ICTM™ SMBT

International Conference on Traditional Medicine-SMBT

3rd International Conference on Traditional Medicine

Online Mode

"TRADITIONAL MEDICINE IN MODERN ERA FOR A CURE"

January **07th-08th**, 2022

SMBT CAMPUS

THE BEST CAMPUS LIFE

3rd International Conference On Traditional Medicine
"Traditional Medicine in Modern Era for A Cure"

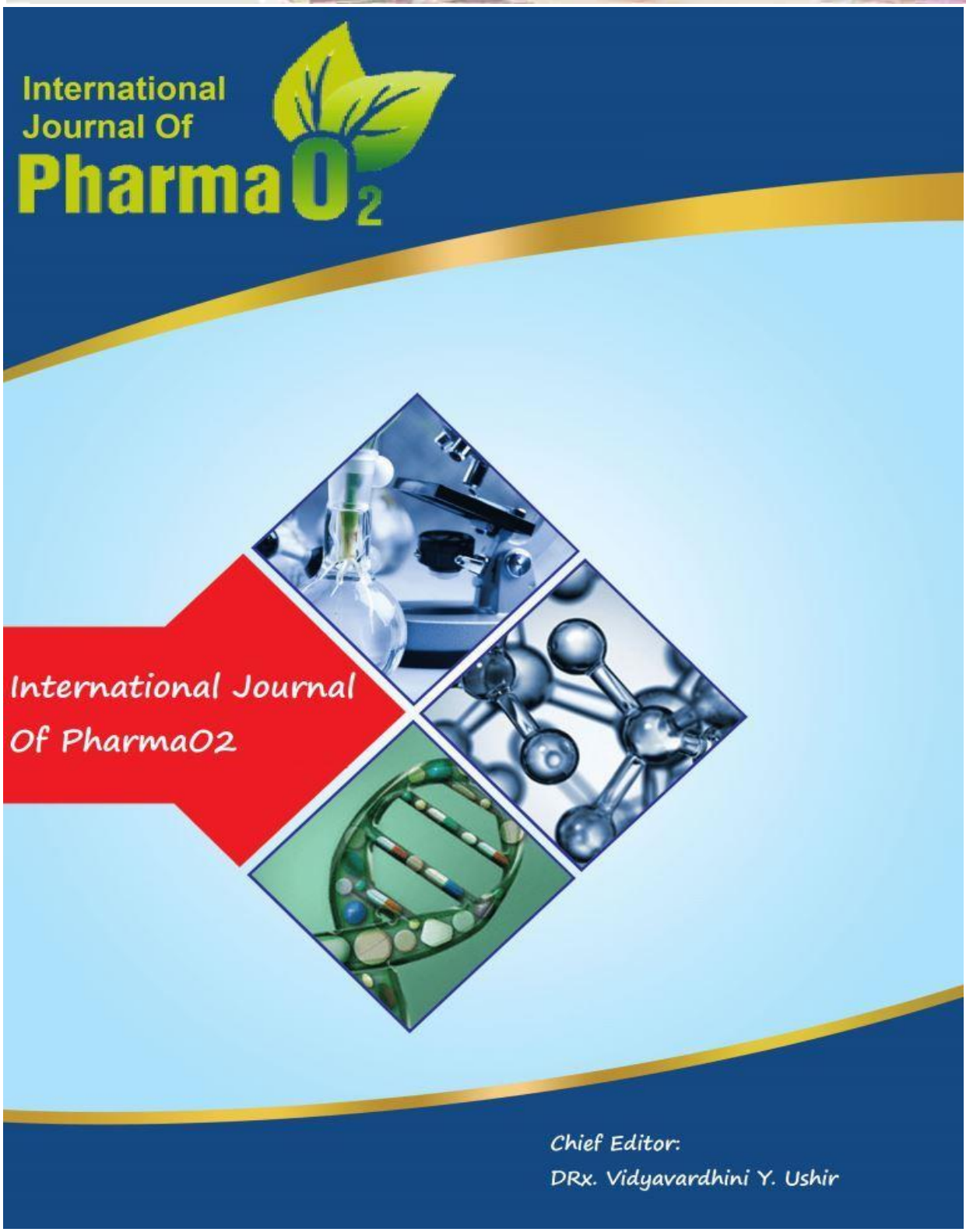
MEDICAL | AYURVED |DENTAL | PHARMACY | NURSING

More Details : www.ictm2022smbt.com

ORGANIZED BY

SMBT Sevabhavi Trust's
SMBT INSTITUTE OF DIPLOMA PHARMACY
Nandihills, Dhamangaon, Tal. Igatpuri, Dist. Nashik, Maharashtra-422403, India

VENUE : SMBT Sevabhavi Trust's Educational Campus, Nashik, Maharashtra-422403, India.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DRx. Vidyavardhini Y. Ushir

Contents

Welcome Message

Dear all Delegates and Participants

SMBT is pleased to welcome all the participants from different states and various countres to attend 2nd t International conference on 'Development & Modern Trends in Herbal Formulations' during January 8th and 9th, 2021 at Nashik, India. The theme of the conference is "Exploring quality assurance and phytochemical research in traditional medicine which practiced for treatment and healing" This ICTM 2021 deals with the current research developments in the field of Traditional Medicine and also about the new treatment methods which are devised by scientists to treat various diseases in an easier way. These formal get together acts as a best platform for participants to learn about the recent trends in quality assurance and phytochemical research and development in traditional medicines.

The ICTM 2021 is focuses on recent research an development on Traditional Medicine and clinical study of herbal medicines. The session are emphasized on

1. Traditional medicines- sources & clinical application
2. Quality assurance 0f Traditional Medicine
3. Phytochemistry – isolation and use of active principles.
4. Trade of natural products and Traditional Medicine
5. Biological screening of natural medicines.
6. Herbal Formulations

Eight lectures will be presented by distinguished scientists. The researchers will be able to report their research finding in --- paper presentations and --- poster presentations. ----poster presentation awards and -- paper presentation awards will be presented each to -- academician/ research scholar and -- students.

We would like to thank to the SMBT management for their help and encouragement during the preparatory stage of the conference. Our grateful thank for the scientific committee for processing abstracts and proceedings book in time. Our special thank for the organizing committee who have done their most to offer a successful and satisfying conference. We wish you all a fruitful conference which strengthen friendship and traditional medicine. We hope everyone enjoy their stay in Nashik and take home new scientific knowledge and inspiration.

…SMBT Educational Trust

Dr. Yogesh V. Ushir
Programme Chair,
Principal, SMBT Institute of D. Pharmacy

Organizing Committee Members

Mr. K.A. Suryavanshi

Mr. K. J. Tiwari

Ms. B.D. Tambe

Ms. S.T. Garud

Mr. V. R. Mahajan

Ms. M. Y. Gaikwad

ICTM 2022 Pre-conference

Scientific Program Schedule

06th January 2022 **Venue- Zoom Meeting app**

Sr.No.	Time (IST, Mumbai)	Activity	Topic
1	**11.30am to 12.30pm**	Registration of Pre-conference	-----
2	**1.00pm to 2.30pm IST**	**Session I** **Dr. Dhanusha Thambavita** **Faculty of Medicine,** **University of Colombo,** **Sri Lanka.**	**Opportunities and Challenges in Conducting Traditional Medicine Research: Ethical Perspectives**
3	**2.45pm to 4.15pm IST**	**Session II** **Prof. Dr. Rabeendra Prasad Shrestha** **Gandaki Medical College,** **Nepal.**	**Traditional Medicine in Modern Era for Cure**

ICTM 2022 Conference

Scientific Program Schedule

07th January 2022 **Venue - Zoom Meeting app**

Sr.No.	Time (IST, Mumbai)	Activity	Topic
1	09.00am To 09.30am	Inaugural Function	-----
2	09.30 to 10.30am IST	Session I Dr. Abd Almonem Doolaanea Faculty of	Improving the delivery of traditional medicine through innovative formulations
3	11.00am to 12 pm IST	Session II Dr Md. Zaidul Islam Saker Program Leader/ Head Food science program, Nothern Marianas College, Saipan, USA	Drug Discovery from Natural Medicinal Plants using Supercritical Fluid Technology
4	1.30pm to 2.30pm IST	Session III Dr Devita Febriani Putri Faculty of Medicine, University of Malahayati, Indonesia.	Lansium domesticum for controlling dengue vector
5	02.00pm to 4.30pm	e-Poster/ e-Oral Presentations	----

ICTM 2022 Conference

Scientific Program Schedule

08th January 2021 **Venue- Zoom Meeting app**

Sr.No.	Time (IST, Mumbai)	Activity	Topic
1	Session IV 9.00am to 10.00am IST	Session VI Dr Maria Laarni M. Salcedo College of Health Sciences, CSPC, Philippine.	A walkthrough on philippine medicinal plants
2	Session V 10.30am to 11.30am IST	Session V Assist. Prof. Dr. Amit Jaisi, School of Pharmacy, Walallak University, Thailand	Biosynthetic studies of Lysine derived alkaloids
3	Session VI 12pm to 1pm IST	Session VI Assist Prof. Dr Mesude Ulusen Faculty of Health Sciences, Amasya University, Turkey	Traditional practices for mothers and newborns during pregnancy, birth and puerperium in different regions of turkey
4	2.pm to 4.30pm	e-Poster/ e-Oral Presentations	-----
5	4.30pm to 5.00pm	Valedictory	

Table for Paper Presentation

Academic / Research Scholar Category

Sr. No.	Code	Name of Delegate	Title of presentation
1	AP1	Chinedu Imo	Haematological effects of ethanolic leaves extract of bryophyllum pinnatum in alloxan-induced diabetic rats
2	AP2	Mrs. Yogita A. Shinde	Analytical methodology to determine the digestible and non-digestible polysaccharides from the *Linum usitatissimum Linn* (Flax seeds)
3	AP3	Dr. Kiran Mantri	An experimental evaluation of "*Jatiphala kosha"* (pericarp of *Myristica fragrans* Houtt.) for its *Madhumehaghna* (Anti-Diabetic) effect in animal model.
4	AP4	Dr. Rajesh T. Wankhade	Revisiting Terminaliaarjuna - An Ancient Cardiovascular Drug
5	AP5	Ms. Priyanka Vekhande	Efficacy of shodhanirvapan lepa in managment of vranashopha (cellulitis) - a case study
6	AP6	Bharti Parmar	Global challenges and acceptance for traditional herbs
7	AP7	Dr. Nitin Gaikwad	Traditional Method ForAnuktaDravya (Undocumented Plant) Identification
8	AP8	Rashmi H Mishal	CRISPR-CAS9 Technology Mechanism- The New Gene Editing Tool for Disease Prevention & Treatment
9	AP9	Zuhairah Ismail Muhammd	EFFECTS OF ETHANOLIC EXTRACTS OF *Datura metel* PARTS ON LIPID PROFILE AND WEIGHT CHANGE OF MALE WISTER ALBINO RATS
10	AP10	Abdul . Asim. Kazi	Design, Synthesis, Molecular Docking and *in vitro* Biological Evaluation of Benzamide-sulfonamide derivatives Derivatives as Glucokinase Activators
11	AP11	Ade Maria Ulfa	Formula Variation of Hand Body Lotion Extract Of Lime Peel (Citrus Aurantifolia) As An Antioxidant
12	AP12	Gusti Ayu Rai Saputri	The Test of Hair Tonic of Ethanol Extraction of Banana Peel (Musa X Paradisiaca L.) Activity as a Hair Growth Stimulant in Rabbits

13	AP13	Nofita	The Effect of Pomegranate Extract (Punica granatum L.) on Albumin Levels and Liver Histology of Male Mice Induced by Paracetamol
14	AP14	Tutik	The Formulation of The Peel off Gel Mask Preparation Of Shallot Peel Extract (Allium Cepa L.) As An Antioxidant
15	AP15	Annisa Primadiamanti	Antibacterial Activity Of Papaya Leaves *(Carica Papaya* L.) And Guava Leaves*(Psidium Guajava* L.) Extract Combination Against *Escherichia Coli* And *Staphylococcus Aureus*
16	AP16	Akshay Kumar Daswad	Phytochemical analysis and Antioxidant activity of Saraca asocaplant part
17	AP17	Dipali P. Shelke	*In-vitro* Antioxidant study of Some Medicinal plant
18	AP18	Avhad Pawan S	RP-HPLC ANALYTICAL METHOD DEVELOPMENT AND VALIDATION OF OBETICHOLIC ACID IN BULK AND MARKTED FORMULATION

AP:- Academician/Research Scholar Paper

Table for Paper Presentation

Student Category

Sr. No.	Code	Name of Delegate	Title of presentation
1	SP1	Pranali Deshmukh	Toxicity study of chlorzoxazone and isosorbide dinitrate
2	SP2	Ms. Pratiksha V.khade	To Develop and evaluate herbal hair antidandruff serum
3	SP3	Ms. Priti Anil Waje	Synthesis of dipeptide containing aspirin as a prodrug
4	SP4	Ms..Kajal Nagare	Formulation and Evaluation of Herbal Anti acne gel prepared from *Alternantherasessilis,Catharanthusroseus* and *Lycopersiconesculentum*
5	SP5	Mr.Roshan.P. Goikane	Formulation and evaluation of herbal anti- inflammatory emulgel prepared from *vitex negundo leaves extract*
6	SP6	Mr.Rahul Gayake	Validation of Raft Forming System for Ranitidine HCL Tablet Dosage Form Using *Plantago Ovata* Seed powder as Natural Polymer by QbD Approach
7	SP7	Ms.Vaibhavi Mali	Investigations on Corn Cob Xylan Hemicelluloses to Study Its Applicability as Pharmaceutical Excipient
8	SP8	Mr. Musab Tanzeel	Evaluation of hepatoprotective and nephroprotective effect of salicin on Experimental Animal
9	SP9	Ms. Prajakta Darekar	Isolation, characterization and cardioprotective activity of Aphanamixis polystachya by using experimental animal model
10	SP10	Mr. Nitin Vanarase	Formulation and Evaluation of Multipurpose Herbal cream
11	SP11	Ms. Muskan. A. Shaikh	Five-star Herbal Formulation on Polycystic ovary Syndrome
12	SP12	Mr. Sahil. Mohite	To prepare and evaluation of Medicated Soap

13	SP13	Ms. Swati Jamdhade	Effectof naturalbinder concentrationon the hardness and disintegration time of tablet
14	SP-14	Darul Aswan	The strategy of segmenting, targeting, and positioning and marketing mix in rsud. Dr. H. Bob bazar, skm kalianda, south lampung, lampung, indonesia
15	SP15	Mr.Nitin S. Dabhade	Investigations on Biofunctional Proteins from *Moringaoliefera*seeds
16	SP16	Mr. Akshay Madhukar Jagirwar	Formulation of Cream for the Purpose of Anti-Wrinkle by Using Ginseng
17	SP17	Mr. Mayur Partole	Formulation And Development Of Herbal Mosquito Repellent Cream
18	SP18	Mr. Dipak Thorat	BRINE SHRIMP ASSAY AND CYTOTOXICITY STUDIES OF THE ETHANOLIC EXTRACTS OF *ANISOMELES HEYNEANA*
19	SP19	Ms. Shaista Pinjari	Formulation Development and Optimisation of Pantoprazole Raft Forming Tablet Dosage Form By Using *Ocimum basilicum* Seed Mucilage As a Natural Polymer

SP:- Students Paper

Table for Poster Presentation

Academic / Research Scholar Category

Sr. No.	Code	Name of Delegate	Title of presentation
1	APO1	Mitali B. Deore	Pomegranate A Traditional Medicine for Different Diseases
2	APO2	Dr. Harsha Pardeshi	Traditional medicinal use of langali (Gloriosa superba) in view of oxytocic activity
3	APO3	Dr. Pallavi Patil	Medicinal use of traditional herb Phyllanthus emblica -An Overview
4	APO4	Dr. Sakshi p. Waghmare	Traditional indian herb - haridra (curcuma longa) – history and its medicinal importance
5	APO5	Dr. Shrihas C.Pagare	. Quality control of Herbal drugs
6	APO6	Dr. Tejas Kulkarni	A Comparative Study to Evaluate Efficacy of Curcumin and Aloe Vera Gel along with Oral Physiotherapy in the Management of Oral Submucous Fibrosis: A Randomized Clinical Trial
7	APO7	Dr.Manisha Pundlik Gavit	Traditional Plant Identification Method In Todays Era
8	APO8	Dr. Pramod Kharkar	A Review of pharmacological Properties Of Two Commonly Used Indian Spices
9	APO9	Ubaidulla Uthumansha	Green synthesis of silver nanoparticles using coriander sativum extract and evaluating its antibacterial activity.

10	APO10	Dipali P. Shelke	Pharmacological Evaluation of Hepatoprotective Activity of *DendrocalamusStrictus*extracts on Animal Model
11	APO11	Dr. Yogesh K. Shewale	A critical literature review of Palash (ButeaMonosperma).
12	AP12	Dr. Abhijit Anil Tambe	Biogenic Synthesis of NiO Nanoparticles Using Areca catechu Leaf Extract and Their Antidiabetic and Cytotoxic Effects

APO:- Academician/ Research Scholar Paper

Table for Poster Presentation

Student Category

Sr. No.	Code	Name of Delegate	Title of presentation
1	SPO1	Mr.Mahesh A. Funde	Formulation of Herbal Chocolate of *Punica granatum* forNutritive and Therapeutic Value
2	SPO2	Mr.Sudipto Mangal	Evalaution of Anti-proliferative and cytotoxic activity of leaves of Litchi chinensis against B16 Melanoma
3	SPO3	Mr.Jatin V. Thake	Preparation and Evaluation of Herbal Lipstick using Rice Bran Wax
4	SPO4	Mungase Punam Navnath	Pricision Medicine : Modern Era for Diagnosis of disease
5	SPO5	Swati Barhe	Formulation And Evaluation of Herbal Shampoo Containing Extracts of Allium Sativum
6	SPO6	Ms.Layba S. Sayyad	Formulation of dorzolamide hydrochloride in-situ preparation for treatment of glaucoma; in-vitro, ex-vivo and in-vivo characterization
7	SPO7	Mr. Shubham K. Gadge	Recent Advancements in Cancer Targeted Drug Delivery Systems
8	SPO8	MrAmit V. Kakad	Formulation of nanoparticles loaded in situ gel for treatment of dry eye disease: In vitro, ex vivo and in vivo evidences
9	SPO9	Krushna Jadhav	Optimization and Evaluation of Simvastatin Tablet Formulation with Utilization of *Trigonella foenum graecum* (Fenugreek) Seed Mucilage as a Pharmaceutical Excipient
10	SPO10	Aishwarya R.Chumbhale	Formulation of Anti-Ageing Orange Peel (Citrus Aurantium Dulcis)serum

11	SPO11	Poonam T. Jundre	Research on Synthesis of pyrazole derivatives from chalcone
12	SPO12	Sayukta PAHURKAR	**Fo**rmulaton and evaluation of herbal handwash gel from jasmine leaf extract with antimicrobial activity
13	SPO13	Yash Agrawal	Formulation and Evaluation of fermented wheat gluten herbal shampoo
14	SPO14	Mr. Rajput Pratiksing Bhimsing	Hypothyroidism
15	SPO15	Shrusti Bendale	Formulation and Evaluation of Herbal Anti-Fungal Nail Lacquer
16	SPO16	Dipali Anil Sonawane	Formulation and Evaluation of Herbal Dandelion Tea
17	SPO17	Purva M. Paprikar	Formulation of Cream for the purpose of wound healing by using Lantana Camara
18	SPO18	Apurva S Bagalkar	Thiazolidinones as Antidiabetic Agents
19	SPO19	Gaurav Nandkumar Walzade	Formulation and Evaluation of Herbal Foot Crack Cream
20	SPO20	Gautami R Barve	Synthesis of Coumarin Derivatives
21	SPO21	Ashwini R. Hadke	Solid dispersion - technique to improve bioavalibilty and solubility of bcs class ii drug
22	SPO22	Tathagat Pagare	Evaluation of adaptogenic effect of *Tecomella undulata* by using experimental animal model
23	SPO23	Mr:-Harshal .M. Indaniya	To prepare and evaluate and compare cyclodextrin complexation of poorly water soluble drug with solid dispersion technique
24	SPO24	Ms. Sakshi R. Kapure	Artificial Intelligence - An accomplishment of modern health care system
25	SPO25	Ms. Gayatri pasalkar	Ayurvedic Medicine : The Traditional System Of India
26	SPO26	Priya.S. Awari	ROLE OF NATURAL DRUGS IN THE TREARTMENT OF CORONA
27	SPO27	Harshanvi P Gawale	DAILY CHALLLENGES FOR PHARMACISTS

28	SPO28	Ms. Bhavika Chaoudhary	Formulation and evaluation of herbal face pack
29	SPO29	Samyak Zankar	An Overview On Omicron
30	SPO30	Ms. Gayatri Kanade	Evaluation of hepatoprotective and nephroprotective effect of α - *pinene* on rat
31	SPO31	Gayatri Shelar	A systemic review on Solanaceae family
32	SPO32	Prajakta Ishwar Pawar	Formulation And Evaluation Of Herbal Cough Syrup

SPO: - Students Poster

ICTM 2022

SPEAKERS ABSTRACT

LANSIUM DOMESTICUM FOR CONTROLLING DENGUE VECTOR

Prof. Dr. Devita Fabriani Putri
Faculty of Medicine, University of Malahayati,
Indonesia.

ABSTRACT

In July 2021, the Indonesian Ministry of Health in collaboration with WHO launched the new National Strategic Plan (NSP) for controlling dengue. The main indicators in the NSP related to the burden of dengue infection are the percentage of districts/cities with an incidence rate (IR) below 49/100,000 population and a case fatality rate (CFR) of 0.5% reaching 90% in 2025. Enhancing effective, safe, and sustainable vector management are one of the strategies to achieve these ambitious targets.

The use of chemical insecticides is still a fast way to control dengue vectors, especially in areas with case outbreaks. The use of insecticides for a long time for the same target provides selection pressure that encourages the development of *Aedes aegypti* populations to become resistant quickly. Furthermore, chemical insecticides contain several harmful active ingredients, such as *dichlorvos*, *propoxur*, and *synthetic pyrethroids* which cause some side effects that are bad for human health.

Plant-based insecticides are insecticides derived from plants, which are an alternative for vector control with more selective targets and safe. *Lansium domesticum* is a plant that grows in the tropics and has bioactivity as an insecticide. Compounds that have the potential as insecticides in this plant are secondary metabolites specifically alkaloids, saponins, and terpenoids.

The review analysis in the last 10 years' research stated that almost all of the alkaloids, saponins, and terpenoids were found in parts of the *L. domesticum* plant, that is stems, leaves, rind, and seedsby phytochemical tests. The results of extraction and fractionation on plant parts of *L. domesticum*have the potential as ovicides, larvicides, and even cause the death of *Ae. Aegypti* reaches 95% atcertain concentrations. *L. domesticum* is a plant-based insecticide as an alternative strategy for controlling dengue vectors that are safe and environmentally friendly, biodegradable which is also non-toxic to non-target organisms.

BIOSYNTHETIC STUDIES OF LYSINE DERIVED ALKALOIDS

Amit Jaisi, PhD
School of Pharmacy, Walailak University
222 Thaiburi, Thasala Nakhon Si Thammarat, 80160, Thailand
Telephone: + 66-7567-2851. E-mail: amit.ja@mail.wu.ac.th

ABSTRACT: Lycopodium and granatane alkaloids produce by plants in two distant genus Lycopodiaceae and Lythraceae are derived from amino acids lysine. Biosynthetically, the early steps of lycopodium alkaloids pathway are postulated to be occurring in the similar fashion of the granatane alkaloids pathway. In addition, it is hypothesized that it uses similar biocatalytic steps to those used to produce granatane alkaloids. Moreover, what is the fate of Lythraceae plants producing just the granatane alkaloids even though they share the same starter units as the lycopodium alkaloids? Though the structures of various alkaloids belonging to these two classes have been known for nearly a century, little or no information is available regarding the enzymes and genes responsible for their formation.

Our group is actively involved in the elucidation of lysine derived alkaloids especially the Huperzine A pathway in lycopodiaceae (Xu et al. 2017; 2018 and Yang et al. 2017; 2019). However, due to the evolutionary complexity and lack of the invitro culture system of the lycopodiaceae plants the search for gene discovery has been a major hurdles to elucidate the Huperzine A pathway. Hence, the comparative study using integrated approach of the pants producing lysine derived alkaloids might further assist to shade lights understanding the mechanistic basis for the emergence and diversification of specialized metabolic enzymes across this plant kingdom. We employed three approaches that involves establishment of in vitro culture and elicitation mimicking biotic and abiotic stress, MALDI-imaging, and transcriptome analysis.

Noteworthy, we reported a novel gene involved in the Securinega alkaloids biosynthesis (Fan et al 2021). Fluesuffine A (**1**), the first example of ascorbylated *Securinega* alkaloids featuring fused 5/5/5/6/5/6/5 congested heptacyclic ring system, was isolated from *Flueggea suffruticosa*. The mechanistic study of the new berberine bridge enzyme (BBE) from *F suffruticosa* (*Fs*BBE) involved in the biosynthesis of **1,** reveal the existence of enamine intermediate, which was recently proposed as a key intermediate in the biosynthesis of C-2 and (or) C-3 enamine derivatives of securinane type alkaloids.

Xu B, Lei L, Zhu X, Zhou Y, Xiao Y#. (2017) Identification and characterization of L-lysine decarboxylase from *Huperzia serrata* and its role in the metabolic pathway of lycopodium alkaloid. Phytochemistry. 136:23-30.

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Yang M, You W, Wu S, Fan Z, Xu B, Zhu M, Li X, Xiao Y#. (2017) Global transcriptome analysis of *Huperzia serrata* and identification of critical genes involved in the biosynthesis of huperzine A. BMC genomics. 18(1):245.

IMPROVING THE DELIVERY OF TRADITIONAL MEDICINE THROUGH

INNOVATIVE FORMULATIONS

Dr. Abd Almonem Doolaanea

Faculty of Pharmacy, International Islamic University. Malaysia

ABSTRACT

Traditional medicine (TM) has been used for centuries across the world. One of the most important features of TM in general is its safety profile which has been proven through the long time being used. However, its efficacy varies from one TM to another and that is partly related to the non-standardized practice in formulation and delivery. In addition, when considering the delivery to children, the taste plays an important role. The delivery of TM plays important role in its stability, efficacy and patient acceptance. Whereas the conventional tables and capsules are the most common methods for TM formulations, new and innovative delivery systems are emerging to overcome the challenges with TM. Encapsulation techniques are one of the most innovative formulations for TMs. Encapsulation aids in transforming TM into more viable medicines. Encapsulation helps to improve the bioavailability of poorly water-soluble drugs, increase the stability of labile ingredients and mask the taste of unpleasant medicine. Few attempts are reported for scaling up the encapsulation processes of TMs. Through such innovative formulations and the successful scale up processes, TM will have more potential for treating diseases.

BIOSYNTHETIC STUDIES OF LYSINE DERIVED ALKALOIDS

Amit Jaisi, PhD
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Our group is actively involved in the elucidation of lysine derived alkaloids especially the Huperzine A pathway in lycopodiaceae (Xu et al. 2017; 2018 and Yang et al. 2017; 2019). However, due to the evolutionary complexity and lack of the invitro culture system of the lycopodiaceae plants the search for gene discovery has been a major hurdles to elucidate the Huperzine A pathway. Hence, the comparative study using integrated approach of the pants producing lysine derived alkaloids might further assist to shade lights understanding the mechanistic basis for the emergence and diversification of specialized metabolic enzymes across this plant kingdom. We employed three approaches that involves establishment of in vitro culture and elicitation mimicking biotic and abiotic stress, MALDI-imaging, and transcriptome analysis.

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OPPORTUNITIES AND CHALLENGES IN CONDUCTING TRADITIONAL MEDICINE RESEARCH: ETHICAL PERSPECTIVES

Dr. Dhanusha Thambavita

Senior Lecturer in Pharmacy,Department of Pharmacology, Faculty of Medicine,

University of Colombo, Colombo, Sri Lanka.

Abstract:

Traditional medicines represent the whole body of the knowledge, skills, and practices attached to several different indigenous cultures used in the prevention and management of physical and mental illnesses worldwide. Traditional medicines include not just herbal medicines but mainly therapeutic modalities as well as therapeutic procedures.

The remedies contained in traditional pharmacopeias have been time-tested for their efficacy and safety and some of them have been tested more recently through controlled studies according to Western scientific approaches. Most of the published research on traditional medicine are published on plants and extraction of one or several compounds from a plant with evaluation for safety and efficacy. They are mainly related to plant pharmacology without further effort in developing drugs. Unfortunately, many of these studies lack direction, commonality of purpose, and thread in the diseases covered. Already published research studies and ongoing studies have very little done on "Traditional Medicine".

Not only do traditional medicines bear the potential of providing relatively inexpensive time-tested drugs for many diseases but they also provide starting materials for future therapeutics. Exploiting this potential of traditional medicines requires hard evidence for efficacy based on a scientific approach. Modern research ethics challenge the aspects in traditional medicines mainly on unreasonable harvesting on natural medicinal plants, ethical accountability of researchers towards indigenous knowledge holders, and the credibility of traditional medicines as a complementary and alternative mode of treatment.

The ethical framework for traditional medicine research should be broadly based on values such as care, respect, honesty, and fairness. Steps to be taken to ensure that the patients are treated with care and respect, and they are informed about potential side effects of traditional medicines given to them and about the limited availability of data on the trial medicine. On the other hand, due to the vast number of plant-based medicines, the acquisition of pharmacological information and the potential for drug interactions pose a major challenge in conducting traditional medicine research. These challenges bring the need for more collaborations, and harmonized strategies to enhance ethical standards in traditional medicine research.

A WALKTHROUGH ON PHILIPPINE MEDICINAL PLANTS

Maria Laarni M. Salcedo,Ph.D.
Camarines Sur Polytechnic Colleges

Abstract

The Philippines is teeming with diverse flora, with the thousands of the identified medicinal plants, there were 120 medicinal plants which have been scientifically validated for safety and efficacy. The Department of Health (DOH) and Philippine Institute for Traditional and Alternative Health Care (PITAHC) approved and recommended 10 medicinal plants since 1997.

Herbal medicines include herbs, herbal materials, herbal preparations and finished herbal products, that contain as active ingredients part of plants, or other plant materials or combinations (WHO). These are used by the indigenous people for centuries and play a large role in the Philippine healthcare system. There had been evidenced-based research conducted as proof that these have medicinal values to relieve different types of conditions. The government is supportive on the development of these medicines through the Traditional and Alternative Medicine Act (TAMA) Law of 1997 which created the Philippine Institute of Traditional and Alternative Health Care. It is mandated to plan and carry out research and development activities and to transfer economically viable technologies for the development of Philippine traditional and alternative health care. The National Integrated Research Program of the Philippines (NIRPROMP) led the conduct of the initial studies of the Ten Medicinal Plants. Research yields the efficacy and safety of the Philippine medicinal plants.

TRADITIONAL PRACTICES FOR MOTHERS AND NEWBORNS DURING PREGNANCY, BIRTH AND PUERPERIUM IN DIFFERENT REGIONS OF TURKEY

Mesude Uluşen*

Asst.Prof, PhD.

Amasya University Faculty of health Sciences,
Department of Midwifery

Abstract:

Individual health behaviours are embedded in patterns of cultural exchanges and are usually passed down from generation to generation. The traditional methods of the society regarding their beliefs, traditions, values and cultures are the methods that are passed on from ear to ear. As we move from developed societies and regions to underdeveloped societies and regions, the forms of treatment change and become more irrational. In regions where education and health services cannot be reached adequately, it is seen that people do their own medicine when necessary.

The concept of health, illness and care are integral parts of general cultural values, beliefs and practices. Cultural values, such as attitudes and beliefs, affect the lifestyles, and therefore health conditions, of individuals. In culture, there are many traditional beliefs and practices that individuals do to perceive health and illness, to protect health and to get rid of diseases.

Traditional practices in childbirth are widely used in the world and in our country and continue to be effective today. Anatolia has a rich traditional medicine culture as it has many civilizations and cultures. The traditions related to health that exist today are a synthesis of a very colorful and rich culture revealed by the civilizations settled in Anatolia. The fact that our country has experienced great migrations due to its geopolitical position, being a region where various races and cultures are fused, and being under the influence of great civilizations has created a wealth of traditions related to health.

Today, many traditional beliefs and practices influence life from birth to death. Although some of them vary from region to region, family to family and person to person, they are still of great

importance. Health workers should recognise people's reactions, attitudes and cultural values towards health services in order to provide an effective health service.

Turkey is located in a geography that shows great diversity in terms of population and cultural structure. There are great differences between 'contemporary and traditional' population groups. Although there are rural-urban, east-west differences in different regions of Turkey, different traditional practices are maintained.

There are not many studies on traditional birthing practices. At the same time, different applications are made in different regions of Turkey. The information obtained from studies on traditional practices in obstetrics is presented by classifying them as findings related to pregnancy, birth, puerperium and infant care.

TRADITIONAL MEDICINE IN MODERN ERA FOR CURE

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Abstract

Traditional medicine is the oldest form of health care in the world and is used in the prevention, and treatment of physical and mental illnesses. Some forms of traditional medicine like traditional Chinese medicine, Ayurveda, Kampo, traditional Korean medicine, and Unani have been widely practiced in the world. It has strong cultural and religious background in Nepal as well. Ayurveda is an ancient medical system and is indigenous in Nepal with deep roots. Besides Ayurveda, Naturopath, Tibetan medicine, homeopathy and Unani are the complementary and the alternative health - care practices in Nepal. In addition to this, Nepal is one of the major suppliers of wild medicinal plants in the world. Yarsagumba, Chiraito, Dalchini, Timur, panchaule, Jatamansi and Amala are some of the major traditional herbal medicine exported from here. They have a wide range of diversity of multi-dimensional chemical structures and pharmacological activities. Therefore, they are considered as huge source of novel drugs in modern era for cure. Artemisinin, paclitaxel, vincristine, vinblastine, morphine and atropin are some of the selected modern drugs that are elucidated from traditional medicine. Recently, the use of herbal medicines as a dietary supplement and immunostimulant are gaining momentum in the pharmaceutical market. Therefore, Herbal medicines' standardization, quality control and clinical trials should be mandatory in order to ensure the safe and effective use of traditional herbal medicines. Moreover, herbal pharmacovigilance program should be established for the detection, assessment, understanding, prevention and documentation of the adverse drug events caused by the traditional herbal medicines. It is concluded that collaborative research in modern and traditional medicines are needed to satisfy the health care needs in this modern era.

Key word: Ayurveda, Herbal pharmacovigilance, Traditional medicines,

Drug Discovery from Natural Medicinal Plants using Supercritical Fluid Technology

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Abstract

Natural medicinal plants are significant sources of natural products in the form of lead compounds or standardized extracts which pave the way for innovative drug discovery and development. Plant extracts commonly contain a variety of biologically active constituents with varying polarities, and separating them remains a significant challenge for identification and characterization. Some of the compounds are very sensitive to heat, air and light thus it's hard to retain the quality of their antioxidant properties during conventional extraction process. The conventional technique for the extraction of plant materials has various drawbacks including poor extraction yields, the use of a large number of solvents, longer extraction durations, and the residues of harmful organic solvents in the final products. Whereas, supercritical fluid extraction (SFE) method is superior to other conventional methods for the recovery of lead drug molecules due to it's unique and friendly operating conditions such as pressure, temperature and other extraction parameters. SFE is based on fluid properties such as viscosity, density, diffusivity, and dielectric constant, as well as the ability to change unique operating conditions such as pressure and temperature to achieve a supercritical fluid and the final product can be easily changed, making this technology a good option for the recovery of various types of compounds with high selectivity.

Natural medicinal plants such as *Clinacanthus nutans*, *Mimosa Pudica*, *Phaleria macrocarpa*, *Stereopermum fimbriatum* were extracted using SFE method and compared with the yield of conventional method. The SFE extracts of the natural medicinal plants exhibited the highest bioactivity, optimum scoring with more identified drug compounds and less toxic compared to the extracts of the conventional methods. The potential use of medicinal plants for therapeutic purposes, the selection of extraction techniques are a crucial and important steps to discover the desired drugs.

Keywords: Medicinal plant, Drug discovery, Conventional extraction method, Supercritical fluid extraction medthod, Bioactivity.

Academic Paper Presentation

ICTM2022

AP-01 To AP-18

AP - 01

Effects of Ethanolic Extracts of Datura Metel Parts on Lipid Profile And Weight Change Of Male Wister Albino Rats

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Abstract

This study was carried out to investigate the effect of ethanolic extract of Datura metel on blood lipid profile and weight change of male albino rats within a period of seven days. 28 albino rats (8 weeks old) weighing between 66g to 84g were purchased and randomly distributed into 7 groups. The control group received normal saline, groups 2 and 3 received leaf extract of Datura metel at low and high doses respectively, while groups 4 and 5 received seed extract at low and high doses, groups 6 and 7 received whole fruit extract also at low and high doses respectively. The doses were administered orally for seven days, while the animals were sacrificed on the 8th day, and blood samples were collected. There was a general decreasing trend in the mean values of low-density lipoprotein levels across all the groups, while group 7 with lowest value was significantly lower ($p< 0.05$) than other treatments. There were no significant differences ($p> 0.05$) in triglyceride levels across the groups. While group 5 and 6 of total cholesterol had higher significant differences than other groups with the values of 2.05 ± 0.06 mmol/L and 2.13 ± 0.10 mmol/L respectively. The final body weight of the rats increased significantly ($p<0.05$) after administration of the extract. The study showed that the body weight reduced with increase in concentration of the extract. Weight gain of rats administered 300 mg/1000g bw of leaf (88.75 ± 8.46) and seed (88.50 ± 5.20) were significantly higher than those administered 600 mg/1000g bw of leaf (78.50 ± 7.33) and seed (71.25 ± 3.86) respectively, while there was no significant changes in the low and high doses of whole fruit (75.00 ± 8.52). This study suggests that ethanolic extract of Datura metel parts possess active ingredients that may be capable of improving the blood lipid profile and this might be useful in the management of cardiovascular diseases.

Keywords: Datura metel, lipid profile, lipoprotein, weight.

AP-02

Analytical Methodology to Determine the Digestible and Non-Digestible Polysaccharides from the Linum Usitatissimum Linn (Flax Seeds)

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Abstract

Flax seed was used to conduct this research work, which aims to find out the simple method to determine the digestible & non- digestible polysaccharides. Non reducing oligosaccharides which resists the hydrolytic cleavage in acidic environment of stomach are considered to be non digestible. These non-digestible polysaccharides or oligosaccharides when enter into intestine are consumed as food by beneficial gut flora. Various methods are available for detection of Prebiotics for e.g. Pulsed-Field Gel Electrophoresis, disk diffusion method etc but these methods require more sensitive and costly instruments, hence simple method was needed to be developed for detection of non-reducing polysaccharides. So in present research work it was attempt to come up with simple preliminary cost effective methodology for detection of prebiotic property of the substance. The developed method is based on the principle of colorimetry.

Keywords: - Flax seed, digestible, no digestible, prebiotic, linum usitatissimum

AP-03

An Experimental Evaluation of "Jatiphala Kosha" (Pericarp of Myristica Fragrans Houtt.) For Its Madhumehaghna (Anti-Diabetic) Effect In Animal Model.

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Abstract

World is grappling with diabetes epidemic according to IDF. Pericarp of Myristica fragrans Houtt. is used traditionally as a home remedy by local people for treatment of Madhumeha (Diabetes). The aim of present study was to experimentally evaluate anti-diabetic activity of pericarp scientifically by use of cold infusion (shitakashaya) in a diabetic animal model.

Materials and Methods: In anti-diabetic study (ADS), Alloxan (130 mg/Kg.b.wgt) induced diabetic rats were administered with Shitakashaya of Jatiphala kosha (SJK) at three different dosage i.e. half (HD – 0.9 ml), therapeutic (TD – 1.8 ml) and double (DD-3.6 ml) dose per 200 gm of rat respectively and standard drug Glibenclamide (0.5 mg/Kg.b.wgt) for 20 days. Blood sugar level (BSL) was analyzed on day 0, 1, 2, 5, 10, 15 and 20 for long term ADS and at time interval 0, 1, 2, 4 and 6 hour for short term study by using Glucometer. Hepatic and renal functions were screened. Anti-oxidant enzymes, Glutathione, Lipid peroxidation and Alpha-Amylase levels was analyzed using commercial kits. Oral glucose tolerance test (OGTT) was performed.

Results: TD and DD dose of SJK was significantly effective as standard drug in reducing BSL. SJK restored the increase hepatic and renal parameters, lipid peroxidation and alpha amylase levels to normal levels, supporting anti-diabetic effect of the study drug. Levels of antioxidant enzymes and glutathione were increased as compared to control diabetic rats. OGTT results showed better glucose tolerance in SJK treated group. No acute toxicity was seen. Qualitative analysis of extracts shows presence of pectin, tannins.

Conclusion: Jatiphala Kosha Shitakashaya is therapeutically effective in Alloxan induced diabetes model. It possess anti-diabetic activity along with antioxidant effect.

Key words: Myristica fragrans pericarp, Diabetes mellitus, Alloxan, Shitakashaya.

AP-04

Revisiting Terminalia Arjuna - An Ancient Cardiovascular Drug

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Abstract

Medicinal plants play an essential role in health care and are the major raw materials for both traditional and conventional medicine preparations; still most of the people choose herbal medicines than conventional medicines. They expanded attention due to their effectiveness, lack of current medical alternatives, increasing cost of modern medicines and cultural preferences. Around the world, the traditional knowledge system has expanded chief importance in perspective with protection, sustainable growth and search for new utilization patterns of plant resources. In the earliest India, medicinal plants were used to prevent different critical diseases and they would be the best source to obtain a variety of drugs. The Indian traditional medicine is based on various systems such as Ayurveda, Siddha, Unanai, etc. In recent years there has been an increasing awareness about the importance of medicinal plants. The aim of this review is to summarize the information and knowledge about the T. arjuna and updating available research data for clinical studies.

Keywords: Antioxidant; Cardiovascular disorders; Coronary prevention; Flavonoids; Terminalia arjuna.

AP-05

Efficacy of Shodhanirvapan Lepa in Managment of Vranashopha (Cellulitis) - A Case Study.

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Dr. Shilpa Badhe, Guide and Professor from department of Shalyatantra, SMBT Ayurveda College and Hospital and Research Centre, Dhamangoan, Igatpuri, Nashik (Maharashtra).

Abstract

Acharya sushruta has mentioned a detail description of inflammatory swelling under the heading of Vranashopha. According to the clinical features of vranashopha it can be correlated with cellulitis. Cellulitis can cause mild discomfort to severe toxaemia, which can lead to death. In such condition, only systemic drugs are helpful to eradicate the acute problem. As per ayurveda saptopkrama are metioned treatment of vranashopha.Lepan is the best therapy because of it's helpful in acute stage, safely and high efficacy in the managment of vranashopha. So we can treat the disease with properties like deepana, pachana, raktaprasadan. In this way we hypothesize that drugs, which could reduce local swelling, tissue damage and helpful in managment of inflammation

Keywords:- Vranashopha, Cellulitis, Lepan, Deepan, Pachan, Raktaprasadan, Shophanirvapan lep, Saptopkram.

AP-06

Global Challenges and Acceptance for Traditional Herbs

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Abstract

Traditional and complementary medicine is an important, but often overlooked, health resource. There are numerous global challenges for the use of traditional medicines, including universal h ealth coverage, integration with all "pathies", research and development, proper regulation and documentation, policy formulation, and policy implementation in various countries. Internationally The World Health Organization (WHO) provide platform and delivered "Global Report on Traditional and Complementary Medicines 2019", which examines global pr ogress over the last two decades and is based on contributions from 179 WHO member countrie s.The World Health Organization (WHO) is halfway through implementing the "WHO tradition al medicine strategy 2014-2023".

Along with WHO's efforts, India as a country has made significant progress in the acceptance of traditional herbs. Remarkable progress in this segment by Ministry of - AYUSH by providing strong support to the traditional medicines in National level programs in Covid pandemic. In special case study in Amdavad Municipal Corporation driven SVP Hospital by AYUSH doctors, where 5000 ward patients and 500 ICU patients were treated with Ayurvedic "Herbs" and "Medicine" along with allopathic line of treatment. The result enlighten the new era of integrated medicine role in pandemic. It resulted exposure of Ayurvedic treatment as adjunctive might be more effective in mild- early stage Covid-19 patients as compared to standalone conventio nal care. For strong evidence base data we review one more paper in silico docking analysis for potential phytochemical in two herbs in comparison with Remedesvir in SARS covid-19 patients. All these segment are suggestive of more phytochemical analysis with proper documentation and integration with global data in "Traditional Herbs and Medicine"

Key words: Traditional and complementary medicine (T&CM), covid 19,AYUSH.

AP-07

Traditional Method For Anukta Dravya (Undocumented Plant) Identification

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Abstract:

The knowledge about medicinally useful plants is scientifically documented, and systematically organized in Ayurveda Samhitas, Nighantus and other texts. Due to innumerability of plant species, many plant drugs were not recorded in classical treatises though they have the medicinal properties. Therefore, no any classical herbal pharmacopeia is available which enumerates all the medicinal plants. Such drugs are being utilized and practiced by the many ethnic groups. Further, many herbal drugs were introduced in India after intrusion of many other countries. Such undocumented and newly introduced herbs are not evaluated scientifically till date. Undocumented or unexplored drugs are known as Anukta Dravya (extra pharmacopeial drugs). Therefore, efforts have been made to compile the scattered references which explain the basic concepts for determination of Anukta Dravya through classical Ayurvedic method.

Keyword: Traditional medicine, Folk lore, Ayurvedic text, Anukta dravya (Undocumented Plant)

AP-08

CRISPR-CAS9 Technology Mechanism- The New Gene Editing Tool for Disease Prevention & Treatment

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Abstract:

Genome editing (also called gene editing) is a group of technologies that give scientists the ability to change an organism's DNA. These technologies allow genetic material to be added, removed, or altered at particular locations in the genome. Several approaches to genome editing have been developed. A recent one is known as CRISPR-Cas9, which is short for clustered regularly interspaced short palindromic repeats and CRISPR-associated protein 9. The CRISPR-Cas9 system has generated a lot of excitement in the scientific community because it is faster, cheaper, more accurate, and more efficient than other existing genome editing methods. Genome editing is of great interest in the prevention and treatment of human diseases. Currently, most research on genome editing is done to understand diseases using cells and animal models. Scientists are still working to determine whether this approach is safe and effective for use in people. It is being explored in research on a wide variety of diseases, including single-gene disorders such as cystic fibrosis, hemophilia, and sickle cell disease. It also holds promise for the treatment and prevention of more complex diseases, such as cancer, heart disease, mental illness, and human immunodeficiency virus (HIV) infection and now even Covid-19. This e-oral presentation throws light on this technology.

AP-09

EFFECTS OF ETHANOLIC EXTRACTS OF Datura metel PARTS ON LIPID PROFILE AND WEIGHT CHANGE OF MALE WISTER ALBINO RATS

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Abstract

This study was carried out to investigate the effect of ethanolic extract of Datura metel on blood lipid profile and weight change of male albino rats within a period of seven days. 28 albino rats (8 weeks old) weighing between 66g to 84g were purchased and randomly distributed into 7 groups. The control group received normal saline, groups 2 and 3 received leaf extract of Datura metel at low and high doses respectively, while groups 4 and 5 received seed extract at low and high doses, groups 6 and 7 received whole fruit extract also at low and high doses respectively. The doses were administered orally for seven days, while the animals were sacrificed on the 8th day, and blood samples were collected. There was a general decreasing trend in the mean values of low-density lipoprotein levels across all the groups, while group 7 with lowest value was significantly lower ($p< 0.05$) than other treatments. There were no significant differences ($p> 0.05$) in triglyceride levels across the groups. While group 5 and 6 of total cholesterol had higher significant differences than other groups with the values of 2.05 ± 0.06 mmol/L and 2.13 ± 0.10 mmol/L respectively. The final body weight of the rats increased significantly ($p<0.05$) after administration of the extract. The study showed that the body weight reduced with increase in concentration of the extract. Weight gain of rats administered 300 mg/1000g bw of leaf (88.75 ± 8.46) and seed (88.50 ± 5.20) were significantly higher than those administered 600 mg/1000g bw of leaf (78.50 ± 7.33) and seed (71.25 ± 3.86) respectively, while there was no significant changes in the low and high doses of whole fruit (75.00 ± 8.52). This study suggests that ethanolic extract of Datura metel parts possess active ingredients that may be capable of improving the blood lipid profile and this might be useful in the management of cardiovascular diseases.

Keywords: Datura metel, lipid profile, lipoprotein, weight.

AP -10

Design, Synthesis, Molecular Docking and in vitro Biological Evaluation of Benzamide-sulfonamidederivatives Derivatives as Glucokinase Activators

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Abstract

Glucokinase (GK) is a cytoplasmic enzyme that metabolizes glucose to glucose-6-phosphate andsupports adjusting blood glucose levels within the normal range in humans. In pancreatic β-cells, it plays aleading role in governing the glucose-stimulated secretion of insulin, and in liver hepatocyte cells, it controls themetabolism of carbohydrates. GK acts as a promising drug target for treating patients with type 2 diabetesmellitus (T2DM). Objectives: The present work has been designed to discover some novel substitutedbenzamide derivatives. Method: This work involved designing novel benzamide derivatives and their screeningby docking studies to determine the binding interactions for the best-fit conformations in the binding site of theGK enzyme. Based on the results of docking studies, the selected molecules were synthesized and tested for invitro GK enzyme assay. The structures of newly synthesized products were confirmed by IR, NMR, and massspectroscopy. Results: Amongst the designed derivatives, compounds 4c, 4d, 4e, 5h, 5j, 5l, 5m, 5n, 5p, and 5rhave shown better binding energy than the native ligand present in the enzyme structure. The synthesizedcompounds were subjected to in vitro GK enzyme assay. Out of all, compounds 4c, 4d, 5h, 5l, and 5n showedmore GK activation than control. Conclusion: From the present results, we have concluded that the synthesizedderivatives can activate the human GK enzyme effectively, which can be helpful in the treatment of T2DM.AP-10

AP -11

Formula Variation of Hand Body Lotion Extract Of Lime Peel (Citrus Aurantifolia) As An Antioxidant

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Abstract

Lime (Citrus aurantifolia) was one of the herbal plants were often used for cooking ingredientsand also as a medicine. Lime had chemical contains such as flavonoids, and saponins could have function as antioxidants. The purpose of this study was to determine lime peel extract could be formulated in hand body lotion preparation and determine the antioxidant activity value of lime peel extract hand body lotion preparation. The method used in extraction was maceration using96% ethanol solvent with a yield value of 11.6%. Test of flavonoid levels using UV-Vis spectrophotometry with quercetin standard obtained 1.13%. Evaluation of stability of handbodylotion preparation included organoleptic test, homogeneity test, pH test, spreadibility test,adhesivity test and irritation test. Based on the results of the study, a good formula was obtained0,1% and antioxidant activity was tested on the lime peel extract handbody lotion preparation0.1% using the DPPH method and an IC 50 value of 159.91 ppm was obtained.

Keywords: Lime peel (Citrus aurantifolia), Toxicity, Artemia salina Leach, BSLT.

AP -12

The Test of Hair Tonic of Ethanol Extraction of Banana Peel (Musa X Paradisiaca L.) Activity as a Hair Growth Stimulant in Rabbits

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Abstract

Hair growth stimulant supplies (hair tonics) were cosmetic supplies used to enhance hair growthor stimulate hair loss and baldness. The purpose of this study was to make a hair tonic formulationfrom the ethanol extract of banana peel and its effect on hair growth in order to the hair lengthand hair weight. Hair tonic was made with different concentrations of banana peel extract, in 1%,2% and 4%. This test was applied to rabbit skin every day for 21 days and hair length wasmeasured on day 8, 15 and 22 using calipers while hair weight was measured on day 22 byshaving the growing hair and then weighing it. The test results showed that the best formula whichcould increase hair growth was a formula containing 4% ethanol extract of banana peels. Thehair growth enhancement activity in this formula was not significantly different from the positivecontrol. Hair tonic supplies containing 1%, 2% and 4% of banana peel extracts showed goodphysical stability at low and room temperature storage.

Keywords: hair growth activity, hair tonic, banana peel.

AP -13

The Effect Of Pomegranate Extract (Punica Granatum L.) On Albumin Levels and Liver Histology Of Male Mice Induced By Paracetamol

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Abstract

Pomegranates had antioxidants such as flavonoids, thus it was assumed to have ahepatoprotective effect. This study aimed to investigate the effect of pomegranate extract on serumalbumin levels and histopathological features of male rat liver induced by paracetamol.Pomegranate extract was carried out by the percolation method using ethyl acetate solvent. Some25 male sprague dawley rats were randomly divided into 5 groups. Pomegranate extract (200 mg/ kg body weight and 400 mg / kg body weight) and sylimarin (100 mg / kg body weight) werecarried out every day for 15 days, paracetamol was induced 2 hours after administration ofpomegranate extract. The parameters measured were serum albumin level and liverhistopathology to assess the effect of pomegranate extract on liver damage caused byparacetamol. The results showed that pomegranate extract (200 mg/kg BB dan 400 mg/kg BB)showed that the activity of serum albumin levels was statistically significant (p <0.05) to negativecontrols and inhibit the damage of liver tissue histopathology of male rats induced byparacetamol. Pomegranate extract showed the effect of hepatoprotector on liver induced byparacetamol.

Keywords : Pomegranate, Hepatoprotective, Serum Albumin Levels, Histopathological

Overview of the Liver, Paracetamol

AP -14

The Formulation of the Peel off Gel Mask Preparation of Shallot Peel Extract (Allium Cepa L.) As An Antioxidant

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Abstract

Shallot peel was known to contain secondary metabolites that hadthe potential as antioxidants. This study aimed to determine whether shallot peelextract (Allium cepa L.) could be formulated into peel off gel mask preparationand to determine the antioxidant activity of the peel off gel mask preparation ofshallot peel extract (Allium cepa L.). The method of this research was theextraction of shallot peelusing the maceration method with methanol solvent. Theextraction results obtained were made into a peel off gel mask preparation andtested for antioxidant activity with DPPH. Extraction results obtained yield3,036%. The results of the evaluation of the peel off gel mask preparationsobtained that the peeoff gel mask that met the requirements and was stable wasformulation II with a concentration of 1% shallot peel extract. The results of theantioxidant activity test of the peel off gel mask obtained lC 50 of 29,97%ppm.Theantioxidant activity of the peel off gel mask shallot peel extract was included inthe category of very strong antioxidant..

Keywords: Shallot peel (Allium cepa L.), antioxidant, peel off gel mask

AP -15

Antibacterial Activity Of Papaya Leaves (Carica Papaya L.) And Guava Leaves(Psidium Guajava L.) Extract Combination Against Escherichia Coli And Staphylococcus Aureus

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Abstract

Papaya leaves (Carica papaya L.) were traditionally used by society in treating skin diseasessuch as acne and diarrhea. Papaya leaves (PsidiumguajavaL.) contained active compounds such ascarotain alkaloids, antraquinone, saponins, steroids, tannins, and triterpenoids. Guava leaveshad the ability to cure acute and chronic diarrhea. Guava leaves contained secondary metabolitessuch as flavonoids, alkaloids, polyphenols, and tannins.This study aimed to determine theantibacterial activity of a combination of papaya leaves and guava leaves extract againstEscherichia coli and Staphylococcus aureus. The concentration of the extract combination usedwas 20%, 15%, 10%, and 5% with the antibiotic ciprofloxacin as a positive control and aquadestas a negative control. The results showed that the combination of papaya leaves and guava leavesextract (1:3) was effective in killing bacteria Escherichia coli and Staphylococcus aureus at aconcentration of 20% with an average diameter of 12.50 mm and 12.41 mm. ANOVA test resultwith confidence level of 95% obtained p value = 0,000 (p<0,05) to conclude that there was asignificant influence between the variation of combination and concentration of papaya leavesand guava leaves extract against Escherichia coli bacteria and Staphylococcus aureus. Thisstudy concluded that combination of papaya leaves and guava leaves extract (1:3) withconcentration of 20% had an antibacterial activity against Escherichia coli and Staphylococcusaureus.

Keywords:Carica papaya L., Psidiumguajava L., Escherichia coli, Stapylococcusaureus, antibacterial

AP -16

Pharmacological Screening of Saraca asoca plant extract.

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Abstract

Objective: Saraca asoca (Cesalpiniaceae) is a plant with a range of ethnic medical purposes and is commonly planted for its edible bark throughout Asia, Africa, and the Caribbean. The current study will use ethanolic and aqueous extracts to test the antiulcer efficacy of a portion of the plant. **Materials and Methods:** A portion of the plant powder was extracted with ethanol (95%) and water, then submitted to phytochemical screening to detect distinct phytoconstituents using Soxhlet extraction. The OECD up-and-down approach of recommendations No.425 was used to conduct Ld50 tests for both (ethanolic and aqueous) extracts up to the dosage level of 2 g/kg. The antiulcer activity was tested in rats utilising pylorus ligation ulcer models. Statistical analysis was performed using one-way analysis of variance (ANOVA) followed by Dunnett's test. $P < 0.05$ was considered statistically significant. **Results:** In both the ethanolic and aqueous extracts of S. asoca, preliminary phytochemical analyses indicated the presence of saponins, sterols, mucilage, glycosides, and alkaloids, as well as steroidal saponins. Up to the maximal dosage level of 2 g/kg, no mortality was seen with aqueous and ethanolic extracts. Except for the low dose of 100 mg/kg, both extracts considerably decreased the number of ulcers at the medium and high doses, respectively.

Conclusion:

Based on the current experimental findings of both pharmacological and biochemical parameters, it is concluded that the doses of 200 mg/kg and 400 mg/kg aqueous extract of S. asoca have potentially useful anti-ulcer activity because they produce a positive ulcer score and ulcer index as well as significant ulcer inhibition.

Key words: Anti-ulcer, pylorus ligation, Saraca asoca.

AP -17

In-vitro Antioxidant study of Some Medicinal plant

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Abstract

Highly reactive oxygen species, often known as free radicals, are capable of causing oxidative damage to the human body. Antioxidants are substances that stop reactive species from attacking the body and lessen the risk of illness. Dendrocalamus strictus and Dolichandrone falcata are both used to treat various diseases in humans, and their effects are nearly identical.

Key Words: Dendrocalamus strictus, Dolichandrone falcata Antioxidant activity, DPPH, Free Radical Scavenging activity, Hydrogen peroxide, Reducing ability.

AP -18

Rp-Hplc Analytical Method Development And Validation Of Obeticholic Acid In Bulk And Markted Formulation

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Abstract

The present investigation was aimed to develop new analytical RP- HPLC method forquantification of Obeticholic Acid in its bulk and marketed formulation. Material andMethod- Liquid chromatography method was carried on C18 column, mobile phase isprepared by using 0.1% Orthophosporic acid and Acetonitrile in ratio 65:35. Flow rate was1.0 mL/min and injection volume was 10ml. Absorbance maxima of drug was 210 nm. Theretention time was found to be 2.80 min. Result- Above method was found to be accurate andlinear in the range of 2.4- 14 mg/ml with correlation coefficient of 0.999. The percentageRSD for presion was found to be less than 1.8% and mean 100.05%. All the validationparameters were statistically validated according to ICH guidelines and were found to bewithin acceptance criteria. Conclusion- This method was found to be easier, precise, specific,accurate and robust. This method of HPLC will be successfully employed for the analysis of Obeticholic acid.

Keywords: Acetonitrile, Obeticholic acid, RP-HPLC, Validation

ACADEMICIAN POSTER PRESENTATION CODE APO-01 TO APO-12

APO-01

Pomegranate A Traditional Medicine for Different Diseases

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Abstract

Beside use of pomegranate as a fruit, it also has many medicinal properties. Whole fruit rinds bark and roots are used for the treatment of many diseases. The pomegranate seed oil shows inhibitory effect on skin and breast cancers. The extracts of rinds have been shown as bactericidal, antiviral and antitumor effect. The peel extract of pomegranate shows antioxidant activity and due to the antioxidant property of pomegranate it is used in the treatment of Acquired Immune Deficiency Syndrome (AIDS). The extract obtained from several parts of pomegranate shows different pharmacological actions like prevention of infection, inflammation and cancer. Several infusions and decoctions of the plant flowers have been used in the traditional medicine to treat simple diarrhea, vaginal discharge. The extract of pomegranate has been used to relive inflammation of the pancreas. The decoction of fruit helpful in the treatment of diarrhea, dysentery and stomach disorders. Pomegranate helps to prevent heart diseases, heart attacks and strokes. Pomegranate have the potential to thin the blood, increase blood flow to the heart, reduce blood pressure, reduce plaque in the arteries and reduce bad cholesterol while increasing good cholesterol.

Conclusion

Through the review article it has been proven that pomegranate and its different parts are having wild range of pharmacological action against various diseases. The rich bioactive compounds of pomegranate make it highly nutritious and desirable fruit crop. Pomegranate have wild- spectrum of health benefits.

APO-02

Title – Traditional medicinal use of langali (Gloriosa superba) in view of oxytocic activity

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Abstract

Plant derived products have some properties that they have been used as medicine since anicient time in various forms . Gloriosa superba is alkaloid rich plant and has been used as abortificient, to induce labour, to enhace expulsion of placenta in traditional Indian system of medicine. Gloriosa superba is a glorious herbaceous climber with underground tuberous rhizome found throughout India .This plant is poisonous, toxic enough to cause human fatalities if ingested. It contains alkaloids such as colchicine and act as oxytocs -this provides justification for its use in traditional medicine. In parts of India extracts of the rhizome are applied topically during childbirth to reduce pain. Plant that produce uterine contractions have a similar action to that of oxytocics. Other than Ayurvedic classical texts, traditional birth attendants were mostly used this herb to induce labour and criminal abortion the aim of this article is to put forth the oxytocic effect of langali (Gloriosa superba) and importance of future research of gloriosa superba as oxytocic in a scientific way.

Keywords –Langali (Gloriosa superba), oxytocic activity

APO-03

Medicinal use of traditional herb Phyllanthus emblica -An Overview

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Abstract

Amala (Phyllanthus emblica) is a traditional plant plays vital role in preserving our health.Medicinal plants has very much importance in healthcare system of developing contries and potent source of medicament to heal various types of diseases in the world. IN these days of herbal products has become the foremost option for human all over world for curing the diseases without any side effect. In ayurveda it is called as Rasayana(rejuvenating and antiaging drug).It is the rich source of vitamin C Chemical composition of amla contains more than 80% of water. It also contains protein, carbohydrates, fiber, amino acids and minerals such as calcium, phosphorus, iron, niacin, carotene, thiamine, riboflavin etc. The chemical constituents present in the plant include tannins, gallic acid, ellagic acid, emblicol, phyllembin, lupeol, essential oil, fixed oil etc. Amla fruit is widely used as diuretic, laxative, liver tonic, antipyretic, hair tonic, ulcer preventive and for common cold, fever as alone or in combination with other plants. Research reports on amla reveals its analgesic, anti-tussive, cardioprotective, cytoprotective, immunomodulatory, chemopreventive, antioxidant, memory enhancing, anticancer, antidiabetic and some others properties. In this article, we review the morphology, distribution, nutritional value, chemical constituents, and medicinal uses of amla. Keywords: Phyllanthus emblica, Medicinal Herb, Chemical Constituents, Medicinal Uses of vitamin C.

APO-04

TRADITIONAL INDIAN HERB - HARIDRA (CURCUMA LONGA) – HISTORY AND ITS MEDICINAL IMPORTANCE

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Abstract

The use of HARIDRA (turmeric) dates back nearly 4000 years to the Vedic culture in India, where it was used as a culinary spice and had some religious significance. According to Sanskrit medical treatises and Ayurvedic and Unani systems, HARIDRA (turmeric) has a long history of medicinal use in South Asia. Susruta's Ayurvedic Compendium, dating back to 250 BC, recommends an ointment containing HARIDRA (turmeric) to relieve the effects of poisoned food. In Sanskrit, turmeric has at least 53 different names, including anestha (not offered for sacrifice or homa), bhadra (auspicious or lucky) etc. HARIDRA (Turmeric) is a common spice that comes from the root of Curcuma longa. It contains a chemical called curcumin, which might reduce swelling. HARIDRA (Turmeric) has a warm, bitter taste and is frequently used to flavor or color curry powders, mustards, butters, and cheeses. Because curcumin and other chemicals in turmeric might decrease swelling, it is often used to treat conditions that involve pain and inflammation. In Southeast Asia, HARIDRA (turmeric) is used not only as a principal spice but also as a component in religious ceremonies. Because of its brilliant yellow color, HARIDRA (turmeric) is also known as "Indian saffron."

APO-05

Quality control of Herbal drugs

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Asst. Professor. Agadtantra And V.V Dept.

Abstract

Quality control is the term that involves maintaining the quality and validity of manufactured products. It is mostly based on three pharmacopoeial terms i.e. 1. Identity. 2. Purity. 3. Content/ Assay. Also further we can use some parameters to check the above said terms like macroscopic examination. Microscopic examination. Determination of ash value. Determination of foreign matter. Determination of heavy metals. Determination of pesticides residue. Determination of microbial contamination and aflatoxin

APO-06

A Comparative Study to Evaluate Efficacy of Curcumin and Aloe Vera Gel along with Oral Physiotherapy in the Management of Oral Sub mucous Fibrosis: A Randomized Clinical Trial

Dr. Tejas Kulkarni1

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Abstract

Rationale (Hypothesis): The antioxidant, anti-inflammatory, immunomodulatory and ant tumorigenic properties of natural plant's extracts like aloe Vera and curcumin may produce beneficial therapeutic effects on OSMF patients and may lead to their symptomatic relief. Aim: to compare the efficacy of Curcumin with Aloe Vera gel when both the gel are supplemented along with oral physiotherapy in the management of OSMF. Materials and methods: A study of parallel group trial design, using simple randomization technique, was conducted on confirmed cases of OSMF. Patients were divided into two groups, one group (30 patients) was given curcumin gel (Cure next) and other group (30 patients) aloe Vera gel (Aloe Vera 100% relief) and each group was asked to do same oral physiotherapy exercises supplemental. Follow-up was done after 2, 4 and 6 weeks Result and conclusion: There was highly statistically significant improvement with burning sensation in group B Hence, we can advocate these drugs as adjuvant treatment in addition to the recommended treatment.

APO-07

Traditional Plant Identification Method in Today's Era

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Abstract:

Traditional medicine refers to health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and prevent illnesses or maintain well-being. For traditional medicine proper plant identification is must. Importance of namarupavigyana is a basic need of practitioners to identify the exact drug or plant, they should be very selective and accurate to about the plant nama and rupa. In this universe every object has a specific name through which it is identified. Without this we can't introduce anything to anybody. Nama and rupa are linked with each other like word and its meaning in order to distinguish objects. The synonymous word in ayurveda for drug identification is "Namarupagyana" which includes name and features and properties and action of the drug.

Keyword: Traditional medicine, Nomenclature, Namarupavigyan

APO-08

A REVIEW OF PHARMACOLOGICAL PROPERTIES OF TWO COMMONLY USED INDIAN SPICES 1.MIRI(PIPER NIGRUM) 2.DALCHINI(CINNAMOMUM ZELYLANICUM)

Pramod Kharkar,
SMBT Ayurveda College, Nashik.

Introduction: Indian diet-Indian heritage of recipes are designed such a scientific way towards the health only along with taste also.

Aim : To review pharmacological Properties of Miri(Piper Nigrum)& Dalchini(Cinnamomum Zelylanicum).

Materials &Methods: In this Presentation a review has been done two commonly used Indian spices mentioned below. For review all two major treatises of Ayurveda, Nighantu,Texts along with published research papers has been studied.
Review of Literature:

Name	Rasa(Taste)	Vipaka(Post Digestive Property)	Virya(Potency) Guna(Properties)	Chief Chemical Constituents
MIRI(Piper nigrum)	Katu(Spicy)	Katu(Spicy)	Ushna(Hot)	Piperine 5.9%
Dalchini(Cinnamomum Zelylanicum)	Katu(Spicy) Madhur(Sweet)	Madhura(Sweet)	Ushna(Hot)	Tannic

Name	Chief Ayurvedic Pharmacological Properties	Chief Pharmacological Properties as per Modern Research
Piper Nigrum	Pacifies Kapha & vata, Vitiates Pitta, Improves Appetite Digestion, Enhance Liver Function, Effective on skin disorders.	Antioxidant,Antifungal,Antiamoebic,Anti-asthamatic,Anti-Diabetic,Immunomodulatory activities,Anti-Bacterial ,Anti-Protozoal
Cinnamomum Zelylanicum	Pacifies Vata, Pitta, Kapha. Relives abdominal Heaviness, Pain & Bulging. Improves Taste & Appetite, Tone up Heart muscle.	Anti-Microbial, Therapeutic effect on cardiovascular disorder, Diabetes & Cancer, Antioxidant, Antifungal, Antiviral, Insecticidal activities

Conclusion: Miri & Dalchini are beneficial, preventive & cure off many diseases as their Anti-Bacterial, Anti- Fungal, Anti-Inflammatory, Anti-Cancer,Anti-Oxidant medicinal Properties. So used Regularly in Indian Recipes

APO-09

GREEN SYNTHESIS OF SILVER NANOPARTICLES USING CORIANDER SATIVUM EXTRACT AND EVALUATING ITS ANTIBACTERIAL PROPERTIES

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Abstract

Coriander (Coriandrum sativum L) belongs to the family Apiaceae (Umbelliferae) and is commonly known as dhanya. It has potential source of high-value components for functional foods and nutraceuticals. For centuries, the coriander plants and their parts, primarily their leaves and ripe seeds, have been used in folk medicines in addition to culinary uses. This plant is herbaceous and aromatic and is cultivated in several countries, including India, Italy, the Netherlands, Europe, China, and Bangladesh. The present study aims that a simple, rapid and economical method to synthesize silver nanoparticles (AgNPs) from coriander sativum linn extract. The topical formulation was prepared by incorporation of optimized AgNPs into the carbopol gel base. Further, the gel was evaluated in vitro antibacterial assay by agar well diffusion method. The antibacterial inhibitory efficiency of prepared AgNPs incorporated nano gel was found similar to the commercial product against the Staphylococcus aureus, E. coli and Pseudomonas aeruginosa.

APO-10

Pharmacological Evaluation of Hepatoprotective Activity of Dendrocalamus Strictus extracts on Animal Model

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Abstract:

Medicinal plants have always been the principle sources of medicine worldwide. Human beings have used those as medicine from the very beginning of time. India sustains a very rich traditional medicinal plant wealth and inherits unique plant and animal communities. The objective of the study was undertaken to investigate the Hepatoprotective activity of Dendrocalamus strictus extracts on Animal Model which is an important medicinal plant in Indian folk. The antioxidant activity of the extracts was done by using DPPH method. The results showed that Ethanolic extract and Methanolic extract at 150 µg/ml concentration showed the significant antioxidant effect as compared with ascorbic acid as standard. The In-Vivo Hepatoprotective activity of Ethanolic & Methanolic extract were estimated by using carbon tetrachloride induced hepatotoxicity model. The degree of protection was estimated by measuring levels of biochemical markers like SGOT, SGPT, Total Bilirubin and Total Protein. The histopathological study was also carried out and compared with carbon tetrachloride treated group. The results suggest that Dendrocalamus strictus possess potential antioxidant and Hepatoprotective activity.

Keyword: Dendrocalamus strictus, Phytochemical screening, Antioxidant activity, Hepatoprotective activity.

APO-11

A critical literature review of Palash (Butea Monosperma).

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SMBT Ayurved College Dhamangaon, Nashik.

Abstract-

In Rigveda 'Kinshuk' was the synonym given for Palash. 'Kinshuk' means who shines brightly. This synonym is given because of its bright attractive colour of the flower. Palash (Butea monosperma Lam.) is belonging to the family Fabaceae. Palash was commonly known as the 'flame of the forest'. It is a traditional medicinal plant which has been used for thousands of years in Ayurvedic system of medicine for the treatment of prameha. Palash Pushpa (Flower) and Palash Twak (bark) both possess same Tikta, Katu and Kashaya Rasa but Flower having Madhur Vipaka and Sheet Virya and bark having Katu Vipaka, Ushna Virya. The detailed review was studied from ancient as well as modern texts and various researches on its pharmaceutical action were considered. Bhavprakash Nighantu, Raj Nighantu mentioned pramehghna (Anti- diabetic), medohar (Anti- obesity), varnaropak (Wound healing) and shophahar (Anti- inflammatory) activities. Acharya Vagbhat, Sushruta, Charaka, Yogratnakar and Bhaishjyaratnavali had used palash as an important ingredient in many Ayurveda formulations.

Key Words- Butea monosperma, Karma. Palash, Pharmacology, Properties.

APO -12

BIOGENIC SYNTHESIS OF NIO NANOPARTICLES USING ARECA CATECHU LEAF EXTRACT AND THEIR ANTIDIABETIC AND CYTOTOXIC EFFECTS

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Abstract

Nanoworld is an attractive sphere and has the potential to explore novel nanomaterials with valuable applications in medicinal science. Surface morphology, characteristic size, and shape are the main features for nanomaterials because of which make them highly attractive and more reactive for researchers. Nanotechnology may furnish a novel resource for the evaluation and development of safer, newer, and effective drug formulations in the treatment of infectious diseases. Use of plant extracts for the synthesis of nanoparticles is desirable due to the various plant metabolites like polyphenols, alkaloids, phenolic acids, and terpenoids, which play a major role in the bioreduction of metal ions, yielding nanoparticles. Plant act as bioreactors in the binding and reduction of metal ions which leads to the formation of nanoparticles.

Student Paper Presentation

ICTM2022

SP-01 To SP-18

SP-01

TOXICITY STUDY OF CHLORZOXAZONE AND ISOSORBIDE DINITRATE

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Abstract:

Drug safety monitoring during pregnancy has vital role to prevent fetal death and also to avoid inabilities in fetus which remains lifelong. Some are the general health issues observed during pregnancy like anemia, nausea, depression, preeclampsia, miscarriage, gestational diabetes and many more. Chlorzoxazone is promising muscle relaxant but not utilize due to lack of its teratological information. It is a centrally acting muscle relaxant (Spasmolytic). Chlorzoxazone contains Mephenesin group as a basic moiety. It has longer duration of action (8-12 hrs.) but has slower onset of action and is orally better tolerated. Isosorbide Dinitrate (ID) is used in cardiovascular diseases as a vasodilator and it corresponds to nitrate class. It can be used in preeclampsia. As per current literature survey there is no any teratological dataavailable till date. Chick embryo model is cheap, worthy technique. Hence, efforts are madeto explore teratogenicity of caliber drugs like above mentioned. This study aims to assess the teratological effects of these drugs on some vital organs using the chick embryo model, which is cheap as well as reliable.

SP-02

TO DEVELOP AND EVALUATE HERBAL HAIR ANTIDANDRUFF SERUM

Ms. Nikita R. Shahane, Ms. Pratiksha V.khade*, Dr. Rani Kankate, Dr. Kshirsagar Sanjay. J[2],

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Abstract:-

In the mammalian system, hair is known to be the most significant organ that determines appearance, gender distinction, provides intense temperature protection and plays a role in self-defense. The younger generations have begun to suffer from extreme hair loss problems due to many lifestyle-related changes such as fatigue, anxiety, intake of junk foods, use of different hair styling/coloring methods The various herbal ingredients are used in the formulation are: Aleovera gel, Coconut oil, Rose water, Vitamin E, Rosemary essential oil, Neem oil, Tea tree oil.

SP-03

SYNTHESIS OF DIPEPTIDE CONTAINING ASPIRIN AS A PRODRUG

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Abstract

Proteins and Peptides which are continuously to grow in the medication for their possible use in the current drug therapy and protein drug market. Peptides are one of the best applicant of drug development due to their higher specificity and lower toxicity. Mostly peptides are obtained from chemical synthesis or other biological technique. The peptide based drugs are use to antimicrobial agent as well as cure of cancer. Most of peptides when attach to the hetrocyclic compounds shows most of activity such as antifungal, antimicrobial, antibacterial, anti-inflammatory activity etc. Most of synthetic molecules have been design to prevent the cell proliferation. The widely varieties of the biopeptides had been discovered by the last two decades. In chemical synthesis of peptides, mainly two procedure are used, one is a solid-phase synthesis technique which are carried out on a solid support such as a resin and other also solution phase synthesis technique. Condensation of hetrocycliccomponenet or group like as P-aminosalicylicacid (PAS), Coumarine, Nicotinic acid, Furan, Quinoline, Imidazole, Thaizole, with a peptide containing amino acid shows potent biological action. In addition to the biological and pharmacological activities of the Dipeptide were examined by prediction of activity spectra for substance (PAAS) Program.

Keyword: Coumarine, furan, imidazole, nicotinic acid, quinolone, thaizole.

SP-04

FORMULATION AND EVALUATION OF HERBAL ANTI ACNE GEL PREPAREDFROM ALTERNANTHERASESSILIS,CATHARANTHUSROSEUS AND LYCOPERSICONESCULENTUM

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Abstract

Uses of herbal formulation has increased nowadays with most therapeutic effect without any adverse drug reactions. Acne is the skin condition which arises due to excess production of oil in sebaceous glands. Acne is most common in teenagers and young adults. It is considered as skin disease but also ignore by many peoples. A non-oily gel formulation for topical application suitable in the treatment of acne condition has been prepared by using Carbopol 940. The prepared gel were evaluated for various physical parameters like pH, Color, Odor,Grittiness, Viscosity, Spreadability, skin irritancy, etc. The herbal plants selected for preparing these gels were Alternantherasessilis, Catharanthusroseus and Lycopersiconesculentum. The results were showing that the herbal gel formulations giving a best results for acne treatment.

KEYWORD- Herbal, acne gel, Carbopol 940, karaya gum, sebaceous gland

SP-05

FORMULATION AND EVALUATION OF HERBAL ANTI-INFLAMMATORY EMULGEL PREPARED FROM VITEX NEGUNDO LEAVES EXTRACT

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Abstract

Topical drug delivery system is a dosage form which are applied directly to skin to cure various disease. In comparison with the other semisolid formulation the use of gel seen to be more advantages both in cosmetics and pharmaceutical preparation. Emulgel have emerged as a promising drug delivery system for the delivery of hydrophobic drugs. The objective of the study was to prepare from the leaves of Vitex Negundo plant using chitosan as a gelling agent. Eucalyptus oil and mentheoil were used as a penetration enhancers. Propylene glycol amount of distilled water. The skin pH was maintain by addition of tri-ethanolamine. The formulation were evaluated for spread ability,Viscosity,in vitro release drug content pH,physical stability etc. On this experimental work prevalent that the herbal gel of leaves extract from leaves of Vitex Negundo found good gelling property and it will be useful as anti-inflammatory gel as per the literature.

Keywords: - Anti-Inflammatory, Emulgel,Enhancer, Penetration, Topical drug delivery, Vitex Negundo .

SP-06

Validation of Raft Forming System for Ranitidine HCL Tablet Dosage Form Using Plantago Ovata Seed powder as Natural Polymer by QbD Approach.

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Abstract

Raft formation includes the formation of viscous cohesive gel in contact with gastric fluids, where in each portion of the liquid swells forming continuous layer called raft. This raft floats on gastric fluid because of low density created by the formulation. The basic goal of floating in-situ Raft forming system is to achieve a steady blood level that is therapeutically effective and nontoxic for an extended period of time. The present work would focus on utilization of Isabgol seed powder as the polymer in the formation of raft structure. Any In situ formulation to be optimized needs the system optimization considering the in vivo parameters which may affect raft formation. The present research work focused on the formulation and development by QbD as it offers better understanding of product and process.

SP-07

INVESTIGATIONS ON CORN COB XYLAN HEMICELLULOSES TO STUDY ITS APPLICABILITY AS PHARMACEUTICAL EXCIPIENT.

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Abstract

Maize (Zea mays. L) is the third most planted food crop and one of the major energy sources belongs to the family Poaceae. In addition to the grains other parts of maize plant are used for the treatments of several ailments. As maize plant contains the various components of therapeutic values, it has been used for centuries as remedy for human diseases.

Plant Parts Used as Excipients: Corn Stalk, Corn Silk, Corn Hull, Corn Fibers. The present work focuses on some of the major aspects like isolation of xylan hemicellulose from corn cobs, the characterization of xylan for its physicochemical as well as therapeutic properties and lastly the formulation of films using xylan hemicellulose.

SP-08

EVALUATION OF HEPATOPROTECTIVE AND NEPHROPROTECTIVE EFFECT OF SALICIN ON EXPERIMENTAL ANIMAL

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Objective: Determination of antioxidant property and evaluation of hepatoprotective and nephroprotective effect of Salicin on experimental animal.

Material: The experimental drug, Salicin was purchased from Sigma Aldrich and Carbon tetrachloride, methanol, sodium nitroprusside, dimethylsulphoxide (DMSO) was purchased from Thomas Baker and other reagent was collected from Research Lab- Fine Chem Ind.

Method: 36 Wistar rats were divided in six groups. Individual group was treated with CCL4 (1200mg/kg), Vitamin C (250mg/kg) and Salicin (100mg/kg, 200mg/kg, 300mg/kg) where CCl4 is inducing agent and Vitamin C as standard drug. The treatment was given for 7 consecutive days. At the end of experiment period animal were anesthetized with over dose for euthanasia, blood was collected to separate the serum which was used for biochemical estimations. Liver and kidney were dissected out for histopathology. Aspartate aminotransferase (AST), Alanine aminotransferase (ALT), Total Bilirubin, Triglycerides, Cholesterol and Total protein tests were performed. Antioxidant assay DPPH Scavenging activity and Nitric oxide assay was performed.

Result and Discussion: In the present study, protective effect of Salicin was assessed against CCl4 induced toxicity by increasing oxidative stress in rat serum, liver and kidneys. Generation of CCl4 toxicity is associated to antioxidants defense. Salicin offered protection against CCl4 induced toxicity in rat. The antioxidant activity of Salicin was determined by DPPH and Nitric oxide assay. Several hepatotoxicity markers like serum glutamate pyruvate transaminase(SGPT), serum glutamate oxaloacetate transaminase(SGOT), alkaline phosphatase (ALP), Cholesterol, Triglycerides and total bilirubin content was found elevated which later decreased significantly when treated with Salicin. Alteration in the important nephrotoxicity markers i.e. creatinine, urea, uric acid, cholesterol and triglycerides in serum was also found to be increased and level of total protein was found to be decreased, which confirms the in vivo occurence of hepato-nephro toxicity. Treatment with Salicin and Vitamin C successfully reduces above noted deleterious hepatic and nephrotic alterations. Histological alterations observed during present study are found to be more in the group of CCl4. However, changes in liver and kidney are more pronounced in CCl4 treated rats than that of Salicin and Vitamin C.

SP-09

Isolation, Characterization and Cardioprotective Activity of Aphanamixis Polystachya by Using Experimental Animal Model

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Abstract:

Objectives: To investigate the cardioprotective effect of extracts of A. polystachya stem bark against isoproterenol-induced myocardial infarction in rat myocardium and in addition also deals with the qualitative study of the flavonoids present in the stem bark extracts. A. polystachya is the large deciduous evergreen tree, distributed in the subHimalayan tract from Gonda (Uttar Pradesh) eastwards to Bengal, Sikkim and Assam. The hepatoprotective activity, antimicrobial, antiviral and antibacterial activity of isolated limonoid rohitukin and cytotoxicity of amoorastatin were also established. A. polystachya has disclosed the presence of Aphanamixis, a new triterpene, a new tetranortriterpenoid i.e., aphanamixinin, sterol, saponin.

Results: Phytochemical screening revealed the presence of alkaloids, flavonoids, phenols, cardiac glycosides, saponin glycosides, anthraquinones, terpenoids, and steroids. Total flavonoid and phenolic content were found highest in ethanolic extract. TLC, HPLC, and IR interpretation of isolated fractions confirmed the presence of flavonoids. Effect of both APHAE and APEE extracts on isoproterenol induced myocardial infarction was shown significantly (*P

SP-10

Formulation and Evaluation of Multipurpose Herbal cream.

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Abstract:
Cream is a semisolid emulsion that is mixture of oil and water, intended for application on the skin or mucus membrane. Creams are of two types namely oily creams and aqueous creams. The oily creams are w/o emulsion which are employed as emollients and cleansing agents. The aqueous creams are o/w emulsions. These are useful as water washable bases. Oil-in-Water (o/w) Creams in Which are composed of small droplets of oil dispersed in a continuous aqueous phase. Oil-in-Water creams are more comfortable and cosmetically acceptable as they are less greasy and more easily washed off using water. Water-in-Oil (w/o) Creams in Which are composed of small droplets of water dispersed in a continuous oil phase? Water-in-oil creams are more difficult to handle, but many drugs which are incorporated into creams are hydrophobic and will be released more readily from a water-in-oil cream than an oil-in-water cream. Water-in-oil creams are also more moisturizing as they provide an oily barrier which reduces water loss from the stratum corneum, the outermost layer of the skin. There are different types of creams like cleansing, cold, foundation, vanishing, night, massage, hand and body creams. The main aim of our work is to develop a herbal cream which can give multipurpose effect like moisturizer, reduce acne and skin irritation, reduce skin diseases. We have used four herbal ingredients in our preparation, which are aloe vera gel, neem, tulsi, cucumber.

SP-11

FIVE-STAR HERBAL FORMULATION ON POLYCYSTIC OVARY SYNDROME

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Name of Guide: Dr. Rani S. Kankate

Department – Pharmaceutical Chemistry, MET's Institute of Pharmacy,

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Abstract

Polycystic Ovarian Syndrome (PCOS) is one of the most common metabolic and reproductive disorders among women of reproductive age. Women with PCOS have a constellation of symptoms associated with menstrual dysfunction and androgen excess, which has a significant impact on their quality of life. They may be at a higher risk of a variety of morbidities, including obesity, insulin resistance, type II diabetes mellitus, cardiovascular disease (CVD), infertility, cancer, and psychological disorders. Polycystic ovarian syndrome (PCOS) is a worldwide problem that is on the rise. Chronic anovulation, polycystic ovary and hyperandrogenism cause symptoms of the irregular menstrual cycle, hirsutism, acne, and fertility. PCOS is associated with insulin resistance and elevated levels of male hormones. Sedentary lifestyle, lack of exercise, dietary variations, stress, and other factors all play a serious role to cause PCOS. Several allopathic treatments available for treating it but its side effects too.

In present research work we used herbal plants for formulation in the treatment of PCOS. The attempts have been made in this research to formulate and evaluate herbal formulation in the treatment of PCOS.

Our prepared herbal formulation contains various medicinal plants which can offer a one-shot natural remedy for reinforcing the feminine system and other symptoms caused because of PCOS by regulating hormonal level. The herb combination selected within the formula employed in this was meant to focus on multiple pathophysiologic mechanisms of PCOS. Research has shown that there's the next incidence of mood disorders in women with PCOS, so it's not a surprise that herbs shows improvements in depression, anxiety, stress, and overall quality of life.The current study's goal is to develop and test herbal formulations for PCOS. A water extract of medicinal plants was used to create the herbal formulation. Inappropriate proportions, the herbal formulation contains solvent extracts of the herbs.

Present formulations having number of applications apart for the treatment of PCOS like it can be use as immunostimulant, women tonic, antioxidant and anxiolytics.

Key words - PCOS, women tonic, Ovary, Insulin, Infertility, Obesity, Diabetes, herbal formulation.

SP-12

TO PREPARE AND EVALUATED MEDICATED SOAP.

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Abstract:

The main purpose of medicated soap formulation was to develop anti-fungal,anti-bacterial, anti-dermal infections using neem paste and vitamin E capsule. Soap formulation where prepared using four type of oil coconut oil,olive oil,palm oil and tea-tree oil. The main base content of medicated soap was sodium hydroxide,active charcoal powder, distilled water. The prepared medicated soap evaluated for their physical appearance, pH, % free alkali content, totally fatty matter alcohol insoluble content and stability studies. Bacterial skin infection is the most common disease in our country. Medicated soap treat Bacterial skin infection.Neem paste is use for anti-bacterial activity these formulation of medicated soap where evaluated for various physicochemical parameter for good characteristics where observed. The plant material is easily available and their effectiveness is very good. This medicated soap is cost effective beneficial and having no side effect.

KEYWORDS:-Active charcoal, Anti-Bacterial, Anti-Fungal, Anti-Dermal, Capsule, Medicated Soap, Stability.

SP- 13

EFFECTOF NATURALBINDER CONCENTRATIONON THE HARDNESS AND DISINTEGRATION TIME OF TABLET

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Abstract

Binders are added in tablet formulation to increase the interparticulate bonding strength within the tablet. Binders are promote the cohesiveness and help as ingredient in the tablet to mix together. The main aim of this work was to formulate a new excipient material for future use as binding agent in tablet formulation and also check there effect on tablet hardness and disintegration time. Natural binders like Gelatin, Starch, Acacia, Sucrose, Guar gum, Karaya Gum, Algenic acid, Pregelatinized starch is used as a binder in various tablet dosage forms. Okra (AbelmoschusEuculentus), Wheat (Triticum), Fragrant Manjak (CardiaDichotoma) having good binding capacity when used as binder in our tablet formulation. Natural Binders/Polymers are safe and economical as compared to synthetic polymers like PVP-K30, Hydroxy propyl Methyl Cellulose etc. In this research work we evaluated the adhesion ability of CardiaDichotomahaving good property as tablet binder. By this purpose CardiaDichotomaused as binder in the tablet dosage formulation. Evaluation including hardness,friability, disintegration time and dissolution rate were done. The tablet prepared by CardiaDichotomahaving good hardness, friability and disintegration time compared with other binders. This study concluded that CardiaDichotomahaving a good binding ability. It could be used as binder in pharmaceutical industries.

Keyword-Okra, Fragrant Manjak, Tablet…

SP- 14

THE STRATEGY OF SEGMENTING, TARGETING, AND POSITIONING AND MARKETING MIX IN RSUD. DR. H. BOB BAZAR, SKM KALIANDA, SOUTH LAMPUNG, LAMPUNG, INDONESIA

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Abstract

The service marketing strategy would be effective if it was able to increase customer satisfaction by implementing a modern marketing strategy of STP (Segmenting, Targeting and Positioning) and a marketing mix including 5P (price, place, people, product, promotion) and supported by using appropriate marketing analysis such as SWOT, USG and Fish-bone as techniques to capture market opportunities, therefore hospital as service marketing was able to provide health services which met the needs of the community.

This study used a quantitative descriptive method with the purpose to describe a situation objectively and solving the problems had. The data used was secondary data in the form of data on new patient visits in administrative services which includes data on new inpatient and outpatient visits at RSUD Dr. H. Bob Bazar, SKM during October to November 2021.

Based on the results of the study, information was obtained that the marketing strategy with the concepts of segmenting, targeting and positioning and supported by the theory of the 5P marketing mix and the right of SWOT, USG and Fish-bone marketing analysis became an effective to improve health services according to customer needs. It could be concluded that the marketing strategy at RSUD Dr. H. Bob Bazar, SKM was quite good, but assessing from the existing problems, there needs to be an increase in digital or online-based services should be integrated into the hospital management information system to improve customer service satisfaction.

Keywords: STP, 5P, SWOT analysis, USG analysis, Fish-bone analysis, online based services

SP-15

Investigations on Biofunctional Proteins from Moringaolieferaseeds

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Abstract:

The therapeutic peptides and proteins have risen in prominence as potential drug due to their multifunctional activities. Proteins and Peptides are designed and engineered in the laboratory for pharmaceutical interventions to treat different diseases. The global oral proteins and peptides market anticipated to reach $8,233 million by 2028, registering a GR of 11.7% from 2022-2028/yr. Proteins and peptides obtained from the synthetic and animal origin make them costlier so going for plant origin is the best way of getting the proteins and peptides that are economical proteins and peptides are used as drug to cure many chronic diseases such as diabetes, hormonal disorders, cancer etc. Proteins and peptides (AMP's) also being promising alternative to antibiotics which had developed resistance by pathogen. They are also used as the carrier for many protein based drugs delivery. So, Moringa as protein had major constituent so we can utilize them for their nutritional and therapeutic activities.

Moringa oliefera legumes — *Moringa oliefera* seeds — Protein isolated from *Moringa oliefera* seeds

SP- 16

Formulation of Cream for the Purpose of Anti-Wrinkle by Using Ginseng

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Abstract:
Aging of the skin is primarily related to reductions in the levels of Type I collagen, which is the principal component of skin dermis. Type I collagen is the main structural component of the extracellular matrix (ECM), which is known to perform a pivotal function in the maintenance of the structure of the skin dermis [1]. Panax ginseng (Asian ginseng) has been used for centuries in many oriental countries as a medicinal plant, and as a functional food that promotes health [2]. Ginsenosides are the main active constituents in Panax ginseng. Panax ginseng root is considered the most important part of the plant for medicinal purpose, and most studies on its ginsenosides have focused on the root. However, several studies have reported that the leaf exhibited Ginsenosides are the main active constituents in Panax ginseng. However, several studies have reported that the leaf exhibited

Materials and Methods:

1. **Materials:**

The leaf of Panax ginseng Acetonitrile, ethanol, n-butanol

2. **Methods:**

The leaf of Panax ginseng air-dried powdered leaf (1 kg) of ginseng was extracted with 10 L 70% aqueous ethanol at room temperature and the supernatant was collected by filtration. The ethanol was removed by rotary vacuum evaporator and the extract was lyophilized (410 g). The 70% ethanol extract was refluxed with alkaline water (pH 2.5–3.5) for 12 h at 60 ◦C. The filtrate was partitioned with n-butanol (1:1, 3 times). The final result is a standardized extract containing two main ginsenosides (over 65%) of the extract in weight.

3. **Preparation of Lotion Containing 0.05% PGLE:**

Oil-in-water lotion with or without 0.05% PGLE was prepared. The lotion contained several principal ingredients including glycerine, shea butter, 1,2-Haxandiol, Ethylhexylglycerin, Cetearyl alcohol, mineral oil and beeswax (Lotion with or without PGLE (0.05%) was applied to the periorbital region.

Conclusion:

Panax ginseng leaf extract having high levels cutaneous benefits as the basis for skin aging treatments, as indicated through in vitro assessments and skin testing in human subjects.

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SP-17

FORMULATION AND DEVELOPMENT OF HERBAL MOSQUITO REPELLENT CREAM

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ABSTRACT

Aim:Present study was conducted to determine the mosquito repellent activities of some selected plant materials. In order to obtain safe and efficient herbal mosquito formulations by selected plant material Anisomeles heyneanabenth(belongs to family Lamiaceae)To obtain essential oil it was performed with the Soxhlet apparatus by obtaining its ethanol extract. Mosquito repellent activity testing was carried out using the arm in cage method. In this methodvolunteers'forearm, which had been rubbed with 1ml test solution and was exposed to the cage where 20 mosquitoes had been placed & the number of mosquitoes that aligned or bitten the arm was recorded in each minute. It was carried out for five minutes 5 and this repellent activitywas carried out for each extract. After analyzing mosquito repellent activity of individual extracts of essential oil a mosquito repellent cream containing 0.25% w/v active ingredients was prepared.

KEYWORDS: Formulation's mosquito repellent activity, Plant Extract, Essential oil

SP-18

BRINE SHRIMP ASSAY AND CYTOTOXICITY STUDIES OF THE ETHANOLIC EXTRACTS OF ANISOMELES HEYNEANA

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Abstract: -

To study the cytotoxicity and anticancer activities of the ethanolic extract of Anisomeles heyneana. This species is commonly known as western hill catmint, Chandhara in Hindi, Gopali in Marathi and in Sanskrit it is named as Oshthaphala Anisomeles heyneana. It is a tall, erect herb,

Growing to 1-1.5 m Hight. Slender stems and branches are quadrangular. Oppositely arranged ovate lance-like leaves are 5- 12 cm long. Flowers occur in cymes which are 10- 30 cm long. Small 2 cm flowers are white, tinged with pink, and 2-lipped. Upper lip is 5 mm. The lower lip is 3-lobed.The flowers resemble cow' s earlobes, which gives it its Marathi name. Flowering: October-November. And all member of this genus used as an anticancer, insecticidal, and antipyretic etc. To study the cytotoxicity, we use to conduct the test for in vivo Brine Shrimp Lethality Assay (BSLA) of the ethanolic extracts of Anisomeles heyneana that gives the cytotoxic activity and phytochemical study of the plant. Cytotoxicity was evaluated in the form of LC50 (lethality concentration). Ten Nauplius were added into three replicates of each concentration of the plant extract. After 24 h the surviving brine shrimp larvae were counted and LC50 was assessed.

Keywords: -Cytotoxicity, Brine Shrimp Lethality Assay, LC50,

SP-19

FORMULATION DEVELOPMENT AND OPTIMISATION OF PANTOPRAZOLE RAFT FORMING TABLET DOSAGE FORM BY USING OCIMUM BASILICUM SEED MUCILAGE AS A NATURAL POLYMER

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Abstract :

This work was done with an objective to develop raft forming tablet dosage form using pantoprazole tablet and natural polymer isolated from Ocimum basilicum seeds. Ocimum basilicum is a culinary herb which is popularly known as sabja or basil plant.Ocimum bascilicum seed polymer though reported to be used in various tablet dosage forms as a disintegrating agent,moreover it has been reported in traditional medicines as a anticancer, antidiabetic,antiviral agents but Ocimum basilicum seed polymer has not been used in raft forming tablet dosage form as an excipient,above justification provides need to work on basil seed polymer to standardize and explore the utilisation of basil seed polymer to its fullest extent.

Materials and Methods: Ocimum basilicum seeds (lamiacea) was procured from local market in Nashik, Maharashtra,India and authentication was done.The drug used was pantoprazole and excipients are sodium alginate, calcium carbonate,lactose, magnesium stearate.

Method:

- Isolation and characterization of Ocimum basilicum seeds- polymer.(organoleptic properties,powder characteristics,chemical tests,FT-IR,DSC,SEM)
- Characterization of drug.(MP,FT-IR,UV)
- Drug-polymer compatibility study
- Formulation and characterization of dosage form.
- Optimization of batches

Results and Discussion

- Alginate and calcium carbonate were used in formulation for raft formation so that poorly soluble Pantoprazole may remain in stomach for longer time.
- DSC shows endothermic peak at 70.5 °C with enthalpy of 24.6 J/mg for plane polymer and endothermic peak at 69.1 °C with enthalpy of 29.1 J/mg for stability.
- From the present study,it can be concluded that natural super disintegrants like Ocimum basilicum mucilage powder shows better raft forming property so that it can be used for raft forming dosage form with its reported disintegrant nature.
- Better results which are biocompatible,biodegradable and free from toxicity were generated from reported polymeric dosage form.
- Pantoprazole was found to be stable during simulated acidic treatment .

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STUDENTS POSTER PRESENTATION CODE

SPO-01 TO SPO-32

SPO-01

FORMULATION OF HERBAL CHOCOLATE OF PUNICA GRANATUMFORNUTRITIVE AND THERAPEUTIC VALUE

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Abstract:

Introduction-The aim of the present study was to show the Antioxidant effect of Punicalagine from Punicagranatumby Nutraceutical approach.To produce dosage form with nutritional and pharmaceutical application.

Material and Methods- Nutraceutical chocolate of Punicagranatum were prepared by using isolated powder of it by spray drying technique whereMaltodextrine wasapplied as adsorbent for isolation of powder and chocolate base for chocolate preparation. The isolated juice wasevaluated for its antioxidant assay, analytical test, TLC identification, physical test. The powder was evaluated for particle size, spectral studies, thermal studies, powder recovery and antioxidant assay, analytical test and also the formulated chocolate evaluated for hardness, dissolution time, texture, appearance, mouth irritation study, bloom formation study.

Result and Discussion-As per the stability study for powder and formulation no significant difference was detected in both powder and formulation. No colourchanges were observed during the study period. The present study showing that the isolated powder having antioxidant activity and there is no adverse effect of it tested by formulated chocolate via mouth irritation test.The developed Nutraceutical chocolate of Punicagranatum having antioxidant activity and having great nutritional as well as pharmaceutical application in the treatment of various diseases with no adverse effects.

Keywords: -Nutraceuticals, Punicagranatum,Punicalagine, Antioxidant

Acknowledgement

The author(s) are thankful to management of MET's Institute of Pharmacy, BhujbalKnowledge City, Adgaon, Nashik- 422003 for providing facilities.

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SPO-02

EVALAUTION OF ANTI-PROLIFERATIVE AND CYTOTOXIC ACTIVITY OF LEAVES OF LITCHI CHINENSIS AGAINST B16 MELANOMA

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Abstract:

Litchi chinensis Linn. has been used as an Anti-Inflammatory agent and is also used as Hepatoprotective agent.The major objective of the project deals with the fact that Natural products can be used in the treatment of Cancer. This Study was aimed to characterize the Leaves Extract of Litchi chinensis (LELC) (Sapindaceae) and investigating its potential against skin Cancer. Methanolic extract of leaves of Litchi chinensis 1mg/ml was dissolved in Phosphate Buffer Saline (PBS) and desired concentration (25, 50, 100, 200 µg/ml) were used for in-vitro experiment. In-vitro cytoxicity studies were assessed by MTT Assay followed by morphological studies under light microscope. In the cytotoxicity study by MTT assay, there was significant reduction in a B16 cell viability in a time and concentration dependent manner compared to that of the untreated control cells after treatment with LELC. Cell morphology determination by Light microscopy showed that treatment with LELC causes apoptotic change in the melanoma cells compared to the untreated control. We may conclude that LCLE have potential anti Skin Cancer activity in B16 melanoma cell line.

SPO-03

PREPARATION AND EVALUATION OF HERBAL LIPSTICK USING RICE BRAN WAX

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[1]S.M.B.T College of Pharmacy, Nashik, India.

Abstract:
The following research will assess and create herbal lipstick utilizing rice bran wax. The use of rice bran wax is owing to its naturally occurring property of being a significant moisturizer with a glossy and smoothing effect that will not affect a normal human.

Introduction
The necessity for herbal-based goods arose as a result of the safety and reliability of natural products. Herbal cosmetics have grown in popularity among modern ladies.In both emerging and established countries, these items are in high demand. Herbal cosmetics are a valuable gift from nature that is in soaring demand across the world. These products are available in a variety of forms to meet your beauty needs[1].Waxes have been employed as formulation aids in a variety of cosmetics and medications.We utilize rice bran wax because it contains tocopherol (Vitamin E), tocotrienols (Vitamin E), and gamma-oryzanol, which are bioactive components with antioxidant characteristics[3]. To boost the stability and activity of these bioactive chemicals, liposomes were utilized to transport them. Rice bran wax is utilized as an oil solidifying ingredient in cosmetics due to its availability. Here the objective of study wasto exploit naturally occurring waxes sourced from rice husk in lipstick. And also, to evaluate the natural ingredient (Rice bran wax) in lipstick.

Materials and Methods
Materials: Lipstick formulations incorporating rice bran waxalong with other ingredients were formulated. strawberry essence, Almond oil, Rose oil, Eosin.
Method:The herbal lipstick was created using the standard process for creating lipsticks. Rice bran wax is melted in a beaker at 70°C on a water bath in this recipe. Almond oil was similarly melted in a beaker over a water bath at 70°C. The coloring pigment and rose oil were added to the oil phase until it was a homogeneous combination. Then, at the same temperature, it was added to the wax phase. Strawberry essence was added once the mixture was cooled to 40°C. Lipstick molds were filled with the molten liquid. After solidifying, it was removed from the molds and placed in a lipstick case. So, the herbal lipstick was created using mold casting method.

Results and Discussion
The lipstick formulations were tested for appearance, Color, Melting point, pH, Breaking point, Force of application, Perfume stability, Spreadability. The following products have been examined for safety and have shown no negative effects.

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SPO-04

PRICISION MEDICINE : MODERN ERA FOR DIAGNOSIS OF DISEASE

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SMBT Institute of Diploma Pharmacy Nandi Hills

Dhamangaon Tal- Igatpuri Nashik.

Abstract :-

Cancer is a lethal disease that kills a great no. of people each year. standard treatment such or chemotherapy as radiation are only effective in a small percentage of individual due to illness variability. Tumors can be caused by a variety of genetic factors and express a variety of protein depending. On the individual

Cancer is devasting disease that takes the liver of hundreds of thousands of people. every year due to disease hetogeneity, Standard treatment, such as chemotherapy or radiation. are effective in only a subset of the patient population.

Some PPM produce are already available to link these differences to an effective drug. It is clear that PPM cancer treatment.

However broader changes to the healthcare & insurance systems must be addressed if PPM is to be addressed if PPM is to become part of standard cancer Care.

Keywords – clonal evolution, genomic diagnosis, Cancer treatment, Precision medicine, personalized medicine.

SPO-05

Formulation And Evaluation of Herbal Shampoo Containing Extracts of Allium Sativum

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Abstraction

Allium Sativum, family Alliaceae has been reported to possess antioxidant , antimicrobial , antitumour , ant mutagenic ,anti-inflammatory ,antiviral and antiulcer properties.Garlic and its extracts have been used to treat infection for thousands of years. Allicin (the name being derived from that of the garlic species Allium Sativum) is considered to be the main biologically active antimicrobial phytochemical produced in garlic extracts. Shampoos are most probably use as cosmetics. And the most common form of hair treatment. It is a hair care product that is used for cleaning scalp and hair in our daily life. They are viscous solution of detergents containing suitable additives preservatives and active ingredients. Shampoos have primarily been product aimed at cleansing the air and scalp. The purpose of using shampoo is to remove dirt that is build upon the hair without stripping out much of the sebum. Many synthetic shampoos are present in the current market both medicated and no medicated ,However , herbal shampoo popularized due to natural origin which is safer ,increases consumer demand and free from side effects. Formulating cosmetic using completely natural row materials is a difficult task synthetic surfactants are added to shampoo primarily for the foaming and cleansing action but their regular use leads to dryness of hairs ,hair loss irritation to scalp and eyes .The challenge lies selecting material that can be rationally justified as 'natural` and formulating them into cosmetic whose functionality is comparable with their synthetic counterparts. A more radical approach in popularizing herbal shampoo would be to change consumer expectations from a shampoo, with emphasis on safety and efficacy.

SPO-06

FORMULATION OF DORZOLAMIDE HYDROCHLORIDE IN-SITU PREPARATION FOR TREATMENT OF GLAUCOMA; IN-VITRO, EX-VIVO AND IN-VIVO CHARACTERIZATION

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Abstract:
Present study was planned to prepare a dorzolamide hydrochloride insitu gel by using Carbopol 974 and HPMC K4M to reduce dosing frequency by increasing residence time as well as sustained drug release from the formulation in cul-de-sac. The concentration of both polymers was optimized by using 32 factorial designs with correlating its impact on dependent variables as cumulative in-vitro drug diffusion at the end of 8 h and viscosity at pH 7.4. Polymer composite showed a quadratic model for drug diffusion as well as for viscosity. Comparative in-vitro drug release study by using type II dissolution apparatus confirms sustained drug release characteristics of optimized formulation which showed 89.41% drug release at the end of 8 h as compared to a marketed formulation which showed complete drug release at the end of 3 h. Ex-vivo transcorneal permeability study ensured permeability of drug through the cornea. Histological study on goat eye cornea proved non-irritation potential of the prepared formulation. A comparative in-vivo study between optimized formulation and marketed formulation on normotensive rabbits confirms sol to gel transition of prepared formulation with percent IOP reduction of 32.87 ± 1.54 at the end of 8 h, whereas; marketed formulation failed to control IOP beyond 3 h. Thus, prepared in-situ gel offers more intensive treatment for glaucoma with a reduction in dosing frequency and enhanced patient compliance.

Materials and Methods:
1)Materials: Dorzolamide hydrochloride was obtained as a gift sample from FDC Ltd. Aurangabad. Carbopol 974 P was gifted by Lubrizol Ltd., Mumbai and HPMC K4M was obtained from S. D. Fine, Mumbai. All other ingredients and reagents were of analytical grade.
2)Method 1: Analytical RP-HPLC Method for DZH:
3) Method 2: Factorial Experimental Design:

Results and Discussion:
On applying factorial design, software suggested the quadratic model for response Y1, and it was found to be significant with a model F value of model F value 65.81, p-value 0.0019, an R2 value of 0.9910, and there was only 0.02% chance that a model "F value" this large could occur due to noise. The formulation containing lowest concentration of carbopol 974 P (0.1%) and HPMC K 4M (0.5%) shows highest release (96.54%) whereas formulation containing highest concentration of carbopol 974 P (0.45%) and HPMC K 4 M (1.5%) shows lowest release of drug (86.74%).

Optimize formulation showed 45.21% drug permeation at the end of 5 hr with permeability coefficient (P) 4.45 (cmh-1) × 10-3 and permiation flux (J) 11.14 µg cm-2h-1. Transcorneal permeation study indicates the movement of drug through cornea as well as drug release retardant property of the polymeric system. Impact of prepared formulation on intra ocular pressure in comparison with marketed formulation was studied by using normotensive New Zeland albino rabbits. Optimized formulation showed an 8.59 ± 1.14 % decrease in IOP after single-dose administration, and this effect was last up to 8 h with a percentage drop of IOP 32.87 ± 1.54 ($P<0.001$).

SPO-07

Recent Advancements in Cancer Targeted Drug Delivery Systems

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Abstract:

Cancer is characterized by uncontrolled cell proliferation and abnormal growth, resulting in the formation of cellular lumps known as tumours. It is a worldwide health issue and presently 24.6 million people are suffering from this deadly disease. There are more than 100 different types of cancer are yet identified. Most cancers are named for the organ or type of cell in which they start. The main categories of cancer include carcinoma, sarcoma, leukemia etc. There are so many treatment strategies available for cancer treatment such as surgery, radiation therapy, immunotherapy, hormonal therapy and chemotherapy. Presently, anti-cancer agents are administered through conventional oral and intravenous routes due to its short biological half-life, narrow therapeutic index, poor oral bioavailability and formulation difficulties like poor water solubility, stability and high molecular weight these routes have shown significant side effects because of nonspecific delivery of anticancer drugs to healthy organs. To Overcome this Problem in the recent past advances the novel drug delivery systems have resulted in use of several colloidal carriers such as liposomes, niosomes, microemulsion, nanoemulsion, microsphere and polymeric micelles for sustained and targeted delivery of anti-cancer agents should reach the target site in the body in required quantities and at the right time.

Keywords: Cancer treatment, Tumours, Anticancer agents, Novel drug delivery.

SPO-08

FORMULATION OF NANOPARTICLES LOADED IN SITU GEL FOR TREATMENT OF DRY EYE DISEASE: IN VITRO, EX VIVO AND IN VIVO EVIDENCES

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Abstract

Introduction

Dry eye disorder is the most common ophthalmic complication which has already affected millions of people worldwide. Due to protective response of eye, conventional drops get rapidly eliminated from eye site. Moreover; current treatment of dry eye syndrome demands frequent administration of formulation. Henceforth; there is need to develop novel ocular drug delivery system to meet the need. By considering the involvement of Peroxisome proliferator-activated receptor-γ in dry eye, we prepared Pioglitazone loaded Poly (D, L-lactide-co-glycolide) nanoparticles which were then suspended in temperature sensitive in situ gel prepared by combination of Poloxamer 407 and HPMC K4M those also contribute in treatment as lubricant.

Materials and Methods

1)Materials: Pioglitazone was obtained as a gift sample from Glenmark Pvt. Ltd. Nashik, India. PLGA 50:50 was gifted by Evonik Pvt. Ltd. Mumbai, India. Poloxamer 407 and HPMC K4M was purchased from BASF Ltd. Polyquaternium-1 was obtained from Pharmonix Biologicals Private Limited, Thane, India. All solvents and materials used were of analytical grade.

2)Method 1: Fabrication of PLGA nanoparticles:- PLGA NPs were formulated by using single emulsion solvent evaporation method.

3)Method 2: Experimental design:- PLGA loaded surface modified nanoparticles were optimized by using 32 factorial design..

Results and Discussion

Responses particle size (Y1), PDI (Y2), Entrapment efficiency (%EE) (Y3) and Zeta potential (Y4) were found to be in the range of 163.51 ± 19 nm to 300.06 ± 09 nm, 0.281 ± 0.084 to 0.456 ± 0.042, 80 ± 2.0% to 95 ± 2.0% and − 5.18 ± 1.5 to − 10.8 ± 1.33 respectively. Software suggested best fitted model as Quadratic for Y1 and Liner for Y2, Y3 and Y4. As value of probability is less than 0.05 in each model, results of ANOVA and regression analysis confirmed that suggested models were significant for operational parameter.

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SPO-09

OPTIMIZATION AND EVALUATION OF SIMVASTATIN TABLET FORMULATION WITH UTILIZATION OF TRIGONELLA FOENUM GRAECUM (FENUGREEK) SEED MUCILAGE AS A PHARMACEUTICAL EXCIPIENT

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Abstract-

Trigonella foenum-graecum (Fenugreek), is an herbaceous plant of the leguminous (Fabaceae)family, seeds possess high percentage of mucilage composed of soluble galactomannan polysaccharides made of galactose combined with mannan, high molecular compound of mannose. Utilization of natural polymer in a very broad structured way in formulation batches, to achieve the response of polymer in different conditions with different factors and at different levels. As per literature, there were no studies found which involves application of screening and optimization design for using the fenugreek seed mucilage in dosage form design. There was a need to consider critical parameters in dosage form design and dosage form performance. Moreover, fenugreek seed mucilage monograph has not been reported. As natural materials are cost effective, nontoxic, stable, easily available with less regulatory issues, eco-friendly, capable of multiple chemical modifications. Mucilage has versatile excipient property as tablet binders, disintegrants, emulsifiers, suspending agents, gelling agents, stabilizing agents, thickening agents, film forming agents. Fenugreek mucilage has revealed its uses in formulation and development of different dosage forms like tablets, gels, mucoadhesive drug delivery system, etc.

Materials and Methods

1)Materials: Trigonella foenum-graecum seed mucilage (FGM)

2)Method-

Part- A: Procurement of Trigonella foenum-graecum (fenugreek) seeds as a study resource, Isolation of seed mucilage

Part-B:Pre-formulation study of isolated mucilage

Part C: Formulation Designing.

Results and Discussion

The fenugreek seed mucilage was isolated by the suitable isolation method. The organoleptic properties and all physicochemical properties were studied. Further it was used in Simvastatin tablet dosage form by using Plackett Burman Design. Various independent variables were studied and evaluated. Optimization was done by applying ANOVA by Insignificant and Significant factors. And optimized batch was generated and evaluated. The mucilage was found to be showing disintegrant and binder in Direct compression and Weight granulation techniques.

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SPO-10

FORMULATION OF ANTI-AGEING ORANGE PEEL

(CITRUS AURANTIUM DULCIS)SERUM

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Introduction - Facial wrinkles and skin aging is the natural process of intrinsic and extrinsic factors. Currently no effective strategies are available to delay skin aging process. The use of various Synthetic ingredients, exaggerated use of chemical agents may tend to cause some side effects, therefore the use of naturals as much as possible are empathized upon. Orange Peel, Glycerin, aloe vera gel, essential oil, Almond oil is a decent herbal face serum. Serum has a property of rapid absorption and ability to penetrate into deeper layer of the skin. Orange peel from the class Flavonoids acts effectively as Anti-oxidant, Anti-microbial it helps to increase the Collagen production. Aloe Vera acts as anti-inflammatory, anti-bacterial and anti-fungal agent.

Material & method– Sample of Fresh Orange Pericarp **(Citrus Aurantium Dulcis)** Ruteaceae, Glycerin, Aloevera gel, Essential oil, Almond oil.

Preparation of Orange peels Powder: The Pericarp of Fresh orange was finely Greeted and dried for 2 days and passed through grinder to obtain the fine powder.

Orange peel powder about 5gm, Pure Glycerin (5ml) + vit E oil (2.5ml) + Aloevera gel + 5-6 drops of orange essential oil was added and mixed properly to obtain the Anti-ageing serum.

Result and Discussion - Orange peel face serum formulation was light orange pourable preparation with a smooth homogenous texture and glossy appearance. After use, gives emollient, slipperiness

Physical appearance: Serum formulation was light orange in color, viscous pourable preparation with a smooth homogenous texture and glossy appearance.

PH: The pH of formulation was found 6.2. As the skin having an acidic pH around 4.1-6.7, this range of formulation is suitable for skin.

Stability studies: The formulation was undertaken stability studies for physical and chemical change. No considerable variations in properties of the formulation were observed.

After feel: The serum after distribution amongst individuals and their application, had a soothing and pleasant effect as informed to us by the individuals, indicating that it had an emollient and moisturizing action and also it was non-irritating and non-sensitive to the skin.

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SPO-11

RESEARCH ON SYNTHESIS OF PYRAZOLE DERIVATIVES FROM CHALCONE

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Abstract

Chalcones and their analogues have become a popular destination recently years. Researchers have discovered new ones chalcone exit combinations, which produce a series of medical and biological effects. This exit chalcone is shown essential antimicrobial, antifungal, anti-mycobacterial, antimalarial, antiviral, anti-inflammatory,Antioxidant, antileishmanial anti-tumor, and anti-cancer properties. This highlights the synthesis and pharmacological properties of chalcone out of the other. The 1,3-diphenylprop-2-en-1-one frame is best known for its genetics the term '' chalcone,'' is the name coined by Kostanecki and Tambor . Also known as benzalacetophenone and benzylidene acetophenone. The presence of a double bond in combination with carbonyl performance is believed to be responsible for biological functions chalcones, as the removal of this function does inactive. Chalcone is a unique template associated with several biological functions such as antioxidant, anticancer, anti-inflammatory, antibacterial, antifungal, antiviral, antituber-cular, antimalarial, antileishmanial, antihyperglycemic, tyrosineinhibitory and vasorelaxant activity. Chalcones are a dynamic medium for the development of various heterocyclic systems such as pyrazoline, oxazoline, thi-azine, oxazine and pyrimidine etc.Many routes have been reported compilation of chalcones while its general integration involves Claisene Schmidt condensation under homogeneous conditions in the presence of acid or base.

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SPO-12

FORMULATON AND EVALUATION OF HERBAL HANDWASH GEL FROM JASMINE LEAF EXTRACT WITH ANTIMICROBIAL ACTIVITY.

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Abstract:

Recently, world is facing covid-19 pandemic situation. Hand hygiene is vital principle and exercise in the prevention, control and reduction of health care acquired infection. Hence, worldwideits demand is increasing. In market hand wash are available using synthetic ingredient which imposes side effect like drying of skin,irritation,itching, dermatits.hence use of natural hand wash is recommended to overcome the above side effects. Herbs are famous for they possess antimicrobial properties.thus,utilization of herbs in hand wash product will help in terminating germs and viruses. So these plant material can be used in the preparation of herbal hand wash on commercial scale.

Objective:

The objective of present work is to formulate and evaluate liquid hand wash. This formulation formulated aiming less side effect and good antimicrobial effect using extract of jasmine leaf.

Method:

The formulation prepared using sles (26%w/w), aloeverajuice(26%w/w), vit e(0.17%w/w), cinnamonoil(0.34%w/w), nacl(4.3%w/w), and water(47%). The prepared formulation was evaluated by different parameters like organoleptic, physicochemical along with antimicrobial test(using agar plate).

Result:

The formulated hand wash was found to be good in physical parameters with good cleansing and antimicrobial activity

Keyword: herb, hygiene,antimicrobial properties, hand wash,organoleptic,jasmine angustifolium

SPO-13

FORMULATION AND EVALUATION OF FERMENTED WHEAT GLUTEN HERBAL SHAMPOO

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Abstract:

Recently, the most common occurring problem was hair fall and dandruff. So the main aim of the study was to formulate herbal shampoo to reduce hair fall, dandruff, promote hair growth and strengthen human hair. There were many synthetic preparation of shampoo which contains various chemicals which effect on the hair and scalp, but the herbal shampoos have advantages over it.Hence in this research the attempt has been done to formulate shampoo using natural herbal ingredients. The present study was to exploit the use and to formulate and evaluate the herbal shampoo which was prepared by fermented wheat gluten. The main ingredients in this study was fermented wheat (Triticumaestivum) grainflour, which contains mainly gluten (protein) which helps in decreasing hair fall, acts as antidandruff, promote hair growth and nourishment to hair. The herbal shampoo was formulated by using some of the traditional herb like Hibiscus-rosa-sinensis,Phyllanthusemblica, Aloevera, Trigonellafoenumn graceum along with gluten.

SPO-14

HYPOTHYROIDISM

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Abstract:

Reactions of various Calcium Formulations with levothyroxine's absorption, understanding of physiology and clinical outcomes observed with thyroid hormone replacement strategies. Levothyroxine is still a potent drug with or without combinations. The best time for consuming the drug is before the bedtime at the evening when the food is almost digested, and it does not cause any side effects on pregnant women and the infant taken moderately. Hypothyroidism aka underactive thyroid, low thyroid or hypothyreosis is a disorder of endocrine system in which the thyroid gland does not produce enough thyroid hormone. Levothyroxine is still a potent drug with or without combinations. The best time for consuming the drug is before the bedtime at the evening when the food is almost digested, and it does not cause any side effects on pregnant women and the infant taken moderately. Improvements in TSH testing have led to a significant decrease in thyroid hormone replacement rate and the ability to accurately diagnose mild forms of hypothyroidism. The discovery of peripheral T4-to-T3 modification provided physiologic mechanisms for the induction of L-thyroxine monotherapy. Consistent with the constant concern and safety of natural thyroid preparations, synthetic L-thyroxine was considered the most reliable treatment. These findings laid the basis for clinical tendency away from natural thyroid preparations and focused on L-thyroxine monotherapy in doses to history of medicine. History and Future Treatment of Hypothyroidism 54 Annuals of Internal medicine prepare serum TSH. Later, A small number of patients with remaining symptoms of hypothyroidism were identified. It remains to be seen whether this is due to the fact that non specific symptoms are caused by thyroid dysfunction, low serum T3 and / or high T4: T3 ratio, or the role of Thr92AlaD2 polymorphism, and whether combination therapy with L-thyroxine plus L- triiodothyronine will be beneficial.Levothyroxine is still a potent drug with or without combinations. The best time for consuming the drug is before the bedtime at the evening when the food is almost digested, and it does not cause any side effects on pregnant women and the infant taken moderately

SPO-15

FORMULATION AND EVALUATION OF HERBAL ANTI-FUNGAL NAIL LACQUER

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Abstract:

Onychomycosisis a common contagious nail infection (figure nails and toe nails).Mainly 80% cases of Onychomycosis have affected toenails which influence around 19% of the world population. The infection is associated with proximal subungalonychomycosis distal and primary total dystrophic onychomycosis.There are varieties of formulation for treatment of nails infection like creams,solution,gel,nail patches. Nail is the less vascular area. Therefore, nail lacquer will be more effective formulation than other formulation mainly oral administration. The

Objective:

The present study is to formulate and evaluate the Anti-Fungal nail lacquer using various herbs. To screen Anti-Fungal activity of formulated nail lacquer. To find out effective concentration of penetration enhancer.

Method :

Nail lacquer was prepared by using nitrocellulose, ethyl cellulose, ethylacetate, salicylic acid (act as penetration enhancer), dibutylphthalate and various mixture of extract of Calendula officinalis, Origanumvulgare, Allium sativum, Curcuma longa and oils of Syzygiumaromaticum, Melaleucaalternifolia, cymbopogon, Ocimumtenuflorum and Menthapiperita.The mixture of extract and oils mixed with the continuous stirring. The nail lacquer of Fluconazole was prepared by same method and compare for Anti-Fungal activity with formulated herbal nail lacquer.Herbal nail lacquer were evaluated for drug content, non-volatile content, lacquer film thickness, drying time, gloss, smoothness, flow, water resistance test, peel adhesion test, Invitrotransungual penetration study, milling test and Anti-fungal study.

Result:

Various types of Phytoconstituents were found in the herbal nail lacquer. Therefore, selection of good penetration enhancer was required to pass maximum more amount of active constituent through nail plate. Herbal nail lacquer showed improved antifungal activity as compare to Fluconazole.

SPO-16

FORMULATION AND EVALUATION OF HERBAL DANDELION TEA

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Abstract:

Introduction:

The Dandelion (Taraxacum Officinale) is much more than just weed, it has been cultivated for its medicinal benefits for centuries. Dandelion is good source of vitamin and minerals like vitamin A, beta-carotene, magnesium, calcium, iron, zinc. The flower, leaf, and root of dandelion can all used to make dandelion tea. Research has found a number of potential health benefits to drinking dandelion tea: Gastrointestinal disorders, Diabetes, Cancer, anti-inflammatory effect, lower blood pressure, improves liver health.[1, 2]

Objective:

To formulate herbal dandelion tea using dandelion root, to evaluate dandelion root for its health benefits.

Materials and Method:

Dig your fresh dandelion and get the taproot, boil 1 quart of water in the saucepan wash, dry, and dice the taproot and add 2 tsp of root to the boiling water. Cover the pot and reduce the heat allow the steeping process to take place on the burner for approximately 1 minute remove your pan from heat continue steep for 40 minute, strain roots.

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SPO-17

FORMULATION OF CREAM FOR THE PURPOSE OF WOUND HEALING BY USING LANTANA CAMARA

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Abstract-

Introduction- In India, Lantana Camara is used to treat cuts, ulcers, swelling, cough and intestinal worms. Scientific studies showed that lancamarone, a steroid component of the plant has cardiac tonic property and lantamine, an alkaloid for the plant has antipyretic and antispasmodic properties comparable to those of quinine. This plant was proved for its antimicrobial, antifungal, anthelmintic and antiviralactivity. Antioxidant, anti-hyperglycaemic, anti-ulcerogenic and antipyretic properties of this plant were proved in animal models [1].It showed the wound healing property in excision wound and burn wound in rats in normal rats [2-4]. Thorough literature survey revealed that the wound healing property of Lantana camara in diabetic rat was not studied. Hence, this study was aimed to evaluate the wound healing property of Lantana camara.

Materials and method- Materials: Fresh leaves of Lantana Camara, Coconut oil, Aloe vera gel. **Method:** Collect fresh leaves of Lantana Camara then wash it with purified water by soaking it within water up to 15 minutes after that dry leaves for at least 3 days so that powder can be form by crushing it with the help of mortar and pestle after fine powder preparation add coconut oil into it by using maceration cloth extract oil from powder after that add aloe vera gel into it so that thick mass of the cream formed..

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SPO-18

THIAZOLIDINONES AS ANTIDIABETIC AGENTS

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2S

Abstract

Thiazolidinone is a biologically important heterocyclic ring having almost all types of biological activities. Thiazolidinones are saturated form of thiazole, called thiazolidine with carbonyl group. In the modern era, thiazolidinone has emerged as an important arena, as per its clinical significance concerned. Thiazolidinones possess wide range of pharmacologically activities such as anti-cancer, anti-diabetic, anti-microbial, anti-fungal, anti-viral, anti-inflammatory and anti-convulsant, etc. The diversity in biological response profile has attracted the attention of many researchers to explore this skeleton to its multiple potential against several activities. Three 4-thiazolidinones, two with nicotinamide (NAT1 and NAT2) and one with 4-chlorophenoxyacetamide (PAT1) side chains were evaluated for their hypolipidaemic, hypoglycaemic activity in Swiss albino mice fed a high-fat diet along with fructose administered in drinking water. NAT1 and PAT caused reduction of elevated triglycerides, cholesterol and glucose; NAT2 was effective only against triglycerides. Nicotinamide side chain might have contributed to the lipid lowering effect of both NAT1 and NAT2, but the bulky group of the latter could have affected proper binding to the receptor sites, making it ineffective against elevated cholesterol. On the other hand, the 4-chlorophenoxyacetamide side chain of PAT might have exerted powerful hypolipidaemic activity, despite the bulky substitution at C2.

SPO-19

FORMULATION AND EVALUATION OF HERBAL FOOT CRACK CREAM

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Abstract

Human feet balances weight of the whole body but they are often neglected. The skin on the feet tends to become dryer as oil glands are absent. This dryness causes the skin to crack. Crack Heel is abnormal condition of hard fissure, dry skin over heels of feet. Therefore, feet need special care for protection, beautification and comfort. Herbal products can be used to treat the crack feet. In this study Kokum butter derived from Kokum (Garcinia indica) was explored as natural moisturizing and nourishing ingredient in foot cream. Foot Crack Cream formulated with Kokum butter (38.4%w/w), Coconut oil (53.8%w/w), Almond oil (1%w/w), Peppermint oil (1%w/w), Tea tree oil (1%w/w), Jojoba oil (1%w/w) and glycerin (4%w/w). **Objective:**

To formulate herbal crack cream using Kokum Butter. To evaluate Kokum butter uses for its moistening activity.

Method:

Oily phase prepared by melting Kokum at 38°C and to it added other oils. Glycerin was added to oily phase with constant stirring. Formulated cream was evaluated for appearance, stability, spreadability, skin feel, smoothness and absorption.

Result:

It was observed that Herbal Crack Cream posses following characteristics such as smooth appearance, good stability, good spreadability, soothing skin feel, and good absorption. The result showed a potential of this formulation to produce excellent emoliency. It forms protective occlusive skin barrier on crack skin leaving the skin silky smooth and hydrated.

SPO-20

SYNTHESIS DERIVATIVES OF COUMARINE

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ABSTRACT

Coumarin possess a number of biological activities like anticoagulant, antimicrobial,anti- inflamanatory,analgesic,antioxidant,anticancer,antiviral, antimalarial etc.

Coumarin belongs to a group as benzopyrogen,which consists of synthesized and characterized by IR and H'NMR Spectra. These newly formed Coumarin derivative were screened for anti-inflammatory activity by carrageenan induced Rat Paw edema model and anti bacterial activity agaist steophylococcus aureus as well as Escherichia Coli by Cup plate method.

The synthesized coumarin derivatives were administered orally in the dose of 10 mg/kg.

The Study of coumarin dated back to 1820. When coumarin was first extracted form tonka bean by vogel. Coumarin derivatives could be obtained derivatives could be obtained form different starting, materials with various methods but big differences in yield. The review focuses on current devlopements in the syntheisis of heterocylic courmarin compounds. The chemical structures of the newly synthesized compounds. Were elucidated by using anlytical. The all componds were screened for their antidantactivtives. This review summarized various methods, techniques& reaction condtions for sysntheisis of coumarins form different compounds such as aldehydes, phenols, ketones and carboxylic acids.

Keyword – Coumarins, antibacterial activity anti-tumor activity and anti-inflammatory.

SPO-21

SOLID DISPERSION - TECHNIQUE TO IMPROVE BIOAVALIBILTY AND SOLUBILITY OF BCS CLASS II DRUG

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Abstract:

This article is intended to combine recent literature on solid dispersion technology for solubility enhancement with special emphasis on mechanism responsible for the same by solid dispersion & various preparation method. Solid dispersion is molecular dispersion of drug in a polymer matrix which leads to improved solubility & hence better bioavailability. The solubility behaviour of drugs remains one of the most challenging aspects in Formulation development. The number of poor water soluble compound has radically increased. Currently only 10-12% of new drug candidates have both high solubility & high permeability. More than 60-65% of potent drug product suffers from poor water solubility. This article reviews the various prepration techniques for solid dispersion characterization & complies some of the recent technology transfer. Compared to conventional formulations such as tablet or capsule, solid dispersion prepared by various methods can be used which have many benefits over the above conventional dosage form.An unending challenge in pharmaceutical industry is related to poor solubility of maximum drugs.Biopharmaceutical classification system (BCS) highlights are the dissolution as rate limiting step for oral absorption of BCS class 2 & class 4 drugs, BCS class 2 & class 4 drugs have low solubility.

Keywords: solid dispersion, bio availability dissolution, solubility etc.

SPO-22

EVALUATION OF ADAPTOPGENIC EFFECT OF TECOMELLA UNDULATA BY USING EXPERIMENTAL ANIMAL MODEL

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Abstract:

To evaluate the adaptogenic effect of isolated fractions from Tecomella Undulata bark extract in acute and chronic stress induced experimental animal model including the qualitative study of the flavonoids present in the bark extracts. The plant is widely distributed in the Northwest part of India, southern Pakistan, and most of Arabia. The chemical constituents reported from the plant belong to different classes such as glycosides, tannins, and phenolic compounds, flavonoids, phytosterols, and saponins. The plant contains ester glucoside, alkanols, β-sitosterols, undulatoside A and B and chromone glycosides. The plant is in use to treat various diseases like abdominal pain, cough, blood disorders, liver and spleen disorders, tumors, obesity, and many others. The different parts of plants are used to cure different disorders by the common people like the bark obtained from the young branches acts as a remedy for syphilis. Seeds are used against abscesses used in the treatment of eczema, ulcers, diseases of the blood, eye, ear and in muscular pain and it possesses mild relaxant, cardiotonic activities.

Materials: T. Undulata plant collected from Nashik, India in the month January. The plant was authenticated by Mrs. Y.A. Padol, professor, Department of Agricultural Botany K. K. Wagh College of Agriculture, Nashik bearing the authentication number KKW/B.Sc (Agri.)/35/2021. DPPH reagent was collected from Research Lab fine chem Industries, Quercetin from Sigma Aldrich, Co. and Folin-Ciocalteu's reagent collected from LOBA CHEMIE Pvt. Ltd.

Methods: The present study deals with identification and characterization ethanolic and methanolic extract of T. Undulata and qualitative study to investigate the flavonoids. Extracts were prepared by maceration. Total flavonoid and phenolic content determination were performed for TPEE and TPME extracts. The UV-visible spectrophotometry, thin layer chromatography (TLC), High-performance liquid chromatography (HPLC), High-performance Thin Layer Chromatography (HPTLC), Fourier Transform-Infrared (FT-IR) and Nuclear Magnetic Resonance (NMR) were performed for structural elucidation. For preclinical study, acute and chronic stress induced experimental animal models screen activity of TPEE and TPME. Acute oral toxicity was performed using OECD 425 for 14 days to study mortality, morbidity and LD50 was estimated. Wistar rats were treated with TPEE and TPME (50mg/kg), (100mg/kg), (200mg/kg) orally for 14 days along with chronic stress induced by foot shock model. Post evaluation of plasma was performed. The plasma was used to estimate biochemical parameters like cortisol, cholesterol, triglycerides, glucose and histopathological study was evaluated.

Results: The phytochemical tests exhibited the presence of flavonoid, as active constituent. The phytochemical screening showed the presence of alkaloids, flavonoids, saponin glycoside, amino acids, cardiac glycoside, steroids, phenols, reducing sugar, tannins, carbohydrates. The total flavonoid and phenol content were found highest in amount in methanolic extract. TLC, HPLC and FT-IR, NMR interpretation of isolated fractions confirmed the presence of flavonoids. Effect of both TPEE and TPME extracts on acute and chronic stress induced experimental animal model was shown significantly (*$p<0.05$) confirms the presence of flavonoids in both extracts.

Conclusion: Proposed study revealed that TPEE and TPME confirms the presence of flavonoids. The adaptogenic effect might be due to the presence of flavonoids, alkaloids and phenols. As extract shows adaptogenic activity, this study opens up new ways to exploit T. Undulata plant for various therapeutic and restorative purposes.

SPO-23

TO PREPARE AND EVALUATE AND COMPARE CYCLODEXTRIN COMPLEXATION OF GIVEN POORLY WATER SOLUBLE DRUG WITH SOLID DISPERSION TECHNIQUE

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Abstract:

The objective of the present study were to investigate the effects of β-cyclodextrin (βCD) on the solubility and dissolution rate of Bosentan prepared using three different methods, at drug to cyclodextrin weight ratios of 1:1, 1:2, 1:3 and 1:5. Cyclodextrins (CDs) have been used in many pharmaceutical formulations as their constitution and inherent shape present advantages for drugs with poor aqueous solubility and low bioavailability. Because CDs can act as drug carriers by forming inclusion complexes to conjugate with many drugs. All the methods increased the solubility and dissolution rate of Bosentan via inclusion complexation with βCD. Bosentan was converted from crystalline to amorphous form through inclusion complexation. Solvent evaporation method was the most effective method in terms of Bosentan solubilisation. Several studies have been conducted to investigate the use of CDs and most have shown improvements in drug solubility and bioavailability.

Cyclodextrins interacts with appropriately sized guest molecules to form inclusion complex and enhance the aqueous solubility, physical chemical stability, and bioavailability of drugs. Through the various reported literatures, the research highlights the concept of cyclodextrin and its derivatives in enhancing solubility and bioavailability of poorly aqueous soluble Bosentan.

Keywords:-Amorphous, Bioavailability, β-cyclodextrin, Bosentan, Complexation, Solubility.

SPO-24

Artificial Intelligence - An accomplishment of modern health care system

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Abstract

The advancement of modern technology introduced Artificial intelligence in our healthcare and medicine development. Artificial intelligence (AI) is a computer system that mimics human intelligence and cognition to analyse complex data and conclude it. MYCIN was first launched for identification of causative micro-organism and predict effective antibiotics. It aims to acquire knowledge towards present and future of artificial intelligence in medical infliction. In development of new drug product against a specific disease via clinical trials data, may have manual errors and can takes years as well as billions of dollars. Atom wise, an AI enabled software system was used to screen existing medications to combat Ebola virus. Wearable health tracker like Fitbit, Apple, Garmin monitors heart activities. Robotic arms task the hand movement of surgeon and with a 3D view, ultra-magnification execute complex urological, neurological surgery like The da Vinci robotic surgical system by Intuitive surgical, USA. Utilizing successive personal medical data and proficient medical knowledge, apps like Babylon gives users medical advice. CAD (computer-assisted diagnosis) used in screening of Radiography, CT-scan, ECG and other diagnostic reports accurately. Precision/personalised medicine is evolved in the treatment of chronic complex diseases like cancer, practices and products to individual patients based on genetic, environmental, lifestyle and other factors.

SPO-25

AYURVEDIC MEDICINE : THE TRADITIONAL SYSTEM OF INDIA

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Abstract:

Ayurveda is a science of life with a holistic approach to health and personalized medicine. It is one of the oldest medical system, which comprise thousand of medicinal concept and hypothesis .also Ayurveda has ability to treat may chronic diseases such as cancer, diabetes arthritis and asthma which are untreatable in modern medicine .Unfortunately, due to lack of scientific validation in various concept , this precious gift from our ancestors is trailing. Hence, evidence – based research is highly needed for global recognition and acceptance of Ayurveda, which needs further advancements in the research methodology. The present review highlights and various fields of research including literary improve the research methodology for Ayurveda with main emphasis on the fundamental research this attempt will certainly encourage young researchers to work on various areas of research for the development and promotion of Ayurveda.

Traditional Indian medicine is becoming increasingly popular , with many chronic conditions responding to it well. Most patient being to take conventional medication as soon as their diagnoses are made , so Ayurvedic treatment are usually undergone alongside and after conventional medical approaches. The Knowledge of the basic ideologies of Ayurveda is poorly acceptable scientifically and systematically due To lack of evidence. In comparison to allopathic treatment Ayurvedic treatment is more effective in most of the chronic diseases. However, the popularity of Ayurveda is rather lesser as the majority of the global population prefers modern diseases as compared to Ayurvedic treatment. Recently, the awareness and thus fear to toxicity to allopathic drugs and high cost of healthcare are causing of people

SPO-26

ROLE OF NATURAL DRUGS IN THE TREARTMENT OF CORONA VIRUS INJECTION

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Abstract

The severe acute respiratory syndrome coronavirus 2 (SARS –Co-V2) is the cause pandamic of corona virus disease 2019 (covid-19) which Emerged In Wuhan ,China and Spread Around The World . The First description of A Coronavirus Related Phenomena Outbreak In December 2019. Corona viruses are a group of enveloped viruses with no segmented single stranded and positive sense RNA genomes this viruses firstly nose and then pass through lungs members of the family corona virus cause a broad spectrum of animal & human diseases. They are many important medicinal plants which posseses antiviral activity and therefore they are use for viral infections. The main objective of herbal products to present their source characteristics & potential antiviral action concerning to covid-19, the world is working together to eliminate this pandemic. There are Certain ways to boost immune system like as active lifestyle, healthy diet, physical exercise, relaxation & sound sleep. SARS-Cov & MERS-Cov Middle East Are Zoonotic & Highly Pathogenic Corona Viruses .The Eighteen Drug *Zingiber Officinate*(Ginger), *ocimum Tenuiflorum* (Tulsi), *Curcuma Longa*(Turmeric), *Elettari Cardamomum Moton* (Cardamom), *Eugrnia Caryophyllus*(Clove), *Adhatoda Vasika*(Vasaka), *Cinnamonum Zeylanicum*(Cinnamon), *Piper Nigrum*(Black Pepper), *Laurus Nobilis* (Bay Leaf), *Tinospora Cordifolia(*Giloy), *Cymbopogon Nardus(*Lemon Grass), Jaggery, *Withania Somnifera*(Ashwagandha), *Apis Mellifera*(Honey), *Citrus Limon*(Lemon Juice), *Allium Sativum(*Garlic), *Trachys Permum ammi,*(Ajwain), *Glycyrrhiza Glabra*(Licorice root),*Mentha*(Pudina). This review aims to assess and success adverse events of herbal drug for the treatment of covid-19.

Keywords: - covid-19, Medicinal plant, pathogenesis, Respiratory syndrome**,** viral infection.

SPO-27

DAILY CHALLLENGES FOR PHARMACISTS

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Abstract

Pharmacy profession has evolved from its convential and traditional drug focused basis to an advanced patient focused basis over a years. The challenges for pharmacists in the care of patients has evolved over time, with increased emphasis on collaborative care and patient interaction .The demand for pharmacists is strong and increasing graduates with degrees in pharmacy face a greater range of career options than ever before but it also posses a significant challenge. The concept of the pharmacy professional as an active participant in the health care system is very exciting .The pharmacist is no longer just a supplier of medicines and invention of medical products but also a team member involved in the provision of health care whether in the hospital, the community pharmacy, the laboratory, the industry or in academic institutions .The purpose of this review is to evaluate the published literature on the Daily Challenges For Pharmacists

SPO-28

FORMULATION AND EVALUATION OF HERBAL FACE PACK

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ABSTRACT

The main objective of this work is to evaluate and formulate an herbal face pack for glowing and healthy skin by using natural ingredients. Herbal cosmetics have been growing demand in the World Market. There are wide range of herbal cosmetics and herbal face pack is one of them. The demand and uses of herbal products are increasing day by days they are safe, easily available and do not have any side effect. The natural herbal face pack influences the function of skin and provides nutrients necessary for the healthy skin. And nowadays most women prefer natural products over chemicals one for their skin care to enhance their beauty. And herbal products provide satisfaction as these are free from synthetic chemicals. By using natural herbal face pack it cure various skin ailments. In these work natural herbal ingredients like Gram flour, Bajari flour, Charcoal powder, Arjuna powder, Multani mitti, Aloevera powder. All these ingredients are in the form of dried powder. All natural herbal powder ingredients were sieved by using Sieve No:180. All these herbal natural ingredients were weighed accurately and then all were mixed for uniform formulation and evaluated by using different parameters like Organoleptic, physiochemical, irritancy and stability. The combined form of dried powder had passable flow property and it is suitable for a herbal face pack. Thus in the present work we formulated a herbal face pack which is made from easily available ingredients. Herbal face pack are non-toxic in nature and nourishes the facial skin and it helps to stimulate blood circulation and help to maintain the elasticity of the skin and remove dirt. Thus in this work we had concluded good properties for the herbal face pack and further optimization studies are required on this study to find the useful and important benefits of herbal face pack on human cosmetic products.

Keywords: Herbal cosmetics, synthetic chemicals, Organoleptic parameters.

SPO-29

AN OVERVIEW ON OMICRON-

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Abstract

The emergency of divergent variant in the content of a heterogeneous and evolving neutralizing antibody response in host population. Partly credit to increase observation some of the other omicron mutation with known as effects confer increase transmittal and effect binding affinity. The impact of omicron on transmitter is a concern omicron is anticipated to displace delta as the dominant in with serve critical omicron associated COVID-19 that target host response are expected to remain affective.

Since, First two cases of omicron variant where announced in the country on December 2021 researches in south Africa and around the world are conducting studies to better understand many aspects of omicron and will continue to share the finding of this studies are they become available currently no information to suggest that symptoms associated with omicron. Countries can and must-prevent the spread of omicron with the proven health and social measures.

SARS-COV-19 omicron variant detection of cases in multiple countries. Potential increase transmissibility. 30 mutation in spike gene(S-gene). Potential reduction in efficiency of some antibody treatment. Potential reduction neutralization by sera from vaccinated or convalescent individuals.

Conclusion

Drawn from these observation are limited by small sample size, more data will be needed to fully understand the epidemiology of the omicron variant. Travel history of index patient and phylogenetic analysis of the secondary, cases indicate an international introduction of the omicron variant.The recent emergency of omicron which is now projected to be the dominant variant in the united states, reinforces the importance of vaccination, in coordination with other prevention startegies

SPO-30

Evaluation of hepatoprotective and nephroprotective effect of *α - pinene* on rat

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Abstract
The organ toxicity is highly related with oxidative stress, as the hepatorenal cells are repeatedly manifested to drug pressure, xenobiotic, pesticides, fungicides, anesthetic agents, organic solvents and consequently generates ROS during metabolism process. Carbon tetrachloride (CCl_4) is known to induce ROS, deplete antioxidant defenses; enzymes and substrates to cause oxidative stress in different tissues. α-pinene ($C_{10}H_{16}$) is a bicyclic, double bond, terpenoid hydrocarbon having antioxidant potential. They are among the best-known representatives of a broad family of monoterpenes. Some of the plants that contain or produce α-pinene, β-pinene, or both are: *Ocimum menthaefolium*, *Pinus* spp., *Juniperus communis*, *Rosmarinus officinalis*, *Lavandula stoechas*, *Coriandrum sativum*, *Piper nigrum*, Carum copticum L, Foeniculum vulgare.
In CCl4-treated group, CCl4 administration caused a significant elevation of enzymes like Alanine aminotransferase (ALT), aspartate aminotransferase (AST), alkaline phosphatase (ALP), bilirubin, creatinine, blood urea, uric acid and cholesterol level and decreased total protein level as compared to the control group. The use α- pinene in the animals treated with CCl4 significantly decreased the level of liver enzymes and kidney function parameters as compared to the CCl4-treated rats. The results indicated that α- pinene can prevent CCl4-induced liver and kidney injuries.

Keyword The findings suggests that an active phytoconstituent like α-pinene which is having good antioxidant potential would be effectively ameliorates the condition of patients with hepatorenal toxicity. A very small amount of α-pinene acted as excellent scavenging agent and successfully ameliorated certain degenerative changes in liver and kidney due to CCl_4 intoxication.

SPO-31

A systemic review on Solanaceae family

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Abstract

The Solanaceae family is known as "the night shade family" since it is descended from the genes solanum. There are 98 genera and 2700 species. The plants are found in South and Central America. leaves are alternating, spiral, and exstipulate. The flowers are bisexual, actinomorphic, and zygomorphic only infrequently. Cork cambium is found in plants of Solanaceae family. The shape, type, texture, and color of the fruit is vary. The majority of seeds in are endospermic. The chemical elements of the Solanaceae family include tropane alkaloids, scopolamine, atropine, hyoscyamine, and nicotine. Members of the Solanaceae family have medicinal and decorative properties. Poisoning and psychotropic activity is the most common symptoms.

Key Words: Solanaceae, Solanum, Hyoscopolamine, Atropine

SPO- 32

FORMULATION AND EVALUATION OF HERBAL COUGH SYRUP

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Abstract-

The attraction on Herbal Medicines and their use have been Expansion quickly in recent years.As medicinal plants are the richest source of bioactive compounds used in the traditional medicine.The present research has been undertaken with for the development and evaluation of the Herbal syrup containing Honey and Tolu Balasam(Columbian tolu.Tolu balasam of family Leguminaceae is a comman shrub in mainly South Africa.Its Annual herb if with the strong resin.This plant is commonly known as Peru Balasam .It is also use as anti-tussive and expectorant.The aim to formulated and evaluated herbal syrup beacuse synthetic may cause the adverse effect on human body.The Herbal syrup was formulated by the Extraction of Tolu Balasam.

Keywords;-Leguminaceae, Tolu Balsam ,Traditional Medicine.

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