectively alleviated cerebral ischaemia-reperfusion injury *via* suppressing the Caspase-3 signalling pathway.

Key Words: Salvianolate, Ischaemia-reperfusion injury, Reactive oxygen species, Caspase-3 signal pathway

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

An Alternative Approach to the Synthesis of Parvistone C

Paper ID - 1271

A Paper Presented by: A.Rama Krishnam Raju[a] and Venkateswa Rao Anna[a*]

[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

*Corresponding author. E-mail : chem2005.venkat@kluniversity.in

Abstract

A stereo selective total synthesis of Parvistone C, an oxygenated natural styryl lactone, has been accomplished in excellent overall yield by employing asymmetric aldol reaction, asymmetric epoxidation and regioselective epoxide ring opening as the key steps. Our synthetic strategy is very simple, concise and no use of protecting groups.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Dehydrative annulation strategy for the construction of octahydroindolizidine framework: A diastereo selective total synthesis of (6*R*, 8a*S*) - octahydroindolizin-6-ol.

Paper ID - 1272

A Paper Presented by: J. Subba Rao[a] and Venkateswa Rao Anna[a*]

[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

*Corresponding author. E-mail : chem2005.venkat@kluniversity.in

Abstract

A dehydrative annulation strategy involving an intramolecular ring closure under a Mitsunobu-type reaction condition has been used for the construction of octahydroindolizine framework successfully. This strategy that was reported to be unsuccessful when applied to a similar system allowed us to perform a diastereoselective synthesis of (6R,8aS)-octahydroindolizin-6-ol [a precursor of (–)-8a-epidesacetoxyslaframine] starting from commercially available chiral (S)-epichlorohydrin via a piperidine intermediate, i.e.,(3R,6S)-6-(3-hydroxypropyl)piperidin-3-ol. The methodology has potential to afford a library of optically pure small molecules of pharmacological importance based on the related indolizine framework.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

A new strategy for accessing (S)-1-(furan-2-yl)pent-4-en-1-ol: a key precursor of Ipomoeassin family of compounds and C1–C15 domain of halichondrins

Paper ID - 1273

A Paper Presented by: J. Subba Rao[a] and Venkateswa Rao Anna[a*]

[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

*Corresponding author. E-mail : chem2005.venkat@kluniversity.in

Abstract

A highly efficient synthesis of (S)-1-(furan-2-yl)pent-4-en-1-ol, known to be an initial precursor of Ipomoeassin family of compounds and C1–C15 domain of halichondrins has been achieved via a sequence involving the use of Weinreb amide formation followed by Weinreb ketone synthesis and finally CBS (Corey–Bakshi–Shibata) reduction. Detailed study on improvement of each step is described. The title compound was converted to a potential cytotoxic agent for further pharmacological studies.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Synthesis of 2-hydroxy-3-alkyl-2-phenyl-2,3-dihydroquinazolin-4(1H)-one via molybdenum hexacarbonyl mediated CO gas- and ligand free carbonylative reactions.

Paper ID - 1274

A Paper Presented by: J. Subba Rao[a] and Venkateswa Rao Anna[a*]
[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*
*Corresponding author. E-mail : chem2005.venkat@kluniversity.in

Abstract

Carbon monoxide gas and ligand-free conditions were developed for the synthesis of 2-hydroxy-3-alkyl-2-phenyl-2,3-dihydroquinazolin-4(1H)-one via catalytic carbonylation with molybdenum hexacarbonyl as an efficient carbonylating agent for the three-component reaction of isatoic anhydride, amine, iodobenzene. $Mo(CO)_6$ is a solid carbon monoxide source. The quinazolinone synthesis proceeds via a sequential series of reactions such as nucleophilic attack of the amine group on the carbonyl group of isatoic anhydride followed by ring opening, subsequent decarboxylation, carbonylation and heterocyclization.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

I2–DMSO promoted metal free oxidative cyclization for the synthesis of substituted Indoles and pyrroles

Paper ID - 1275

A Paper Presented by: A.Rama Krishnam Raju[a] and Venkateswa Rao Anna[a*]

[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

*Corresponding author. E-mail : chem2005.venkat@kluniversity.in

Abstract

A series of di substituted indole and tri substituted pyrrole derivatives were synthesized efficiently by using I_2/K_2CO_3 in DMSO. The novel synthesis method offers the advantage of mild reaction conditions,operational simplicity, higher yields. The method is functional group tolerant and provides quick access to medicinally significant compounds in moderate to high yields.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

A concise stereoselective total synthesis of decarestrictine J

Paper ID - 1276

A Paper Presented by: A.Rama Krishnam Raju[a] and Venkateswa Rao Anna[a*]

[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*
*Corresponding author. E-mail : chem2005.venkat@kluniversity.in

Abstract:

In this communication, a concise and efficient synthetic route for the synthesis of decarestrictine J in enantioselective way has been described. In this synthesis, Yamaguchi esterification and ring closing metathesis (RCM) for macrocyclic ring formation have been applied as key steps.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Synthesis, Characterization and Antibacterial Activity of Binuclear Chromium(II) Complexes of New Schiff Base Ligand Derived from Amino Acids

Paper ID - 1277

A Paper Presented by: V.Hari Nath Babu[a] and Venkateswa Rao Anna[a*]

[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

*Corresponding author. E-mail : chem2005.venkat@kluniversity.in

Abstract:

Eight chromium(II) complexes of type, [Cr(L)(H2O)x]·*x*H2O (where L= Schiff base ligand) have been synthesized and characterized on the basis of elemental analysis IR, 1H, 13C NMR, mass and electronic spectroscopy, magnetic and conductance measurements. The amino acid schiff base ligand behaved as a octadentate ligand. The probable structures of the chromium(II) complexes have been elucidated and also the chromium(II) complexes were screened for antibacterial activity, which showed a moderate to good activity against Gram-positive and Gram-negative bacteria.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Green Synthetic Protocol for (*E*)-1-Aryl-3-(2-morpholinoquinolin-3-yl)prop-2-en-1-ones and Their Antimicrobial Activity

Paper ID - 1278

A Paper Presented by: Relangi Siva Subrahmanyam [a] and Venkateswa Rao Anna[a*]

[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

*Corresponding author. E-mail : chem2005.venkat@kluniversity.in

Abstract:

An easy, efficient and green synthetic protocol for the (*E*)-1-aryl-3-(2-morpholinoquinolin-3-yl)prop-2-en-1-ones by the Claisen-Schmidt condensation of 2-morpholinoquinoline-3-carbaldehyde and different substituted acetophenones by using 1-butyl-3-methylimidazolium tetrafluoroborate (Bmim)BF_4. The compounds were characterized by using ^{1}H NMR, ^{13}C NMR and mass spectral data and screened there *in vitro* antimicrobial activity against different bacterial and fungal organisms.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Stability-indicating reversed-phase HPLC method for the separation and estimation of related impurities of Cilnidipine in pharmaceutical formulations

Paper ID - 1279

A Paper Presented by: K.Bikshal Babu[a] and Venkateswa Rao Anna[a*]

[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

*Corresponding author. E-mail : chem2005.venkat@kluniversity.in

Abstract:

A novel HPLC method was developed and validated for the determination of cilnidipine (CLDP) along with its related impurities A and B in pharmaceutical formulations. The chromatographic separation was carried out by isocratic elution using an X Terra C18 column (250×4.6mm; 5µ). The mobile phase was composed of methanol and phosphate buffer at a pH of 5.8 in the ratio of 10:90 (V/V) at a flow rate of 1.0 mL/min. The eluents were detected and quantified at a UV detection wavelength of 229 nm. Calibration curves of all analytes in the range of 2-12µg/mL showed a good correlation linearly ($r \geq 0.999$) with recovery rate of more than 98% for each analyte. The percentage RSD in intraday, inter day precision and ruggedness were found to be less than 2. Small variations in the developed conditions like mobile phase ratio, flow rate, pH and UV wavelength do not influence the results. This proves the precise and robust nature of the developed method. Stress degradation studies were conducted for standard drug and high amount of degradation was observed under UV light exposure. After 24hours, the molecules degraded up to 9.967%. In base hydrolysis, the CLDP molecule degrades up to 6.223%. In other stress conditions like acidic (5.347%), oxidative (4.916%) and thermal (4.319%) conditions, CLDP was found to be highly labile. In stress degradation study, there is no interference of both known impurities and other degradation products formed and were separated from CLDP. Therefore, this method was found to be selective and specific. The method development and validation result confirms that this method is suitable for determination and quantification of process impurities (A and B) of CLDP in pharmaceutical formulations.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Synthesis, Biological Evaluation and Molecular properties of Novel Imidazole Derivatives as Antibacterial agents

Paper ID - 1280

A Paper Presented by: T.Nageswara Rao [a] and Venkateswa Rao Anna[a*]

[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

*Corresponding author. E-mail : chem2005.venkat@kluniversity.in

Abstract:

A convenient, rapid, efficient and environmentally benign route has been developed for the preparation of 2,5-disubstituted-*N*-alkyl imidazole derivatives **5** using knovenogal condensation of *N*-alkyl-2-butyl-4-chloro-1H-imidazole-5-carbaldehyde **3** and ethylcyano acetate **4** by L-proline as a catalyst. The synthesized derivatives (**5a-5g**) were evaluated for their invitro antibacterial, antifungal activity against different bacteria and fungi strains respectively. Of the derivatives, compounds **5g, 5c, 5d,** and **5d** exhibited strong, broad-spectrum inhibitory effects towards *Enterococcus faecalis, Klebsiella pneumonia* UF222, *Staphylococcus aureus* UA1758. In particular, the **5g** exhibited potent antibacterial activities toward the bacterial-resistant isolate *Pseudomonas aeruginosa* UA1024, *Klebsiella pneumonia* UF222, with both having MIC values of 2 μg/mL. In addition, they had significant inhibitory effects towards two fungal strains, *Candida albicans* 205, *Candida krusei* ATCC 6528 (compound **5a**: MIC = 0.25 μg/Ml, **5c**: MIC = 8 μg/mL and 5b: 4 μg/mL) respectively. In the present investigation for prediction of insilico molecular properties and drug likeness for the title compounds was evaluated by using chemin fomatics tools (Molinspiration, 2003 and MolSoft, 2007) and **5a, 5b** displayed suitable highest drug like scores -0.75, -0.71 according to Lipinski's rule of five.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Differential growth and photoluminescence of ZnS nanocrystals with variation of surfactant molecules

Paper ID - 1281

A Paper Presented by: Anindita Chatterjee*, Amiya Priyam, Subhash C Bhattacharya, Abhijit Saha

Department of Chemistry,
Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.

*Corresponding author. E-mail anindita@kluniversity.in

Abstract

Growth of colloidal ZnS nanoparticles in aqueous solution has been extensively investigated in presence of two water-soluble thiols, cysteine and mercaptoethanol. In addition to controlling the particle size by duration of heating, an effective control overgrowth rate (d*r*/d*t*) was also obtained just by altering the functional groups of thiol-surfactants, even without changing heating rate or temperature. The growth rate was found to vary linearly with the average radius of growing nanoparticles. Higher growth rate for cysteine-capped ZnS NPs was observed which could be attributed to greater specific surface energy at the solvent–NP interface as compared to mercaptoethanol capped ones. Photoluminescence of these nanoparticles was found to be influenced by the concentration and nature of the surfactant molecules. Maximum PLQY of 2.3% and 2.0% was obtained for mercaptpethanol and cysteine capped NPs, respectively at an optimum Zn^{2+}surfactant molar ratio, 1:1.5. For given particle size, mercaptoethanol-capped ZnS NPs show greater PLQY as compared to cysteine-capped ones. The lower PLQY of cysteine-capped ZnS NPs is attributed to the sulfur vacancy defects, which was not found in case of mercaptoethanol-capped ZnS nanoparticles.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

A short and concise route to total synthesis of Dendrodolide L

Paper ID - 1282

A Paper Presented by: Anindita Chatterjee & Venkata Reddy Regalla

Department of Chemistry,
Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.

*Corresponding author. E-mail anindita@kluniversity.in

Abstract

A short and efficient method for the stereoselective synthesis of Dendrodolide L has been developed from inexpensive and commercially available starting material. This convergent synthesis utilizes Jacobsen kinetic resolution, regioselective ring-opening of epoxide and Yamaguchi macro lactonization as key steps.

Keywords: Jacobsen kinetic resolution, Regioselective ring-opening of epoxide, 1,3-Dithiane, Ozonolysis. Yamaguchi macrolactonisation.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

A novel synthesis of chromone based unnatural $$\upalpha $$-amino acid derivatives

Paper ID - 1283

A Paper Presented by: Anindita Chatterjee* & Venu Kandula
Department of Chemistry,
Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.

*Corresponding author. E-mail anindita@kluniversity.in

Abstract

An efficient method for the preparation of chromone based αα-amino acid derivatives by alkylation of glycinate schiff base with 3-bromomethyl chromone as well as 2-bromomethyl chromone has been described. Using this method, 2-amino-3-(4-oxo-2-chromenyl) propanoic acid and 2-amino-3-(4-oxo-3-chromenyl) propanoic acid, two novel chromone-amino acid conjugates have been prepared. Furthermore, the separation of chromone amino acid enantiomers by chiral column chromatography was accomplished.

Keywords: Schiff base, alkylation, glycinate Schiff, enantiomers.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Pure and copper doped cellulose micrifibres- A case study

Paper ID - 1284

A Paper Presented by: Anindita Chatterjee* & G Kiran Kumar
Department of Chemistry,
Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.

*Corresponding author. E-mail anindita@kluniversity.in

Abstract

Our work demonstrates the improvement of intrinsic properties of cellulose microfibers upon copper doping. Cellulose microfibers were extracted from cotton by hydrolysis process. These were further doped with copper (Cu) to see the effect of dopant on optical, structural and conducting properties. We investigated the potential usage of these microfibers to solar cell applications. The evolution of cellulose microfibers has been comprehensively investigated with increasing dopant concentration of Cu (5 to 15%). Scanning electron microscopy gives clear images of cellulose microfibers of average diameter 5–10 μm. Absorption spectra of all samples showed an onset of absorption between 5.07 to 3.93 eV. A red shift was observed in band gap upon doping which is indicative that Cu has been incorporated into cellulose. DC conductivity studies reveal an improvement in conductivity values after Cu doping (303 to 363 K) from 8.89×10^{-5} to 5.04×10^{-4} S cm^{-1}. These fibers were then coated over a Si solar cell and found an increase in short circuit current from 66 to 100 mA. The increase in short circuit current is attributed to charge transfer because of Cu metal and further reduces electron hole recombination which in turn improved the overall efficiency.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Highly Efficient Synthesis of 2, 4-Disubstituted Oxazoles Through Palladium/Copper Comediated Direct Arylation Reaction

Paper ID - 1285

A Paper Presented by: Anindita Chatterjee* & Venkat Swamy Puli
Department of Chemistry,
Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.

*Corresponding author. E-mail anindita@kluniversity.in

Abstract
The aim of the present study is to synthesize 2,4-disubstituted oxazoles through palladium/copper comediated direct arylation reaction. 2,4-disubstituted oxazoles (3a-i) have been synthesized by the reaction of 4-substituted oxazole with aryl bromide in the presence of KOH, CuI and Pd (PPh3)4 in dimethoxyethane. Titled compounds (3a-i) were obtained in good yields using an expedient two-step synthesis of 2,4-disubstituted oxazoles from commercially available starting materials. The structures of the newly synthesized compounds were characterized by Fourier-transform infrared, 1H NMR, 13C NMR, and mass spectral studies. This method can be an efficient method for the synthesis of 2,4-disubstituted oxazoles (3a-i). Pd (PPh3)4 and CuI cocatalytic system direct arylation of 4-aryl/alkyl oxazoles with various aryl bromides has been developed to generate 2,4-disubstituted oxazoles. The high functional group tolerance and the speed of the reaction afford this method appropriate for the combinatorial synthesis of a variety of 2,4-disubstituted oxazoles.

Keywords: Oxazoles, Arylation, Palladium/copper.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

An Efficient Method for the Preparation of N-Formamides using Propylphosphonic Anhydride (T3P®)

Paper ID - 1286

A Paper Presented by: Anindita Chatterjee* & Ramakrishna Gudipati
Department of Chemistry,
Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.

*Corresponding author. E-mail anindita@kluniversity.in

Abstract

The synthesis of *N*-formamides from aromatic amines and formic acid using propylphosphonic anhydride (T3P®) as a green coupling reagent is described. By using this method, aryl, heteroaryl and fluorinated aryl-containing formamides were synthesized in high yield and purity. The significant features of this method include easy work up, high purity and reduced toxicity of the reaction.

Keywords: N-formylation - T3P - formic acid - aromatic amine - formamide.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Microwave-assisted synthesis, characterization, and biological evaluation of phenylacrylamide derivatives of triazoles derived from oxazolones

Paper ID - 1287

A Paper Presented by: Anindita Chatterjee* & Vukoti Kiran Kumar
Department of Chemistry,
Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.

*Corresponding author. E-mail anindita@kluniversity.in

Abstract

The aim of the present study is to synthesize novel phenylacrylamide derivatives as potent bioactive agents. Novel N-(3-(4H-1,2,4-triazol-4-ylamino)-3-oxo-1-arylidene prop-2-yl) benzimidic acids (7a-c) have been synthesized by the reaction of 4-(arylidene)-2-phenyloxazol-5(4H)-ones (5a-c) with 4-amino-1, 2, 4-triazole (6) in the presence of anhydrous sodium acetate in glacial acetic acid. Titled compounds (7a-c) were obtained in good yields using microwave technology which resulted in dramatic reductions in reaction times leading to the formation of phenylacrylamide derivatives (7a-c) at a faster rate. The structures of the newly synthesized compounds were characterized by Fourier-transform infrared, 1 H NMR, 13C NMR, and mass spectral studies. This method can be an efficient method for the synthesis of phenylacrylamide derivatives (7a-c). All the final compounds were screened for their antimicrobial and antioxidant activities and found to be biologically active. Among all the compounds, 7b was found to be potent antimicrobial and antioxidant.

Keywords: Phenyl acrylamides, Triazoles, Oxazolones, Antimicrobial activity, Antioxidant activity.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Highly efficient synthesis of 2,4-disubstituted oxazoles via palladium/copper co-mediated direct arylation reaction

Paper ID - 1288

A Paper Presented by: Anindita Chatterjee
Department of Chemistry,
Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.

*Corresponding author. E-mail anindita@kluniversity.in

Abstract

The aim of the present study is to synthesize 2,4-disubstituted oxazoles through palladium/copper comediated direct arylation reaction. 2,4-disubstituted oxazoles (3a-i) have been synthesized by the reaction of 4-substituted oxazole with aryl bromide in the presence of KOH, CuI and Pd (PPh3)4 in dimethoxyethane. Titled compounds (3a-i) were obtained in good yields using an expedient two-step synthesis of 2,4-disubstituted oxazoles from commercially available starting materials. The structures of the newly synthesized compounds were characterized by Fourier-transform infrared, 1H NMR, 13C NMR, and mass spectral studies. This method can be an efficient method for the synthesis of 2,4-disubstituted oxazoles (3a-i). Pd (PPh3)4 and CuI cocatalytic system direct arylation of 4-aryl/alkyl oxazoles with various aryl bromides has been developed to generate 2,4-disubstituted oxazoles. The high functional group tolerance and the speed of the reaction afford this method appropriate for the combinatorial synthesis of a variety of 2,4-disubstituted oxazoles.

Keywords: Oxazoles, Arylation, Palladium/copper.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Sonochemical synthesis of 2, 4-disubstituted quinolines catalysed by Phosphosulfonic acid (PSA) under solvent-free conditions

Paper ID - 1289

A Paper Presented by: Anindita Chatterjee & Nanda Kumar Yellapu
Department of Chemistry,
Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.

*Corresponding author. E-mail anindita@kluniversity.in

Abstract

A simple, efficient and environment-friendly one-pot multicomponent method has been developed for synthesizing 2,4-disubstituted quinolones. It uses ultrasound-mediated condensation of aldehydes, alkynes and amines in the presence of various catalysts under solvent-free conditions. Phosphosulfonic acid (PSA)was found to be superior to other catalysts for the reaction of 2-methoxybenzaldehyde and ethynylbenzene with 4-methoxyaniline.A series of 2,4-disubstituted quinolines were synthesized in good to excellent yields after short reaction times when compared to the conventional thermal method.Thisnew procedure provides several advantages over current methods, including: simple work-up, cost effectiveness, a wide range of functional group tolerance and use of an inexpensive reusable heterogeneous catalyst. All new compounds were identified and characterized by 1H,13C NMR and HRMS spectra.

Keywords: Oxazoles, Arylation, Palladium/copper.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Antibacterial effect of ultrafine nanodiamond against gram-negative bacteria *Escherichia coli*

Paper ID - 1290

A Paper Presented by: Anindita Chatterjee & Elena Perevedentseva
Department of Chemistry,
Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.

*Corresponding author. E-mail anindita@kluniversity.in

Abstract

We investigate the antibacterial effect of ultrafine nanodiamond particles with an average size of 5 nm against the gram-negative bacteria Escherichia coli (E. coli). UV-visible, Raman spectroscopy, and scanning electron microscopy (SEM) have been employed to elucidate the nature of the interaction. The influence on bacterial growth was monitored by measuring optical densities of E. coli at 600 nm as a function of time in the presence of carboxylated nano diamond (cND) particles (100 μg⁄ml) in highly nutritious liquid Luria– Bertani medium. The SEM images prove that cND particles are attached to the bacterial cell wall surface and some portion of the bacterial cell wall undergoes destruction. Due to the change of the protein structure on the bacterial wall, a small Raman shift in the region of 1400 to 1700 cm−1 was observed when E. coli interacted with cNDs. Raman mapping images show strong evidence of cND attachment at the bacterial cell wall surface. Electro transformation of E. coli with a fluorescent protein markers experiment demonstrated that the interaction mechanisms are different for E. coli treated with cND particles, E. coli by lysozyme treatment, and E. coli that suffer lysis.

Keywords: Escherichia coli; nano diamond; UV-visible spectroscopy; scanning electron microscopy; Raman spectroscopy; electro transformation.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

A comparative study about Reduction of nitro group instantly in presence of $NaBH_4$ and catalytic amount of heterogeneous catalysts Pt/C, $PtCl_2$ and PtO_2

Paper ID - 1291

A Paper Presented by: Prabhakar Yaddanapudi and K.R.S.Prasad*
Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, Guntur-522502, Andhra Pradesh, India

Abstract

Simple and highly efficient synthetic procedure is discussed for the reduction of nitro group of halogen and non halogen substituted aromatic compounds in presence of $NaBH_4$ and catalytic amount of heterogeneous catalysts Pt/C, Pd(II)Cl_2 and Pt(IV)O_2.

Keywords: reduction, Platinum on activated carbon, Palladium(II)chloride, Platinum (IV) oxide, Sodiumborohydride, Nitroarenes.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Abstract of Synthesis, anticancer evaluation and molecular docking studies of fused benzoxazole derivatives:

Paper ID - 1292

A Paper Presented by: Prabhakar. Y and K. R. S Prasad

Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, Guntur-522502, Andhra Pradesh, India

Abstract

A series of fused benzoxazole derivatives synthesized and were characterized by ^{1}H NMR, ^{13}C NMR and Mass spectral data. Further, all these compounds were evaluated for their anticancer activity against three human cancer cell lines such as Breast (MCF-7), Lung (A549) and Melanoma (A375). Most of the compounds showed moderate to excellent anticancer activity, in those five compounds were showed more potent activity than compared with reference drug. Moreover, out of five active compounds, four compounds were carried out their molecular docking studies on EGFR receptor results indicated that two compounds were strongly binding to the protein EGFR (PDB ID: 4hjo). In addition, it was found that binding energy calculations were in good agreement with the observed IC_{50} values.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Anti-fungal activities of extracts of some species of Mangrove plants towards some selected strains

Paper ID - 1293

A Paper Presented by: Karnati Rajeswari* and T. Bhaskara Rao
Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, Guntur, Andhra Pradesh, India – 522502
Department of Chemistry, KL University, Guntur, Andhra Pradesh, India 522 502

Abstract

The bio-materials of four marine mangrove medicinal plants viz., Aegiceras Corniculatum (AGC), Excoecaria agallocha (EA) Rahizophora Mucronata (RM) and Xylocarpus Granatum (XG), are extracted with hexane,methanol and dichloromethane. These extracts are submitted to the antifungal activity towards the strains:C.albicans NCIM 3471, C.albicans NCIM 3557, C.neoformans, NCIM 3452, C.glabrata, NCYC 388 and C.tropicalis, NCIM 3118 adopting Disc Diffusion method. It is found that XG MeOH extract is effective towards C.albicans NCIM 3471 strain while EA MeOH extract is effective towards the strains of C.albicans NCIM 3471, C.neoformans, NCIM 3452 and C.glabrata, NCYC 388. The AGC (MeOH) extract is found to be effective towards the strains: C.albicans NCIM 3557, C.albicans, NCIM 3471, C.neoformans, NCIM 3452, C.glabrata, NCYC 388 and C.tropicalis, NCIM 3118. With C.albicans, NCIM 3471 strain, the order of effectiveness of the extracts is: XG MeOH (2)> EA MeOH extract (16) = AGC (MeOH) extract (16) while with C.glabrata NCYC 388 strain the order is: XG MeOH (4) > AGC (MeOH) extract (32) > EA MeOH extract (64). With C.glabrata, NCYC 388 strain, the order of effectiveness is found to be: XG MeOH extract (4)> AGC (MeOH) extract (32) > EA MeOH extract (64) while with C.tropicalis, NCIM 3118 strain, only AGC (MeOH) extract (64) is found to be effective.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

CYTOGENETIC ACTIVITY STUDIES ON SOME MANGROVES OF KRISHNA–GODAVARI ESTUARY

Paper ID - 1294

A Paper Oresented by:T.BHASKARA RAO*, B.VENKATESWARA RAO

Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, Guntur, Andhra Pradesh, India – 522502

Abstract

In the present study the bark of Ceriops decandra, collected from godavari estuary, Ceriops tagal and Xylocapus molluccensis collected from Krishna estuary of hexane, methylene chloride and methanol extracts were evaluated for Genotoxicity and cytotoxicity effects. The results indicated that the extracts from the all the three mangrove plant species have cyto-toxicity and it is substantiated from mitotic index and cell proliferation kinetics values. Further, the extracts indicated that they are geno-toxic and it is substantiated by an increase in sister chromosome exchange frequency

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Synthesis and Bioactivity Evaluation of Cinnamic Acid Esters from Oxalis pes-caprace

Paper ID - 1295

A Paper Oresented by:T.BHASKARA RAO*, B.VENKATESWARA RAO

Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, Guntur, Andhra Pradesh, India – 522502

Abstract

Synthesis of cinnamic acid esters 4a-c to 7 was achieved starting from appropriately substituted benzaldehydes. While compound 4a-c to 7 was exhibited potent antioxidative activity in both the NBT and DPPH-radical scavenging models among the synthesized cinnamic acid ester derivatives. No ester derivative showed significant 5-Lox, Tyrosine inhibitory and Cytotoxic activities in the present study. Keywords: Oxalis pes-caprace; synthesis; cinnamic acid ester; antioxidative; cytotoxcity. Abbreviations: NBT, nitroblue tetrazolium; DPPH, 1,1-diphenyl-2-picrylhydrazyl; MDC, methylenedichloride; N.NDMA, N,N-dimethylanline; DMAP, 4-dimethylaminopyridine.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

First total synthesis of Three Anti-tyrosinase Activity Prenylated Flavanones from Dalea boliviana

Paper ID - 1296

A Paper Oresented by:B.Venkateswara Rao, K. Ramanjaneyulu*, T. Bhaskara Rao and T.Rambabu.

Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, Guntur, Andhra Pradesh, India – 522502

Abstract

The total synthesis of three new prenylated flavanones, (2S)-5,7,2'-trihydroxy-8,3'-diprenylflavanone), (2S)-5,2'-dihydroxy-6",6"-dimethylchromeno-(7,8:2,3")-3'-prenylflavanone (II) and (2S)-5,7,2'- trihydroxy-5'-(1"',1"'-dimethylallyl)-8-prenyl flavanone (III) was first achieved through C-prenylation, protection of phenolic hydroxyl group, aldolcondensation, cyclization and deprotection starting from substituted benzaldehyde,2,4,6-trihdroxy aceto phenenone and o-hydroxybenzaldehyide,with total yield of 42%. All structures of new compounds were confirmed by IR, 1H NMR and LCMS.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Excoecaria agallocha Linn (Euphrobiaceae) : An overview

Paper ID - 1297

A Paper Oresented by:Karnati Rajeswari and T. Bhaskara Rao
Department of Chemistry, K. L. University, Vaddeswaram, Guntur

Abstract

The review is conducted on Excoecaria. Different parts plants like wood, root, leaves, stem and leaves, stem, stem and twigs, twigs and bark, bark, twigs and leaves are studied in this review. The study of this review revealed that the parts of plants like wood, root, leaves, stem and leaves; stem, stem and twigs, twigs and bark, bark, twigs and leaves are isolated by 91 compounds. The following biological activities, which are from the crude extract, are observed as follow anti cancer, antimicrobial, anti bacterial, anti-inflammatory, anti micro fouling, antioxidant, anti-histamine. They release invitro anti bacterial, anti-tumour-promoting and cytotoxicity, anti-reverse transcriptase, human cancer cell and anti HIV. This observation finally found that there are many compounds in wood and more number of biological activities in Leaves. Bark, twigs and leaves are observed as anti HIV.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Aegiceras corniculatum Linn (Myrsinaceae)

Paper ID - 1298

A Paper Oresented by: Karnati Rajeswari and T. Bhaskara Rao
Department of Chemistry, K. L. University, Vaddeswaram, Guntur,
Andhra Pradesh, India – 522502

Abstract

In this review, the literature data on photochemical and biological investigations of the Aegiceras are complied. The Aegiceras species are mangroves plants widely distributed along the sea coasts of Africa, South eastAsia to South china, New Guniea and Australia. To date 16 Terpenoids, 17 Terpenes, 9 Alkaloids, 1 Flavonoid, 3 Saponnins, 7 Tannins, 23 Acids, 9 polyketides, 7 Macrolides. From the Fruits, stems and Twigs, Bark, Leaves of Aegiceras. The isolated compounds shown an enorms structural diversity and bacterial and In Vitro blocking activity Cytotoxicity.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Ultrasound assisted Mizoroki-Heck coupling / C-H amination in a single pot: direct synthesis of indole derivatives

Paper ID - 1299

A Paper Oresented by:A. S. G. Prasad,a T. Bhaskara Rao,a
Department of Chemistry, K. L. University, Vaddeswaram Guntur-522502,
Andhra Pradesh, India.

Abstract

A one-pot protocol based on coupling-cyclization strategy has been developed for the construction of indole ring leading to 2-substituted indole derivatives. The methodology involved ultrasound assisted Mizoroki-Heck coupling in the initial step followed by C-H amination in the second step in the same pot. The C-C bond forming reaction in the first step was catalyzed by Pd/C-PPh3 catalyst system whereas the C-N bond formation in the second step was mediated by DDQ. A number of indoles were prepared in good to acceptable yield by treating 2- iodosulfanilides with various alkenes under this condition. The rapid conversions along with the use of inexpensive catalyst as well as oxidant are key features of this method

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

A new flavone from Excoecaria agallocha L

Paper ID - 1300

A Paper Oresented by: Karnati Rajeswari, T. Bhaskara Rao*
Department of Chemistry, K L University, Guntur, Andhra Pradesh -522502, India

Abstract

Isolation of a new flavone [8-hydroxy-2(3-hydroxy-4-methoxy phenyl) 4-oxo-3-propoxy-4H-chromen-7ylpropionate] from Excoecaria agallocha was confirmed through spectroscopic analysis.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Antimicrobial Activities of Extracts of Some Species of Mangrove Plants and a New Compound Isolated Towards some Selected Strains

Paper ID - 1301

A Paper Oresented by: Karnati Rajeswari, T. Bhaskara Rao*
Department of Chemistry, K L University, Guntur, Andhra Pradesh -522502, India

Abstract

The bio-materials of four marine mangrove medicinal plants viz., Aegiceras Corniculatum (AGC), Excoecariaagallocha (EA), Rhizophoramucronata (RM) and Xylocarpusgranatum (XG) are extracted with methanol and hexane. These extracts are submitted to the antibacterial activity towards the strains:Bacillus puvuilis, Bacillus subtilis, Bacillus coagulans, Staphylococcus aureus, Bacillus licheniformis, Corynebacterium diphtheria, Klebsiella pneumonia, Pseudomonas aeruginosa, Shigellaflexneri, Sphingomonaspaucimobilis, Escherichia coli and Vibrio choleraadopting Agar-well diffusion method. It is found that a new Flavone Compound isolated from hexane extract of EAis effective towards Bacillus puvuilis, Bacillus subtilis, Bacillus coagulans, Staphylococcus aureus, Bacillus licheniformis, Corynebacterium diphtheria, Klebsiella pneumonia, Pseudomonas aeruginosa, Shigellaflexneri, Sphingomonaspaucimobilis, Escherichia coli and Vibrio cholera strains while RM MeOH extract is effective towards the strains Bacillus puvuilis, Bacillus subtilis, Bacillus coagulans, Staphylococcus aureus, Bacillus licheniformis,Corynebacterium diphtheria, Klebsiella pneumonia, Pseudomonas aeruginosa, Shigellaflexneri, Sphingomonaspaucimobilis, Escherichia coli and Vibrio cholera. The XG MeOH extract is found to be effective towards the strains Bacillus puvuilis, Bacillus subtilis, Bacillus coagulans, Staphylococcus aureus, Bacillus licheniformis, Corynebacterium diphtheria, Klebsiella pneumonia, Pseudomonas aeruginosa, Shigellaflexneri, Sphingomonaspaucimobilis, Escherichia coli and Vibrio cholera strains while AGC MeOH extract is found to be effective towards the strainsBacillus puvuilis, Bacillus subtilis, Bacillus coagulans, Staphylococcus aureus, Bacillus licheniformis, Corynebacterium diphtheria, Klebsiella pneumonia, Pseudomonas aeruginosa, Shigellaflexneri, Sphingomonaspaucimobilis, Escherichia coli and Vibrio cholera.The order of effectiveness is found to be: EA Hexane > RM MeOH> XG MeOH> AG MeOH. Finally a new flavone compound is found to be more effective than the extracts.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Ultrasound assisted faster and milder approach to 6Hpyrido[1,2a] quinazolin6imine derivatives as potential inhibitors of PDE4

Paper ID - 1302

A Paper Oresented by:A. S. G. Prasad, T. Bhaskara Rao,
Department of Chemistry, K L University, Guntur, Andhra Pradesh -522502, India

Abstract

The ultrasound assisted methodology has been explored first time for the quicker synthesis of 6Hpyrido[1,2a] quinazolin6imine derivatives via the reaction of 2aminopyridines and 2fluorobenzontriles under mild conditions. The methodology is free from the use of any transition metal catalyst and afforded the desired products in good yields. Some of the synthesized compounds were evaluated for their potential PDE4 inhibition in silico and subsequently in vitro. One compound showed dose dependent inhibition of PDE4B and favorable pharmacological properties indicating potential of this scaffold for the discovery of new inhibitors of PDE4.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Ultrasound assisted synthesis of quinoline derivatives in the presence of SnCl2•2H2O as a precatalyst in water: evaluation of their antibacterial activities

Paper ID - 1303

A Paper Oresented by:A. S. G. Prasad, T. Bhaskara Rao,
Department of Chemistry, K L University, Guntur, Andhra Pradesh -522502, India

Abstract:

SnCl2•2H2O has been used as a convenient precatalyst for the onepot and rapid synthesis of 2substituted quinolines under ultrasound irradiation in water. The reaction involved a 3component reaction of aniline, aldehydes and ethyl 3,3diethoxypropionate in the presence of aerial oxygen to give the desired products in good yields. Several of these compounds showed antibacterial activities when tested against grampositive and gramnegative species. One compound i.e. 4b showed promising activities across both the species.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Synthesis and Anticancer Evaluation of 2-{4-[5-(5-Substituted arylpyrimidin-2-yl)-1H-pyrazol-3-yl]- phenyl}thiazolo[4,5-b]pyridine Derivatives

Paper ID - 1304

A Paper Oresented by: Ch. P. Koteswara Raoa, T. Bhaskara Rao*,
a Department of Chemistry, Koneru Lakshmaiah Education Foundation, Green Fields, Vaddeswaram, Guntur, 522502 India

Abstract

In the present study a new series of 2-{4-[5-(5-substituted arylpyrimidin-2-yl)-1H-pyrazol-3-yl]
phenyl}thiazolo[4,5-b]pyridine derivatives (11a–11j) are synthesized and tested for their anticancer activity against four human cancer cell lines including MCF-7 (breast), A549 (lung), Colo-205 (colon), and A2780 (ovarian) by the MTT assay. Among synthesized compounds, 11b, 11c, 11d, 11g, and 11j exhibit activity higher than the standard drug.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Design, Synthesis and Molecular Docking Studies of Novel Pyrazole Benzimidazole Derivatives as Potent Antibacterial Agents

Paper ID - 1305

A Paper Oresented by: Srinivasa Rao Dasari, Nareshvarma Seelam*
[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

Abstract

A novel series of pyrazole benzimidazole derivatives were synthesized and the structure of the final targets **4a-h** were confirmed by IR, Mass, 13C NMR and 1H NMR spectral analysis. The new pyrazole core with imidazole and benzimidazoles derivatives were evaluated for *in vitro* antibacterial, antifungal activity against six bacterial strains significantly. In dispersion, **4c, 4f** and **4g** had the highest antibacterial activities on these microorganisms *Bacillus subtilis* B29, *Escherichia coli* E266, with zone of inhibition 21, 19 and 19 mm, respectively. Compounds **4a**, **4c, 4h** shows good antifungal activity against *A. niger*, *Fusarium oxysporum* fungal strains. Further, molecular docking for protein ligands interactions was performed using the crystal structure of C(30) carotenoid dehydrosqualene synthase from *Staphylococcus aureus* complexed with bisphosphonate BPH-700. Among the final compounds **4e**, **4g** and **4h** show highest binding energy ΔG = -7.89, -7.48 and -7.08 Kcal/mol, respectively and amino acid interactions Lys273, Asp27.

Keywords: Imidazole, Pyrazole, Antibacterial activity, Antifungal activity, Molecular modeling, 2ZCS.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Synthesis, Molecular Properties, and Biological Evaluation of Hybrid 1,2,3-Triazolylpolyaza Heterocyclic Compounds

Paper ID - 1306

A Paper Oresented by: Srinivasa Rao Dasari, Nareshvarma Seelam*
[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

Abstract

In this research article, a highly efficient, cost-effective synthesis of various hybrid molecules possessing
1,2,3-triazolyltetrazoles and evaluation of their biological activity have been addressed. The structure
elucidation of these new library hybrid molecules has been carried out by IR, 1H NMR, 13C NMR, and mass spectral analysis. The compounds have been screened for their anticancer activity against human colon cancer cell line Colo-205 and human lung cancer cell line HOP-205, and the results attest that most of the compounds have shown very good therapeutic nature. In particular, compounds 3d, 3j, 6a, and 6e were more cytotoxic than Adriamycin against all tested human cancer cell lines with 68%, 101.8%, 94%, and 104.5% growth, respectively. In the present investigation, a series of 3a–j and 6a–h were subjected to molecular properties prediction, drug likeness by Molinspiration, and toxicity risks by Molsoft software programs. All the 18 analogues were chosen on the basis of Lipinski "Rule of five" for the synthesis, screening their antibacterial and anticancer as oral bioavailable drugs/leads

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

One-pot synthesis of novel *tert*-butyl-4-substituted phenyl-*1H*-1,2,3-triazolo piperazine/piperidine carboxylates, potential GPR119 agonists

Paper ID - 1307

A Paper Oresented by: Nagaraju K Bashetti, Nareshvarma Seelam*
[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

Abstract

We have synthesized a new series of 1,2,3-triazolo, piperazine and piperidine carboxylate derivatives using a simple and one-pot click chemistry with significantly reduced reaction times
(~5 min) and enhanced reaction yields (~95-98%). The fourteen novel compounds thus synthesized were tested for ability to target GPR119, a G-protein coupled target receptor that plays critical role in regulation of type-2 diabetes mellitus. Four analogs (3e, 3g, 5e and 5g) demonstrated similar or better EC50 values over previously reported AR231453 activity towards
GPR119.

Keywords: 1,2,3-Triazole, piperazine and piperidine.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Design, Synthesis and Molecular Modeling of Nonsteroidal Anti-inflammatory Drugs Tagged Substituted 1,2,3-Triazole Derivatives and Evaluation of Their Biological Activities

Paper ID - 1308

A Paper Oresented by: Srinivasa Rao Dasari, Nareshvarma Seelam*
[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

Abstract

A novel series of 1,4-disubstituted-1,2,3-triazole derivatives **3a**–**l** and **5a**–**i** were one-pot synthesized *via* Cu AAC-alkyne click chemistry and evaluated for their antibacterial activity against four organisms and screened for their anticancer activity against human colon cancer cell line HT-29 and human lung cancer cell line HTB-29. These hybrid molecules structure elucidation has been performed by IR, 1H-NMR, 13C-NMR, and mass spectral analysis. Synthesized nonsteroidal anti-inflammatory drugs-triazoles evaluated for their antibacterial activities against bacterial microorganisms *Pseudomonas aeruginosa*, *Escherichia coli*, *Staphylococcus aureus*, and *Klebsiella pneumonia*. Final compounds **3i**, **3c**, and **5b** showed magnificent broad spectrum activity against *P. aeruginosa*, *K. pneumonia*, *E. coli*, and *S. aureus* with zone of inhibition values of 20, 15, 17, and 16 mm, respectively. Among the series of compound, **3j** showed the best antibacterial activity against all the strains. Further, the compounds **3i** and **5a** were more cytotoxic than cis platin against all tested two human cancer cell lines, with 50.8%, and 52.3% and 73.4% and 75.3% of growth, respectively. The synthesized compounds were tested for kinase inhibitory activity against glycogen synthase kinase-3 protein kinases, in addition, for cytotoxic activity against two different human cancer cell lines.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Synthesis and Characterization of Compounds Potentially Related to the Janus Kinase Inhibitor Baricitinib

Paper ID - 1309

A Paper Oresented by: Srinivasa Rao Dasari, Nareshvarma Seelam*
[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

Abstract

Nine compounds potentially related to the Janus kinase inhibitor Baricitinib have been identified,
synthesized by conventional methods, and characterized by IR, 1H and 13C NMR, and mass spectral data. During the synthesis of Baricitinib according to Scheme-1, many other compounds eluting very closely to Baricitinib were detected by thin-layer chromatography. All these compounds (**1**–**9**) were isolated by column chromatography, characterized by mass, IR,and 1H and 13C NMR spectra, and shown to be structurally related to Baricitinib; they were called "Baricitinib related substances." It is now evident that the process of preparation of Baricitinib could be accompanied by the generation of its related substances which could be mixed up with the required actual active pharma ingredient.
Keywords: Barcitinib; Janus Kinase;

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Synthesis, Antitubercular Activity, and Molecular Docking Studies of Novel 2-(4-Chlorobenzylamino)-4-(cyclohexylmethylamino)-pyrimidine-5-carboxamides

Paper ID - 1310

A Paper Oresented by: Srinu Bodige, Nareshvarma Seelam*
[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

Abstract

A novel series of 2-(4-chlorobenzylamino)-4-(cyclohexylmethylamino)-pyrimidine-5-carboxamide derivatives are synthesized and their structures are confirmed by 1H and 13C NMR, and MS spectral data. The compounds are screened for their antitubercular activity, and those with aryl moiety **7o, 7q**, and **7r** demonstrate potent activity against *Mycobacterium tuberculosis*. Docking studies suggest a mode of interaction of the products with the binding site of enoyl-CoA hydratase demonstrating that the target compounds were potential anti-TB agents.

Keywords: 2,4-diaminopyrimidine, synthesis, docking studies, antitubercular activity.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Synthesis and Anticancer Activity of Thiophene-2-carboxamide Derivatives and *In Silico* Docking Studies

Paper ID - 1311

A Paper Oresented by: Kali Charan, Nareshvarma Seelam*
[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

Abstract

A novel series of thiophene-2-carboxamide derivatives are designed and synthesized, and their structures are confirmed by 1H and 13C NMR, and mass spectra. The synthesized compounds are evaluated for their *in vitro* cytotoxic activity by MTT assay. Among the tested compounds, the derivative with 4-Cl-phenyl ring exhibits potent inhibitory activity against MCF-7, K562, HepG2, and MDA-MB-231. The molecular docking study performed for the synthesized compounds against PTP1B exhibits essential key interactions.

Keywords: synthesis, thiophene-2-carboxamide, anticancer, molecular docking, protein tyrosine phosphatise inhibitor

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Novel and Efficient Synthesis of Deuterium-Labeled Olopatadine-*d*6

Paper ID - 1312

A Paper Oresented by: Srinivas Endoori, Nareshvarma Seelam*
[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

Abstract

A novel and highly efficient synthetic approach has been developed for the synthesis of deuteriumlabeled olopatadine-*d*6 using inexpensive and commercially available dimethyl sulfate-*d*6 at the stage of alkylation of primary amine intermediate. The proposed synthetic path makes it possible to avoid the use of expensive labeled reagents such as dimethyl amine-*d*6 used as labeled precursor in the traditional synthetic route. The structure of the obtained olapatadine-*d*6 has been confirmed by 1H NMR and mass spectral data.
Keywords: olapatadine, olopatadine-*d*6, antihistamine, deuterium-labeled compounds.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Design, synthesis, antitubercular and antibacterial activities of pyrrolo[3,2-b]pyridine-3-carboxamide linked 2-methoxypyridine derivatives and *in silico* docking studies

Paper ID - 1313

A Paper Oresented by: Srinu Bodige, Nareshvarma Seelam*
[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

Abstract

A novel series pyrrolo[3,2-b]pyridine-3-carboxamide linked 2-methoxypyridine derivatives have been designed, synthesized and confirmed by FT-IR, 1H NMR, 13C NMR, 19F NMR, MS, and elemental analysis. The synthesized compounds were screened for their antitubercular activity using microplate alamar blue assay method and antibacterial activity. Among the tested compounds, 4- fluorophenyl (8m), 4- chlorophenyl (8n) and 4-methoxyphenyl (8i) showed potent anti-TB activity (3.12 mg/mL) in comparison with reference drug, Pyrazinamide ((3.12 mg/mL). In addition, all compounds were docked into DprE1 (PDB code: 4KW5) to explore their binding interactions at the active site. The compounds exhibited essential key interactions as that of reported DprE1 inhibitors and hence, the synthesized compounds may be considered as molecular scaffolds for antitubercular activity. Compounds, 4-chlorophenyl (8n) and 4-flurophenyl (8m) showed significant antibacterial activity against Escherichia coli and Staphylococcus aureus strains. In silico prediction of toxicities, druglikeness and drug score profiles of the tested compounds are promising.

Keywords: 2,4-diaminopyrimidine, synthesis, docking studies, antitubercular activity.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Design, synthesis and molecular docking studies of quinazolin-4-ones linked to 1,2,3-triazol hybrids as Mycobacterium tuberculosis H_{37}Rv inhibitors besides

Paper ID - 1314

A Paper Oresented by: PATAN RASVAN KHAN, P. HARI CHARAN*
[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

Abstract

Quinazolin-4-ones linked to 1, 2, 3-triazol (10) were identified as inhibitors of the bisphosphonate BPH-700 transcriptional factor from a high throughput screen. A series of 1, 4-disubstituted triazoles (10a–j) were synthesized by the Cu-catalyzed azide-alkyne cyclo addition of 5-methoxy-2-nitro-4-(prop-2-yn-1-yloxy) benzamide (6) with various substituted azido benzenes (7) in the presence of CuSO 4 under aerobic conditions followed by click reaction with substituted aldehydes. The target compounds were screened for antitubercular activity against Mycobacterium tuberculosis H 37 Rv by Broth micro dilution method using Lowenstein Jensen medium (LJ)(MIC< 9 µg/mL). Majority of the compounds 10b, 10d, 10e, 10i and 10j displayed good antitubercular activity with MIC 7–11 µg/mL. Further, 10e exhibited a promising inhibition with MIC 7 µg/mL, compared to the reference drug Rifampicin.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Study of Bismuth Ferrite-Silver Ferrite Nanocomposite About Structure, Characterization, Magnetic Properties and Band Gap Evaluation

Paper ID - 1315

A Paper Oresented by:R V SATYADHAR REDDI, P. HARI CHARAN*
[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

Abstract

Multiferroic materials are novel multifunctional materials which possess both ferroelectric and magnetic properties. These materials have a variety of applications from semiconductors to sensors. A novel nanocomposite is made of equimolar perovskite-rhombohedral bismuth ferrite-silver ferrite composite through chemical route by blending of nano-bismuth ferrite as the second phase in nanosilver ferrite and left for soaking for 1 and 4 h and then heated at 500 °C. The phases and planes are analyzed and the particle sizes are calculated by X-ray diffraction method and SEM studies indicate features of interconnected agglomeration with spherical in rhombohedral synthesized nanocomposite. The transmission electron microscopy images also correlate the experimental observations from XRD analysis and the band gap is calculated by UV-visible spectra. From Tauc relation, the band gaps are found as 2.84.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

SYNTHESIS AND PHARMACOLOGICAL SCREENING OF NEW ISATIN-3- [N2 -(BENZIMIDAZOL-1-ACETYL)]HYDRAZONE

Paper ID : 1316

A Paper Presented by:SRINIVAS PERABOINA, P. HARI CHARAN*
[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

Abstract

Twenty new isatin-3-[N 2-(benzimidazol-1-acetyl)] hydrazones (IV) were synthesized from ten different isatin-3-[N 2–(chloroacetyl)] hydrazones (III) by reacting with benzimidazole and 2-methyl benzimidazole. The intermediates were obtained from isatin hydrazones (II) on condensation with chloroacetyl chloride. These compounds were characterized by IR, 1 H NMR and mass spectra. All the compounds were screened for antimicrobial, antioxidant and cytotoxic activity. Some of the new compounds showed promising antibacterial and antifungal activity.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Design, Synthesis and Docking Studies of New Indazole Derivatives as Potent Cytotoxic and Antibacterial Agents

Paper ID : 1317

A Paper Presented by:SRINIVAS PERABOINA, P. HARI CHARAN*
[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

Abstract

The novel series of indazole analogs 3a-j and 5a-j based on arylboranes were synthesized and evaluated for their anticancer activity against HT-29, MDA-MB-231 cancer cell lines, and antibacterial activity against Gram-positive and Gram-negative bacteria. All compounds were characterized by nuclear magnetic resonance (1H & 13C NMR), Fourier transform infrared, and mass spectral analysis. The molecular docking studies showed that the compounds 3j and 3c have highest binding energies− 7.45 and− 6.80 kcal/mol with Tyr248, Lys273, Val268, and Arg171 amino acids (PDB ID: 2ZCS). Thus, the synthesized compounds from the present series can serve as an important gateway for the design and development of new anticancer and antibacterial agents.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Design, molecular docking studies of oxaprozin linked to 4-thiazolidinone derivatives as a potent anticancer, analgesic and antiinflammatory agents

Paper ID : 1318

A Paper Presented by:KISHORE BABU CHITTELA, P. HARI CHARAN*
[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

Abstract

In the present study, we introduced acyl hydrazone derivatives of 3-(4, 5-diphenyl-1, 3-oxazol-2-yl) propanoic acid as new potent and selective anticancer, analgesic and anti inflammatory inhibitors that lack the standard pharmacophoric binding features to PDBID 2ZCS. The key intermediate N-acyl hydrazine is prepared in good yields from oxaprozin, was integrate with a variety of aromatic aldehydes under conventional conditions. The newly synthesized compounds have been characterized by IR, 1H NMR, 13C NMR and Mass spectral analysis. Further, the compounds 5a, 5b, 5e, 5g, and 5h announce promising invitro cytotoxicity than reference compound cisplatin. All the target compounds have been screened for their invivo anti-inflammatory activity on rats by carrageenan-induced ratpaw edema assay. The results of the biological activities showed that the compounds 5b, 5d and 5e exhibited significant invivo analgesic and anti inflammatory activities than reference compound oxaprozin. Further investigation, starting from our lead compound 5i, structure-based drug-design was conducted and more potent analogues were obtained with high selectivity and almost full edema protection, in carrageenaninduced autodock 4.2, in case of compounds 5a, 5g, 5d and 5e showed the good binding energy by adding a substituted phenyl rings afforded excellent active compounds. The activity data is validated by molecular docking studies and are in good corelation with observed trends.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

A Facile Synthesis of Amide Derivatives of [1, 2, 4] Triazolo [4, 3-a] pyridine

Paper ID : 1319

A Paper Presented by:KISHORE BABU CHITTELA, P. HARI CHARAN*
[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

Abstract

A facile synthesis for preparation of amide derivatives of [1,2,4]triazolo[4,3-a]pyridine can be achieved by the nucleophilic displacement of chloromethyl derivative with methyl amine followed by the reaction with acid analogues in the presence of 1-[bis(dimethylamino)methylene]- 1H-1,2,3-triazolo[4,5-b]pyridinium 3-oxide hexafluorophosphate (HATU). Reaction of 2-chloropyridine with hydrazine hydrate (99 %) gave 2-hydrazinopyridine (2). Compound 3 was obtained in good yields by treating 2-hydrazinopyridine with chloroacetyl chloride. Further 3-chloromethyl-[1,2,4]triazolo[4,3-a]pyridine (4) is obtained by treatment of compound 3 with POCl3. Nucleophilic displacement of compound 4 with methyl amine gave methyl-[1,2,4]triazolo[4,3-a]pyridin-3-ylmethyl-amine (5). Finally protecting and deprotecting of compound 5 with Boc anhydride and HCl in dioxane gives hydrochloride salt of compound 5 i.e. (6) The reaction of hydrochloride salt of methyl-[1,2,4]triazolo[4,3-a]pyridin-3-ylmethyl-amine with 10 different acids yields amide analogues.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Synthesis and in-vitro studies of some new quinoline 1, 3, 4-thiadiazolo pyrimidin derivatives

Paper ID : 1320

A Paper Presented by:KISHORE BABU CHITTELA, P. HARI CHARAN*
[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

Abstract

A series of eight new quinoline associated 1, 3, 4-thiadiazolo pyrimidin derivatives (5a-h) have been developed using 4-amino-8-fluoro-quinoline-3-carboxylic acid ethyl ester (1) as raw material and by involving 8-fluoro-4-methylsulfanylthiocarbonylamino-quinoline-3-carboxylic acid ethyl ester (2), 8-fluoro-4-hydrazine thiocarbonylamino-quinoline-3-carboxylic acid ethyl ester (3) and 3-amino-7-fluoro-2-mercapto-3H-pyrimido-[5, 4-c] quinolin-4-one (4) as intermediates. The title compounds after structure elucidation were used in vitro to find their antibacterial ability towards different micro-organisms.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

RP-HPLC Method Development and Validation for Nitroxynil in Active Pharmaceutical Ingredient Manufacturing

Paper ID : 1321

A Paper Presented by:KISHORE BABU CHITTELA, P. HARI CHARAN*
[a]*Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.*

Abstract

Cleaning procedures should be monitored at appropriate intervals after validation to ensure that these procedures are effective when used during routine production. Visual inspection can allow detection of Cross contamination concentrated in small areas that could otherwise go undetected by sampling and/or analysis. The process of providing documented evidence that the cleaning methods employed with in the facility consistently controls potential carryover of product cleaning agents and extraneous material into subsequent product to a level that is below predetermined levels and as a Good manufacturing practices (GMP) requirement. The main scope of the study was to developed & Validated a new simple, precise and accurate Reverse Phase High Performance Liquid Chromatographic (RPHPLC) method for Nitroxynil (NXYF/01A) residual determination in veterinary active pharmaceutical ingredient manufacturing. The method was developed by using the isocratic solvent system, HPLC grade acetonitrile and 40 volumes of 0.1% Orthophospharic acid in Milli-Q water in the ratio of 60: 40 (volume/volume) and Acetone is used as diluent. Successful elution of the Nitroxynil (NXYF/01A) was achieved on Nucleosil C18 column with 250x4. 6 mm internal diameter and 5µm particle size (or) Equivalent. The method validation was successfully applied for routine analysis for cleaning/residual samples. The developed Reverse phase liquid chromatography (RP-LC) method was validated with respect to specificity, linearity, accuracy, precision and high sensitivity with detection limits and quantification limits ranging from 0.28 ppm to 0.88 ppm.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Synthesis of (3-Aminophenyl)(morpholino) methanone from Benzotrichloride as Precursor

Paper ID : 1322

A Paper Presented by: AYILEELA KANITHI, P. HARI CHARAN*
Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.

Abstract

(3-Aminophenyl)(morpholino) methanone derivatives are key intermediates in the preparation of active pharmaceutical ingredients. In this synthesis benzotrichloride is selected as a precursor for the preparation of target molecule, the precursor is easily available raw material. The present synthesis consisting of four steps, in the first step we are nitrating the benzotrichloride to obtain the meta-nitrobenzoic acid, which on chlorinated with thionyl chloride to obtain meta nitro benzoyl chloride, which on condensing with morpholine, further reduction with iron and HCl for the formation of the target molecule.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Facile Chemoselective Reduction of 3-Phenacylideneoxindoles and 2-Oxoacenaphthen-1-ylidene Ketones using the Hantzsch Ester

Paper ID : 1323

A Paper Presented by: AYILEELA KANITHI, P. HARI CHARAN*
Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.

Abstract

The exocyclic C=C double bond in phenacylideneoxindole and 2-oxoacenaphthen-1-ylidene ketone derivatives has been selectively reduced in good yields with a combination of the Hantzsch ester and zinc chloride in acetonitrile at ambient temperature.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Design, Synthesis and Biological Evaluation of Novel Urea and Thiourea Bearing thieno[3,2-d]-pyrimidines as PI3 Kinase Inhibitors

Paper ID : 1324

A Paper Presented by: AYILEELA KANITHI, P. HARI CHARAN*
Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.

Abstract

Phosphatidylinositol-3-kinase α (PI3Kα) is a ubiquitous intracellular enzyme, mainly involved in intracellular signaling pathways, promotes cellular growth, proliferation, and differentiation. Therefore, inhibition of PI3K can be a hotspot in molecular targeted therapy for the treatment of cancer. The present research work involves molecular docking studies performed to screen derivatives of urea and thiourea bearing thieno [3,2-d]-pyrimidines against the active site of PI3K enzyme using MOE.2008.10. The designed structures **(6a-f)** and **(7a-j)** were synthesized by the facile synthetic methods and evaluated for their anticancer activity against HT-29 and MCF-7 cell lines and inhibitory activity against PI3Kα enzyme. Among the tested compounds, 4-(4-(2-(3-(pyrimidin-2-yl)thioureido)ethyl)piperazin-1-yl)thieno[3,2-d]pyrimidine-6-carboxamide **(7f)** showed the highest anticancer activity against HT-29 and MCF-7 cell lines with IC50 values of 2.18 µM and 4.25 µM, respectively. Further, the same compound also exhibited potent PI3Kα inhibitory activity with IC50 value of 1.26 µM.Docking studies supported the initial pharmacophoric hypothesis and suggested a mode of interaction at the active binding site of PI3Kα, demonstrating that the target compounds were potential inhibitory agents for cancer therapy.
Keywords: 2,4-diaminopyrimidine, synthesis, docking studies, antitubercular activity.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Enhanced visible-light driven photolytic degradation of methylene blue by nickel doped nanocomposite

Paper ID : 1325

A Paper Presented by:T. Kamakshi[1,3,], G. Sunita Sundari[1], and Harikrishna Erothu[2]**
Department of Chemistry, Koneru Lakshmaiah Education Foundation, Vaddeswaram, A.P., 522502, India.

Abstract

In the present work, Fe3O4, NiFe3O4 (NF), NiFe3O4/GO (NFG), NiFe3O4/rGO (NFRG) photocatalysts have been successfully synthesized using the chemical co-precipitation technique followed by sonification, drying, and calcined. The prepared photocatalysts were characterized using X-ray Diffraction (XRD), Fourier transform infrared spectroscopy (FTIR), field emission scanning electron microscopy (FE-SEM), diffuse reflectance spectroscopy (DRS) techniques. The photocatalytic activity was evaluated using photodegradation of methylene blue (MB) under visible light irradiation. The obtained results showed that $NiFe_3O_4$/rGO (NFRG) photocatalyst exhibited much higher photocatalytic activity than other photocatalysts under visible light irradiation due to the excellent adsorptivity, and effective electron transfer process and it was easy to separate from a solution under the application of an external magnetic field, which is one of promising bifunctional photo-catalysts for waste water treatment and industrial application.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

SYNTHESIS OF DIASTEREOSELECTIVE NOVEL CHROMENE DERIVATIVES BY MEANS OF KNOEVENAGEL CONDENSATION

Paper ID : 1326

A Paper Presented by:D. Navaneetha, HariKrishna Erothu*
Department of Chemistry, Koneru Lakshmaiah Education Foundation(KLEF), Vaddeswaram, near Vijayawada-522 502, Andhra Pradesh, India.
depanavaneetha@gmail.com
**E-mail: harikrishnaiitm@gmail.com*

Abstract

The synthesis of various thiazolidinone derivatives through knoevenagel condensation is considered as one of the most important process in synthetic organic chemistry and medicinal chemistry. Compounds containing azolidinine heterocyclic have a wide range of pharmacological activities such as antiviral[1], antibacterial[2], anticancer, anti-inflammatory[3] etc., write some more applications references here
An efficient protocol for the synthesis of (Z) - 5-((2,4- diphenyl (2H- chromen - 3-yl nethylene) -2-thionothiazolidin - 4- ones and (Z)-5-((2-methyl-2-(4-methylpent-3-en-1-yl)-2H-chromen-3-yl) methylene)-2 thioxothiazolidin-4-one derivatives from chrome-3 carbaldehyde with rhodanine has been developed which proceeds through knoevenagel condensation. This method afforded the products with good yields in presence catalyst. Put some recent references related to azolidinine work here

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Novel Multifunctional Hollow Fibers Fabricated From Nano Metal Oxide Doped Polymer Nanocomposite for Efficient Water Treatment

Paper ID : 1327

A Paper Presented by:Subhakaran Singh Rajaputra, Anjaneyulu Yerramilli and Harikrishna Erothu*

Centre for Advance Energy Studies (CAES), Koneru Lakshmaiah Education Foundation (KLEF) Vaddeswaram, Guntur Dist., Andhra Pradesh, India – 522 502.

***Corresponding author Mobile: (+91) 7995621995; E-mail: harikrishnaiitm@gmail.com**

Abstract

In developing countries, industries related to fertilizers, pesticides, batteries, paper and mining etc. are mainly responsible for heavy metal pollution by discharge of waste waters into the environment. Heavy metals (HMs) like Zn, Cu, Ni, Hg, Cd, Pb and Cr are toxic, carcinogenic, non-biodegradable and accumulate in living organisms causing serious health issues.[1] Nano metal oxides (NMOs) are very efficient in deep removal of HMs due to their large surface area to volume ratio, high interfacial reactivity and specific affinity towards HMs.[2,3] Magnetic NMOs are very economical, recyclable adsorbents for removal of HMs with minor secondary contamination and can be separated easily under magnetic gradient and regenerated.[3,4] The high surface energy of NMOs leads to poor stability, agglomeration and decrease in efficiency.[3] An effective approach is the impregnation of NMOs into polymer forming polymer nano-composites (PNCs) with enhanced stability, processability, physicochemical and mechanical properties also with high interfacial reactivity of the NMOs.[2,3] Membrane filtration technologies using these PNCs have great potential in efficient removal of HMs from aqueous systems.[1] Treatment of contaminated water through Nano-Filtration (NF) using polymeric hollow nanofibers (HNFs) which are very efficient in contaminant adsorption because of their high surface to volume ratios is an unexploited area of research.[5] Our research objective is to design and develop multifunctional HNFs by electro-spinning technique from PNCs of magnetic NMOs. The developed novel multifunctional HNFs will be fabricated into capillary membrane modules and tested in lab scale NF setup for removal of toxic HMs like As, Cr, Mn, Fe, Cu, Hg, Ni, Co and fluorides from contaminated ground water.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Novel Multifunctional Hollow Fibers Fabricated From Nano Metal Oxide Doped Polymer Nanocomposite for Efficient Water Treatment

Paper ID : 1328

A Paper Presented by:Subhakaran Singh Rajaputra, Anjaneyulu Yerramilli and Harikrishna Erothu*

Centre for Advance Energy Studies (CAES), Koneru Lakshmaiah Education Foundation (KLEF) Vaddeswaram, Guntur Dist., Andhra Pradesh, India – 522 502.

*Corresponding author Mobile: (+91) 7995621995; E-mail: harikrishnaiitm@gmail.com

Abstract

In developing countries, industries related to fertilizers, pesticides, batteries, paper and mining etc. are mainly responsible for heavy metal pollution by discharge of waste waters into the environment. Heavy metals (HMs) like Zn, Cu, Ni, Hg, Cd, Pb and Cr are toxic, carcinogenic, non-biodegradable and accumulate in living organisms causing serious health issues.[1] Nano metal oxides (NMOs) are very efficient in deep removal of HMs due to their large surface area to volume ratio, high interfacial reactivity and specific affinity towards HMs.[2,3] Magnetic NMOs are very economical, recyclable adsorbents for removal of HMs with minor secondary contamination and can be separated easily under magnetic gradient and regenerated.[3,4] The high surface energy of NMOs leads to poor stability, agglomeration and decrease in efficiency.[3] An effective approach is the impregnation of NMOs into polymer forming polymer nano-composites (PNCs) with enhanced stability, processability, physicochemical and mechanical properties also with high interfacial reactivity of the NMOs.[2,3] Membrane filtration technologies using these PNCs have great potential in efficient removal of HMs from aqueous systems.[1] Treatment of contaminated water through Nano-Filtration (NF) using polymeric hollow nanofibers (HNFs) which are very efficient in contaminant adsorption because of their high surface to volume ratios is an unexploited area of research.[5] Our research objective is to design and develop multifunctional HNFs by electro-spinning technique from PNCs of magnetic NMOs. The developed novel multifunctional HNFs will be fabricated into capillary membrane modules and tested in lab scale NF setup for removal of toxic HMs like As, Cr, Mn, Fe, Cu, Hg, Ni, Co and fluorides from contaminated ground water.[6,7]

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Solid polymer electrolyte for Battery Applications

Paper ID : 1329

A Paper Presented by:K. Sravanthi[1], G. Sunita Sundari[1*], Harikrishna Erothu[2*]

[1]*Department of Physics, Koneru Lakshmaiah Education Foundation (KLEF), Vaddeswaram, Guntur-522502, Andhra Pradesh, India.*

[2]*Center for Advanced Energy Studies (CAES), Koneru Lakshmaiah Education Foundation (KLEF), Vaddeswaram, Guntur-522502, Andhra Pradesh, India.*

*Corresponding author. Mobile: (+917995621995); E-mail: harikrishnaiitm@gmail.com

Solid Polymer electrolytes (SPEs), can replace liquid electrolyte in energy storage devices like lithium ion batteries by improving safety, efficiency and high energy density and also possess conduction of ions.[1,2] Novel Solid Polymer Electrolyte (SPE) films based on Polymer and Salt with different weight ratios of (Polymer: Salt wt %) (60:40, 70:30, 80:20 wt %) were prepared by solution casting technique. The amorphous nature of synthesized SPE films has been confirmed by XRD analysis. The structural changes in polymer by complexation of polymer with salt has been revealed using FTIR analysis. The value of lowest energy band gap was found to be 3.61 eV for the composition, Polymer: Salt (60:40 wt %) from optical absorbance studies. The highest value of ionic conductivity 1.17×10^{-6} S/cm at 303K for the SPE film Polymer: Salt (60:40 wt %) is observed from AC impedance studies. From the results, SPE film exhibiting low energy band gap and high ionic conductivity which can be considered as a promising material for application in solid state battery.

Keywords: Solid polymer electrolyte; Battery applications; Conductivity studies; XRD.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

PMMA based Polymer Electrolytes for Battery Application

Paper ID : 1330

A Paper Presented by:K. Sravanthi[1], G. Sunita Sundari[1] and Harikrishna Erothu[2*]

[1]*Department of Physics, KoneruLakshmaiah Education Foundation (KLEF), Vaddeswaram, Guntur-522502, Andhra Pradesh, India.*

[2]*Center for Advanced Energy Studies (CAES), KoneruLakshmaiah Education Foundation (KLEF), Vaddeswaram, Guntur-522502, Andhra Pradesh, India.*

***E-mail:** harikrishnaiitm@gmail.com and physics.ss@gmail.com*

Abstract

Lithium based solid-state batteries with ionic conducting polymer electrolyte have attracted much attention because of their potential applications in electronic devices.[1,2,3] Solid Polymer Electrolyte (SPE) films based on poly(methyl methacrylate) (PMMA)[4] and lithium acetate (CH_3COOLi) with different weight ratios of (PMMA: CH_3COOLi wt %) (60:40, 70:30, 80:20 wt %) were prepared by solution casting technique. XRD analysis confirmed the amorphous nature of Li-PMMA SPE films. FTIR analysis revealed the structural changes in polymer by complexation with Li-salt. From the optical absorbance studies, the value of lowest energy band gap was found to be 3.61 eV for the composition, PMMA: CH_3COOLi (60:40 wt %). The conductivity spectra of solid polymer electrolytes exhibits mostly due to ions by increasing the salt concentration, crystallanity vanishes and leads to amorphous phase where ions mobility is easier therefore increased in conductivity. From AC impedance studies, the highest value of ionic conductivity $8.21\acute{}10^{-5}$ S/cm at 303K for the SPE film PMMA: CH_3COOLi (60:40 wt %) is observed when compared to reported literature. From the results of Li-PMMA SPE film with high ionic conductivity, it is a promising material for the application of solid state battery.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Polymer based Solar Cells for Improvements in Stability and Efficiency

Paper ID : 1331

A Paper Presented by:Dr Harikrishna Erothu

Center for Advanced Energy Studies and Department of Chemistry, Koneru Lakshmaiah Education Foundation (KLEF), Green Fields, Vaddeswaram, Guntur Dist., Andhra Pradesh - 522 502, India.

(E-mail: *harikrishnaiitm@gmail.com and harikrishnaerothu@kluniversity.in*)

Abstract:

Finding an inexpensive, clean and completely renewable energy source is the most pressing challenge of current times. Solar energy has long term potential because the earth receives enough energy from the sun in just one hour to meet all human energy requirements for an entire year. Current silicon-based solar technologies lead the market in terms of device efficiency and lifetime but they are expensive to implement on a global scale.[1] This is the major motivation for the development of organic solar cells (OSCs), which recently attracted much attention due to their low-cost, flexibility, lightweight and their use in large-area devices.[2] OSCs are not without their problems, most notably lifetimes, which can be as low as 5 years. The individual layers play a vital role contributing towards the performance and lifetime of the final solar-powered device.

Block copolymers (BCPs) have long-term structural stability and also their solid-state morphology being of the appropriate dimensions to efficiently perform charge separation and transfer to electrodes.[3] Our aim is to improve further the efficiency and lifetime of OSCs by creating highly original and industrially viable novel block copolymers. Hence, we focused on the synthesis and photovoltaic application of BCPs based on poly(3-hexylthiophene) (P3HT) due to its high hole mobility, good processibility and ease of synthesis.[4] Herein, the novel synthesis of the latest BCPs based on P3HT will be presented and explored their detailed study of self-assembly and device performances.[5]

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

P3HT based Polymeric Materials: Synthesis and Application for Organic Solar Cells

Paper ID : 1332

A Paper Presented by: Dr Harikrishna Erothu*[1,2], Dr Mahfoudh Raïssi[2], Dr Eric Cloutet[2], Prof. Henri Cramail[2] and Prof. R. C. Hiorns[2]

[1]*Center for Advanced Energy Studies (CAES) & Department of Chemistry, Koneru Lakshmaiah Education Foundation, Green Fields, Vaddeswaram, Guntur Dist., Andhra Pradesh - 522 502, India.*

[2]*CNRS, Laboratoire de Chimie des Polymères Organiques (LCPO, UMR 5629, ENSCBP, IPB), Université de Bordeaux, 16 avenue Pey Berland, 33607 Pessac Cedex, France.*

(*E-mail: *harikrishnaiitm@gmail.com and harikrishnaerothu@kluniversity.in*)

Abstract:

Solar energy has long term potential because the earth receives enough energy from the sun in just one hour to meet all human energy requirements for an entire year. Current silicon-based solar technologies lead the market in terms of device efficiency and lifetime but they are expensive to implement on a global scale.[1] This is the major motivation for the development of organic solar cells (OSCs), recently attracted much attention due to their low-cost, flexibility, lightweight and their use in large-area devices.[2] OSCs are not without their problems, most notably lifetimes, are less than 10 years. The individual layers play a vital role contributing towards the performance and lifetime of the final solar-powered device.

On the other hand, block copolymers (BCPs) have long-term structural stability and also their solid-state morphology being of the appropriate dimensions to efficiently perform charge separation and transfer to electrodes.[3] Our aim is to improve further the efficiency and lifetime of OSCs by creating highly original and industrially viable novel block copolymers. Hence, we focused on the synthesis and photovoltaic application of BCPs based on poly(3-hexylthiophene) (P3HT) due to its high hole mobility, good processibility and ease of synthesis.[4] Herein, the novel synthesis of the latest BCPs based on P3HT will be presented and explored their detailed study of self-assembly and device performances.

Keywords: *Nano-structures, Block copolymers, Organic solar cells, Stability and Efficiency*

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Polymer based Solar Cells for Improvements in Stability and Efficiency

Paper ID - 1333

A Paper Presented by:Dr Harikrishna Erothu*

Center for Advanced Energy Studies (CAES) and Department of Chemistry, Koneru Lakshmaiah Education Foundation (KLEF), Green Fields, Vaddeswaram, Guntur District, Andhra Pradesh - 522 502, India.

(*E-mail: *harikrishnaiitm@gmail.com and harikrishnaerothu@kluniversity.in*)

Abstract

Finding an inexpensive, clean and completely renewable energy source is the most pressing challenge of current times. Solar energy has long term potential because the earth receives enough energy from the sun in just one hour to meet all human energy requirements for an entire year. Current silicon-based solar technologies lead the market in terms of device efficiency and lifetime but they are expensive to implement on a global scale.[1] This is the major motivation for the development of organic solar cells (OSCs), which recently attracted much attention due to their low-cost, flexibility, lightweight and their use in large-area devices.[2] OSCs are not without their problems, most notably lifetimes, which can be as low as 5 years. The individual layers play a vital role contributing towards the performance and lifetime of the final solar-powered device.

Block copolymers (BCPs) have long-term structural stability and also their solid-state morphology being of the appropriate dimensions to efficiently perform charge separation and transfer to electrodes.[3] Our aim is to improve further the efficiency and lifetime of OSCs by creating highly original and industrially viable novel block copolymers. Hence, we focused on the synthesis and photovoltaic application of BCPs based on poly(3-hexylthiophene) (P3HT) due to its high hole mobility, good processibility and ease of synthesis.[4] Herein, the novel synthesis of the latest BCPs based on P3HT will be presented and explored their detailed study of self-assembly and device performances.[5]

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Organic Solar Cells based on P3HT: Stability and Efficiency Improvements

Paper ID - 1334

A Paper Presented by: Harikrishna Erothu*[1,2], Mahfoudh Raïssi[2], Eric Cloutet[2], Henri Cramail[2] and R. C. Hiorns[2]

[1]*Center for Advanced Energy Studies (CAES), Koneru Lakshmaiah Education Foundation (KLEF), Green Fields, Vaddeswaram, Guntur Dist., Andhra Pradesh - 522 502, India.*
[2]*CNRS, Laboratoire de Chimie des Polymères Organiques (LCPO, UMR 5629, ENSCBP, IPB), Université de Bordeaux, 16 avenue Pey Berland, 33607 Pessac Cedex, France.*
** E-mail: harikrishnaiitm@gmail.com and harikrishnaerothu@kluniversity.in*

Abstract

Finding an inexpensive, clean and completely renewable energy source is the most pressing challenge of current times. Solar energy has long term potential because the earth receives enough energy from the sun in just one hour to meet all human energy requirements for an entire year. Current silicon-based solar technologies lead the market in terms of device efficiency and lifetime but they are expensive to implement on a global scale.[1] This is the major motivation for the development of organic solar cells (OSCs), which recently attracted much attention due to their low-cost, flexibility, lightweight and their use in large-area devices.[2] OSCs are not without their problems, most notably lifetimes, which can be as low as 5 years. The individual layers play a vital role contributing towards the performance and lifetime of the final solar-powered device.

Block copolymers (BCPs) have long-term structural stability and also their solid-state morphology being of the appropriate dimensions to efficiently perform charge separation and transfer to electrodes.[3] Our aim is to improve further the efficiency and lifetime of OSCs by creating highly original and industrially viable novel block copolymers. Hence, we focused on the synthesis and photovoltaic application of BCPs based on poly(3-hexylthiophene) (P3HT) due to its high hole mobility, good processibility and ease of synthesis.[4] Herein, the novel synthesis of the latest BCPs based on P3HT will be presented and explored their detailed study of self-assembly and device performances.[5]

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Removal of lead and fluoride from contaminated water using exhausted coffee grounds based bio-sorbent

Paper ID - 1335

A Paper Presented by: A. Naga Babu a, K. Ravindhranath a, G.V. Krishna Mohan a, *
a Department of Chemistry, KLEF, Guntur, Andhra Pradesh, 522502, India

Abstract

Water pollution by industrial and anthropogenic actives has become a serious threat to the environment. World Health Organization (WHO) has identified that lead and fluoride amid the environmental pollutants are most poisonous water contaminants with devastating impact on the human race. The present work proposes a study on economical bio-adsorbent based technique using exhausted coffee grounds in the removal of lead and fluoride contaminants from water. The exhausted coffee grounds gathered from industrial wastes have been acid-activated and examined for their adsorption capacity. The surface morphology and elemental characterization of pre-and-post adsorption operations by FESEM, EDX and FTIR spectral analysis confirmed the potential of the exhausted coffee ground as successful bio-sorbent. However, thermodynamic analysis confirmed the adsorption to be spontaneous physisorption with Langmuir mode of homogenous monolayer deposition. The kinetics of adsorption is well defined by pseudo second order model for both lead and fluoride. A significant quantity of lead and fluoride is removed from the synthetic contaminated water by the proposed bio-sorbent with the respective sorption capabilities of 61.6 mg/g and 9.05 mg/g. However, the developed bio-sorbent is also recyclable and is capable of removing the lead and fluoride from the domestic and industrial waste-water sources with an overall removal efficiency of about 90%.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

STABILITY INDICATING HPLC METHOD FOR THE QUANTIFICATION OF CEFIXIME, ORNIDAZOLE AND MOXIFLOXACIN IN SOLID DOSAGE FORMS

Paper ID - 1336

A Paper Presented by:Suresh Kumar Palacharla and G. V. Krishna Mohan*
Department of Chemistry, K.L. University, Guntur, AP, India
*E-mail: drkrishnamohangv@kluniversity.in

Abstract

Cefixime is used for bacterial infections recovery, Ornidazole is used as antibiotic for protozoan infections and Moxifloxacin is also an antibiotic for multiple bacterial infections. Accurate, simple and precise HPLC method was developed for the determination of Cefixime, Ornidazole and Moxifloxacin in the tablet pharmaceutical dosage form. The RP-HPLC method was developed and validated with precision, specificity, accuracy, ruggedness, robustness and linearity. Chromatographic conditions are mobile phase A: 6.8g KH_2PO_4 in 1000 ml water and mobile phase B: Acetonitrile, Agilent Zorbax SB- C18, 100 x 4.6mm, 5µm, 280 nm, 1.0ml/min, 25 min (gradient program: mobile phase B at 0min 5%, 5min 5%, 10 min 15%, 14 min 15%, 17 min 35%, 20 min 5% and 25 min 5%.
All validation results showed the accuracy results and % RSD for test area, %assay values were also within the limits. This HPLC method can be used to analyze the regular product quality control purpose.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

REMOVAL OF FLUORIDE FROM WATER USING H_2O_2- TREATED FINE RED MUD DOPED IN Zn- ALGINATE BEADS AS ADSORBENT

Paper ID - 1337

A Paper Presented by: A. Naga Babu a, K. Ravindhranath a, **G.V. Krishna Mohan** a, *
Department of Chemistry, KLEF, Guntur, Andhra Pradesh, 522502, India

Abstract:

Beads prepared by entrapping H2O2 – treated fine red mud in the zinc – alginate (RMZAB) , are investigated as adsorbent for their sorption nature towards the fluoride ions from water.
Keywords: De-fluoridation, Activated red mud, Applications

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

REMOVAL OF FLUORIDE FROM WATER USING H_2O_2- TREATED FINE RED MUD DOPED IN Zn- ALGINATE BEADS AS ADSORBENT

Paper ID - 1338

A Paper Presented by: A. Naga Babu a, K. Ravindhranath a, **G.V. Krishna Mohan** a, *
Department of Chemistry, KLEF, Guntur, Andhra Pradesh, 522502, India

Abstract

Beads prepared by entrapping H2O2 – treated fine red mud in the zinc – alginate (RMZAB) , are investigated as adsorbent for their sorption nature towards the fluoride ions from water.

Keywords: De-fluoridation, Activated red mud, Applications

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Zirconium-Treated Fine Red Mud Impregnated in Zn-Alginate Beads as Adsorbent in Removal of Phosphate from Water

Paper ID - 1339

A Paper Presented by:G.V. KRISHNA MOHAN*, A. NAGA BABU, K. KALPANA and K. RAVINDHRANATH
Department of Chemistry, KLEF, Guntur, Andhra Pradesh, 522502, India

Abstract

Zirconium-treated fine red mud impregnated in Zn-alginate beads (ZRMAB) are investigated for their adsorption nature towards phosphate from water by varying various physico-chemical parameters such as pH, time of equilibration, sorbent dosage, initial concentration of
phosphate, presence of co-anions and temperature. The extraction conditions are optimized for the maximum removal of phosphate and the sorption ability is found to be 13.64 mg/g of the adsorbent. Substantial amounts of phosphate are removed even after ten times of regeneration of the adsorbent. Repetitive use of the same adsorbent completely removes phosphate from water. Surface morphological studies using XRD, FTIR, FESEM and EDX confirm the phosphate is onto the surface of the adsorbent. Adsorption isotherms and kinetic of sorption are analyzed and thermodynamic studies are made. The procedure developed is successfully applied to the removal of phosphate from polluted ground water samples

Keywords: Zirconium treated red mud, Zinc-alginate beads, Phosphate.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Experimental and statistical analysis of As(III) adsorption from contaminated water using activated red mud doped calcium-alginate beads

Paper ID - 1340

A Paper Presented by: A. Naga Babua, and **G. V. Krishna Mohan***
Department of Chemistry, KLEF, Guntur, Andhra Pradesh, 522502, India

ABSTRACT :

Arsenic present in water bodies causes devastating effects on aquatic organisms and indirectly poses a hazardous threat to human existence. There is an urgent need to develop potential and convincing technologies to troubleshoot this problem. In the present study, an adsorbent has been prepared using the waste red mud from hazardous aluminium industry and doping it with calcium-alginate beads (ARMCB) for the effective removal of As(III) from wastewater. The concentration of As(III) was reduced from 0.101 mg/L to 0.008 mg/L after adsorption which effectively met the economic and environmental conditions imposed by WHO (>0.01 mg/L). Further, the statistical Response Surface Methodology (RSM) is adopted to analyze the combine deffects of four operational parameters namely: pH, sorbent dosage, contact time and initial concentration on the adsorption of As(III) from the synthetic contaminated water samples. A high correlation coefficient (R2) value of 0.9672 projected by ANOVA confirmed the satisfactory regression of the developed model. The maximum adsorption capacity is found to be 1.807 mg/ g at optimum operating conditions. The surface characterization of the adsorbent before and after adsorption by SEM, EDX, XRD, and FTIR confirms the potentiality of the adsorbent towards As(III) ions. Thermodynamic, adsorption isotherms and kinetic analysis respectively projected the endothermic Langmuir model adsorption of As(III) and the pseudo-second-order rate kinetics of the sorption mechanism. The current study aids the implementation of the developed robust technique for the successful removal of As(III) from industrial and domestic polluted water samples.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Removal of naphthol green B dye from polluted waters using hydrogen peroxide treated red mud

Paper ID - 1341

A Paper Presented by:G. V. Krishna Mohan, A. Naga Babu, K. Kalpana and K. Ravindhranath*

Dept. of Chemistry, K L University, Green Fields, Vaddeswaram-522 502, Guntur Dt., A.P., India

ABSTRACT

The enhanced adsorption abilities of Hydrogen peroxide treated red mud are investigated for the removal of an anionic dye, Naphthol green B dye from polluted water. Various physicochemical parameters like pH, sorbent concentration, agitation time, temperature and initial concentration of the dye are optimized for the maximum removal of the dye from simulated waters. The nature of adsorption is analyzed using Langmuir, Freundlich, Temkin and Dubinin-Radushkevich isotherms and found that the adsorption is well described by Langmuir adsorption model with R2 : 0.9728; RL: 0.0634 suggesting the monolayer formation onto the surface of the adsorbent and further, Temkin and Dubinin-Radushkevich isotherms reflect the 'physisorption' nature. On the analysis of kinetics of adsorption by Pseudo-first-order, pseudo-second-order, Bangham's pore diffusion and Elovich equations, it is revealed that adsorption follows pseudo-first-order kinetics. The thermodynamic studies reveal that adsorption of the dye onto the surface of the adsorbent, is an exothermic process. The developed procedures are successfully applied to the samples collected from the effluents of textile industries.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Removal of Chromium (VI) from Polluted waters using Adsorbents derived from Chenopodium album and Eclipta prostrate Plant Materials

Paper ID - 1342

A Paper Presented by:A. Naga Babu, G.V. Krishna Mohan* and K. RavindhranathDepartment of Chemistry, K. L. University, Green Fields, Vaddeswaram - 522 502, Guntur Dt., Andhra Pradesh

Abstract:

The adsorption abilities of adsorbents pertaining to leaves and stems of Chenopodium album and Eclipta prostrate plants towards Chromium (VI) from polluted waters have been investigated with respect to various parameters such as equilibration time, pH and adsorbent concentration and optimized. At low pHs, the extraction is found to be more. With the sorbents derived from Chenopodium album plant, the % removal of Chromium (VI) is found to be 89.0% with powder of leaves (at pH:2, Eq. Time: 2.5 hrs and sorbent conc. 2.5 g/L) and 93.0% with stems powder (at pH:2, eq. time: 2.0 hrs and sorbent conc. 2.0 g/l). The maximum extraction of 92.0% is observed for leaves powder of Eclipta prostrate plant at pH: 2, eq. time: 3.0 hrs and sorbent conc. 3.0 g/l. With the stems powder of Eclipta prostrate plant, the % removal is found to be 95.0% at pH: 2, eq. time: 2.5 hrs and sorbent conc. 2.5 g/l. The extractions are not affected by co-cations generally present in the waters even when they are in 5-fold excess. Monovalent anions and carbonate have also not interfered the extraction but sulphate and phosphate ions have shown interference to some extent. The adoptability of the procedures developed in this work have been tested with respect to some industrial effluents and polluted waters and found to be remarkably successful.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Removal of chromium (VI) from water using adsorbent derived from spent coffee grounds

Paper ID - 1343

A Paper Presented by:G. V. Krishna Mohan1 • A. Naga Babu1 • K. Kalpana1 • K. Ravindhranath1
Department of Chemistry, KLEF, Guntur, Andhra Pradesh, 522502, India

Abstract

An acid-treated adsorbent derived from spent coffee grounds is investigated for its adsorption toward chromium (VI) ions from polluted water by optimizing various physicochemical parameters such as pH, time of equilibration, initial concentration of Cr(VI), adsorbent dosage, temperature and interfering co-ions. 91.0% of removal is observed at optimum conditions, and the
adsorption capacity is found to be as high as 22.75 mg/g. Adopting FTIR, EDX, XRD and SEM methods, the surface morphological studies are made. The nature of adsorption is analyzed using various adsorption isotherms, and it was found that Freundlich model describes well with R2: 0.9985
and RL: 0.0108, indicating the heterogeneous surface and favorable multilayer of adsorption. The kinetics of adsorption follows pseudo-second-order with R2: 0.9998. Further, thermodynamics studies reveal the endothermic nature of adsorption process. Even after five regenerations, the % removal has not come down below 81.0%. The methodology is successfully applied for the removal of chromium (VI) from polluted waters.
Keywords :Spent coffee grounds , Chromium (VI) removal Surface characterization, Adsorption isotherms, Kinetic and thermodynamic studies , Regeneration,Applications.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND LIFE SCIENCES.

ISSN- 2456-3889 JULY-2017, SPL ISSUE-7.1

Removal of Lead from Water Using Calcium Alginate Beads Doped with Hydrazine Sulphate-Activated Red Mud as Adsorbent

Paper ID - 1344

A Paper Presented by:A. Naga Babu, G. V. Krishna Mohan, K. Kalpana, and K. Ravindhranath

Department of Chemistry, K L University, Green Fields, Vaddeswaram, Guntur, 522502, India

Correspondence should be addressed to K. Ravindhranath; ravindhranath.kunta@gmail.com

Abstract

Calcium alginate beads doped with hydrazine sulphate-treated red mud are investigated as adsorbent for extracting lead ions from water using batch methods of extraction. Di2erent extraction conditions are optimised for maximum lead extraction. Substantial amount of lead is removed, and the adsorption ability is found to be 138.6 mg/g. Surface characterization using FTIR, EDX, and FESEM con<rms that lead is "onto" the surface of the adsorbent.) Therrmodynamic parameters, adsorption isotherms, and kinetics of adsorption are analysed. Adsorption is "physisorption" in nature and spontaneous.)e adsorbent developed can be regenerated using 0.1MHCl.) Thus regenerated adsorbent can be used as the adsorbent for further removal of lead at least 10 times, and this enables the complete removal of lead from water by repetitive use of the regenerated adsorbent.)e beads facilitate the easy <ltration.)e methodology developed is successfully applied for removing lead from industrial waste waters.

Keywords : Chromium (VI) removal Surface characterization, Adsorption isotherms, Kinetic and thermodynamic studies , Regeneration,Applications.