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3.3.1 Number of research papers published per teacher in the Journals notified on UGC CARE list during the last five years


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A Unit Of Ideal Foundation

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s.3.1 Number of research papers published per teacher in the Journals notified on UGC CARE list during the last five years

Title of paper	Name of the author/s	Department of the teacher	Name of journal	Calendar Year of publication	ISSN number	Link to the recognition in UGC enlistment of the Journal /Digital Object Identifier (doi) number		
						Link to website of the Journal	Link to article / paper / abstract of the article	Is it listed in UGC Care list
Isolation, characterization, and evaluation of anxiolytic bioactive compounds from the seed of Vigna radiata	Sonali V. Uppalwar, Vandana Garg and Rohit Dutt	pharmacognocny	Natural product research	2023	2456-1436	https://doi.org/10.1080/14786419.2023.2189709	Recent therapy for managing anxiety disorders is linked with a wide range of adverse effects. The conventional practice of the use of plant extract may indicate an important and new approach to the anxiolytic agent. Seeds of V. radiata belonging to the family Fabaceae is commonly employed to treat several diseases. However, no data is available to screen its viable neuropharmacological effect regardless of its famous use. Hence, the objective of the present study was to isolate the anxiolytic bioactive compound from seeds of V. radiata. Pure bioactive Compounds SU1 and SU2 were obtained from bioactive fraction F9.3 and fraction F9.5 using the bioactivity-guided fractionation method. The current investigation found that 4 mg/kg (o.p.) of kaempferol and γ-aminobutyric acid exhibit significant anxiolytic action in mice that is statistically comparable to diazepam (2 mg/kg.i.p). This study validates the ethnopharmacological use of V. radiata seeds in the management of anxiety disorders.	yes
Exploring non-high-density lipoprotein estimation methods and their clinical significance in cardiovascular disease	Pallavi Hangargekar , Deepak Jha , Md Akbar , Swati Pawar , Amol Joshi	Pharmaceutical chemistry	Advance Pharmaceutical Journal	2023	2456-1436	http://creativesciences.org/files/nspes/bv-nc-nd/4.0/	Cardiovascular diseases (CVD) are a leading cause of global mortality and morbidity. Elevated low-density lipoprotein cholesterol (LDL-c) levels have been identified as a primary risk factor for CVD. However, the LDL/high-density lipoprotein (HDL) cholesterol ratio has emerged as a more effective risk indicator, considering the role of HDL in preventing atherosclerosis. Non-high-density lipoprotein cholesterol (non-HDL-c) has been recognized as a superior predictor of CVD risk compared to LDL-c alone, especially in individuals with hypertriglyceridemia or other lipoprotein abnormalities. Estimating non-HDL-c provides valuable information for assessing CVD risk beyond LDL-c alone. International guidelines have incorporated non-HDL-c as a subsidiary goal in lipid-associated risk assessment, along with plasma apolipoprotein B (apoB). Non-HDL-c estimation offers better risk estimation than LDL-c and is a valuable marker in clinical practice. It is recommended as a secondary therapy target for patients with high triglyceride levels and cardiovascular disease risk. Additionally, non-HDL-c has been associated with cardiovascular outcomes and is considered a long-term predictive marker. Integrating non-HDL-c and apoB into traditional lipid testing may improve diagnostic and prognostic accuracy. This article explores the clinical significance and various methods of estimating non-HDL-c in the context of CVD.	yes
DESIGN AND DEVELOPMENT OF CITRONELLA OIL MICROEMULSION FOR EFFECTUAL TOPICAL DELIVERY.	NaykarSharmila , Mithlesh Kumar , Narware , Ashwini Vaibhav , Waghachaure , priyanka pratap jadhav , RuchitaArun Bhoir , SayliRameshGunjral	Pharmaceutics , Pharmaceutical chemistry, pharmaceutical analysis, Pharmaceutics , Pharmacology , Pharmacognocny.	European Chemical Bulletin (scopus)	2023	2063-5346	https://www.icebyhikz.com/article/view/2023/02_2536.php	The purpose of this study was to formulate topical microemulsion gel of citronella oil suitable for topical delivery. Citronella oil micro emulsion system with Tween 20 as Surfactant, PEG 200 as cosurfactant and citronella oil as oil was developed for topical delivery. Pseudo ternary phase diagram were constructed to identify the microemulsion region and a suitable composition was identified to formulate the microemulsion. Single isotropic region, which is considered as an O/W microemulsion was found in the pseudo ternary phase diagram developed at various Tween 20 and PEG 200 ratio using phase titration method. The developed microemulsion was characterized for clarity, Zeta potential, Viscosity, Globule size. Centrifugation studies were carried out to confirm the stability of the developed formulation. The formulation was thickened with a gelling agent carbopol 940 and xanthum gum, to yield a gel with desirable properties facilitating the topical application. The developed microemulsion based gel was characterized for pH, Spreadability, Viscosity. Optimized microemulsion based gel formulation was found to exhibit significant antifungal activity against candida Albicansspecies. Thus the present study indicates that developed	yes
Important role of food and nutritional security during covid-19 survey,	Lalchand D Devhare, Shishupal S. Bodhankar, Priyanka Warambhe, Sonali V Uppalwar, Dhanmshila L. Devhare, sanjaykumar Uchibagde, Shubham shende	Pharmacognocny	European Chemical Bulletin	2023	2063-5346	https://www.researchgate.net/publication/370944246_important_Role_Of_Food_And_Nutritional_Security_During_Covid-19_A_Survey_Section_A-Research_paper_Eur	The Covid-19 epidemic is now the most pressing issue on a global scale. To combat viruses, a healthy nutritional state must be attained and maintained. A person's nutritional status is influenced by a number of variables, including age, sex, health condition, way of life, and medicines. During this COVID-19 pandemic, the nutritional state of people has been exploited as a resistance against instability. Strengthening the immune system is the only sustainable approach to live in the present environment since optimal nutrition and dietary nutrient intake have an influence on it. Except for vitamin C, which is one of the greatest ways to boost immunity, there is no proof that supplements help heal the immune system. A healthy diet can guarantee that the body is prepared to fight the infection. However, proper food practices and food safety management are required in addition to the dietary management standards. The present article explored about the survey of immunity boosters and vitamin C supplements for better recovery from COVID-19.	yes

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An Update on morphology, mechanism, lethality and management of Datura poisoning	Shalija Singh , Kimee Hiuna Minj , Lalchand D Devhare , Sonali V Uppalwar, Sneha Anand, Dr. Abhishek Suman, Dr. Dhamshila L Devhare.	Pharmacognocny	European Chemical Bulletin	2023			Datura is a part of the Solanaceae family and belongs to the genus Datura, which is thought to have both poisonous and therapeutic characteristics due to the diverse variety of bioactive ingredients. The Datura plant's common names are thorns apple and Jimson Weed, mad apple, and moonflower. Plants are used to cure a variety of human diseases. Alkaloids, sugars, cardiac glycosides, tannins, flavonoids, amino acids, and phenolic substances were identified in the preliminary phytochemical analysis of the Datura plant extract. Additionally, it contains dangerous tropane alkaloids like hyoscyamine, atropine, and scopolamine. Even while some research on D. stramonium has suggested possible pharmacological effects, the toxicity of the organism is still mostly unknown. Additionally, toxic symptoms have been brought on by the regular misuse of D.	Yes
Molecular docking investigation of antiviral action of Illicium verum(star anise) against marburg virus through biovia discovery studio visualizer	Gomathi Swaminathan, Laliteshwar Pratap Singh, Anchal Arora, Mahendra Duveedi, Anshu Tripathi, Vipul Negi, Sonali Vinodi Uppalwar	Pharmacognocny	European Chemical Bulletin	2023	2063-5346		Objective: In different investigations, phytoconstituents of star anise have demonstrated outstanding antiviral activity against diverse viral species. Consequently, the study's goal was to use in-silico methodologies to assess the effectiveness of star anise phytoconstituents against the Marburg virus protein. Method : Auto Dock was employed to test chosen star anise phytochemical molecules on Marburg virus protein, and Discovery Studio visualizer was used to make 3D and 2D interface images. Result : Blind docking of all eight phytochemicals revealed that two of the eight phytochemicals created conventional carbon-hydrogen bonds, and that eugenol and Farnesol both formed carbon-hydrogen bonds. The lowest binding energy was determined to be -6.00 kcal/mol for beta-eudesmol. Conclusion : Based on the substantial binding energies of phytoconstituents during blind docking, our findings revealed that star anise phytoconstituents can have a beneficial effect against Marburg virus. Beta eudesmol might be a viable alternative to Marburg virus.	Yes
PATIENT-CONTROLLED SEDATION METHODS IN PHARMACOLOGY AND MEDICAL RESEARCH	Murlihar Rao, Pulagurtha Bhaskararao, Raman Kumar, Saurabh Jawahar Sanghavi, Bindu Madhuri Kamba, Sonali Vinodi Uppalwar	Pharmacognocny	European Chemical Bulletin	2023	2063-5346		Patient controlled sedation is nothing is a painless procedure, which is given to the patient. Many patients are opting for the general anesthesia procedure as it lead them with the painless affect during the surgery. It has been seen that most of people they have fear in the ways of giving sedation to the patients. It has also been observed that unprofessional doctors are using during levels methods and techniques for providing the sedation, which is neither accurate for the patient nor good for their careers too. Operation or the surgery cannot be done without giving anesthesia or the sedation. . It is a process of pacifying the patient before any process. It can be in the form of	Yes
A review: Nutraceuticals (brief drug study of tab. dynocal)	Salahuddin Ansari, Shubham Argade, Sadhana Baladhe, Shtal Baladhe, Siddheshwari Bhusale and Dr. Sonali Uppalwar	Pharmacognocny	World journal of pharmacy and pharmaceutical sciences	2023	2278-4357	https://www.eurchembull.com/uploads/paper/33e17b4c4f4f8434dc37dfeec62f47.pdf	Nutraceutical is the hybrid of 'nutrition' and 'pharmaceutical'. Nutraceutical, in broad, are food or part of food playing a significant role in modifying and maintaining normal physiological function that maintains healthy human beings. The principal reasons for the growth of the nutraceutical market worldwide are the current population and the health trends. The food products used as nutraceutical can be categorized as dietary fiber, prebiotics, probiotics, polyunsaturated fatty acids, antioxidants and other different types of herbal/ natural foods. These nutraceuticals help in combating some of the major health problems of the century such as obesity, cardiovascular diseases, cancer, osteoporosis, arthritis, diabetes, cholesterol etc. In whole, 'nutraceutical' has lead to the new era of medicine and health, in which the food industry has become a research oriented sector.	Yes
Review of Sunscreens and Natural Sunscreening Agents	Suyash Shegade, Payal Rathod , Mayur Sabale , Sayna Shaikh , Pawan Sharma, Mayuri Bhoir, Sonali V. Uppalwar	Pharmacognocny	International Journal of Pharmaceutical Research and Applications	2023	2249-7781	www.ijprjournal.com	UVR is reflected or scattered by physical blocks. The outcome of going back to the ground state is that the absorbed energy is transformed into longer, lower-energy wavelengths (such as infrared radiation, hence heat). Inorganic particles, which are smaller versions of physical blocks, also work in part by absorption. Sunscreens, both chemical and physical, have long been used to prevent and treat a variety of UV-related illnesses, including sunburn, photoaging, skin cancer, and phototoxic responses. At the moment, sunscreens come in a variety of forms, including creams, lotions, gels, sticks, and sprays. It's essential to apply	Yes
Pathogenic Insights, Clinical Profiles and herbal dietary solution	Samanthula Kumara Swamy, Kumar Pramod, Manjunath Anoop, Uppalwar Sonali V., Choudhary Ram	Pharmacognocny	International Journal of zoological investigations.	2023	2454-3055	https://doi.org/10.33745/ijzi.2023.v09i02.149	The present review aimed to explore the various types of Psoriasis for quick updates on its etiology, pathophysiology, and treatment. Psoriasis is a common, chronic skin disease with a global prevalence of	Yes
DESIGN AND EVALUATION OF NIRGUDI OIL LOADED NANO STRUCTURED LIPID CARRIER	Sharmila naykar wagh , Swati Talele, Ashwini V. Waghachaure , Priyanka P. Jadhav , Mithlesh Kumar Narware , Ruchita A. Bhoir , Sayali R. Gunjal , Mahesh P. Junghare ,	Pharmaceutics , Pharmaceutical chemistry, pharmaceutical analysis, Pharmaceutics , Pharmacology , Pharmacognocny.	Journal of Clinical Otorhinolaryngology , Head, and Neck Surgery	2023	1001-1781	https://www.icebyhkkz.cn/article/view/2023/02_2536.php	development and fabrication of Nirgudi oil loaded NLC using Factorial design. Materials and Methods: NLC were fabricated by melt dispersion ultrasonication method. NLC containing mixtures of Glycerylmonostearate as solid lipid and Nirgudi Oil as liquid lipid and Tween 80 as surfactant. Results and discussion: The particle size of the NLC was found	Yes
Design and Development of Citronellea Oil Microemulsion For Effectual Topical Delivery	Sharmila naykar wagh , Ashwini V. Waghachaure , Priyanka P. Jadhav , Mithlesh Kumar Narware , Ruchita A. Bhoir , Sayali R. Gunjal ,	Pharmaceutics , Pharmaceutical chemistry, pharmaceutical analysis, Pharmaceutics , Pharmacology , Pharmacognocny.	European Chemical Bulletin	2023	2063-5346	https://www.eurchembull.com	The purpose of this study was to formulate topical microemulsion gel of citronella oil suitable for topical delivery. Citronella oil micro emulsion system with Tween 20 as Surfactant, PEG 200 as cosurfactant and citronella oil as oil was developed for topical delivery. Pseudo ternary phase diagram were constructed	Yes

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Pharmacognosic characterization of mung beans (<i>Vigna radiata</i> (L.) R. Wilczek) seeds for identification and evaluation.	Sonali V. Uppalwar, Vandana Garg and Rohit Dutt	Pharmacognocny	International journal of botany studies	2020	—	https://www.researchgate.net/publication/341743311_Seeds_of_Mung_Bean_Vigna_radiata_LRWilczek_Taxonomy_Phytochemistry_Medicinal_Uses_and_Pharmacology	Background: Seeds of Mung bean (<i>Vigna radiata</i> (L.) R. Wilczek) have been recognized as a 'Green pearl' of Asian cuisine due to abundance in dietary fibres, protein, minerals, vitamins and wide variety of bioactive agents.	yes
MUCORMYCOSIS: - ASSOCIATED WITH COVID-19	Kirti Prakash Patil, Sonali Vishnu Patil, Sakshi Raghunath Sangale, Vighnesh Madhav Patil, Yashraj Yadav, Sori Yadav, Bindhya Yadav, Vijay Yadav, Mrs. Shikha Shukla and Dr. Dileep Bharati	WORLD JOURNAL OF PHARMACY AND	International journal of botany studies	2024	2278-4357	https://www.wjpps.com/wjpps-controller/index	caused by the SARS-CoV-2 virus (Novel corona virus). First time discovered in Wuhan, China. Fungal infections, including mucormycosis, aspergillosis and invasive candidiasis, have been reported in patients with severe COVID-19 or those with immunosuppression. Over the years a large number of herbal medicines have been used to enhance cognition and memory. Plants are a source of pharmacological potent drug	YES
NATURAL DRUGS AS COGNITIVE ENHANCER: A SURVEY ARTICLE		World Journal of Pharmaceutical Research	International journal of botany studies	2022	2277-7105	https://wjpr.net/abstract_show/19399		YES

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Title of paper	Name of author	journal name	Calendar Year of publication	ISSN No	Link to the recognition in UGC enlistment of the Journal /Digital Object Identifier		
					Link to website of the Journal	Link to article / paper / abstract of the article	Is it listed in UGC Care list
CORONA VIRUS DISEASE: HISTORICAL PERSPECTIVE, CLASSIFICATION, PATHOPHYSIOLOGY, RISK FACTORS	Bhakti Patil, Poonam Ambudkar, Akshita Bhagat, Shivani Chaudhary, Aditya Daware, Jayesh Jadhav, Rithik Gupta Divya Dnyaneshwar Patil*, Kirti Prakash Patil, Sonali Vishnu Patil, Sakshi Raghunath Sangle, Vighnesh Mahendr Patil, Mayuri Bhoir and Dr. Dileep Kumar Bharati	WORLD JOURNAL OF PHARMACY AND WORLD JOURNAL OF PHARMACY AND	2024	2278-4357	https://www.wjpps.com/Wjpps_controller/abstract_id/16503	acute Respiratory syndrome Corona Virus Disease 2019(COVID- 19) has caused a worldwide sudden and sustainable increase in hospitalization for Pneumonia with Multiorgan disease. This Disease is Largely transmitted by (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus (Novel corona virus).First time discovered in Wuhan, China. Fungal infections, including mucormycosis, aspergillosis and invasive candidiasis,	yes
MUCORMYCOSIS: - ASSOCIATED WITH COVID-19		WORLD JOURNAL OF PHARMACY AND	2024	2278-4357	https://www.wjpps.com/wjpps_controller/index	the deadliest infectious disease responsible for millions of deaths annually across the world. Worldwide TB is a 13th leading cause of death and second leading infectious killer after covid-19. And in these project work we present a general overview of TB including the pathogenesis, diagnosis, and treatment guidelines. In preparation of these write up, we search PubMed for relevant articles on TB. Additionally we search the member of macrolide family. According to our survey study it is effective against bacterial and inflammatory disease (e.g.: sore throat), respiratory syndrome coronavirus 2 (SARS-COV-2) emerged in late December 2019 in China and rapidly spread to many countries around the world. The World Health Organization (WHO)	YES
TUBE RCULOSIS: THE INFECTIOUSD ISEASE	Dakshata Lahoo Goshte*, Ashish Santosh Gautam, Sumit Prakash Gaikawad, Sanyukta Satish Gharat, Oshali Baban Gore, Miss. Priyanka Rathod and Dilip Kumar Bharti	WORLD JOURNAL OF PHARMACY AND	2024	2278-4357	https://www.wjpps.com/Wjpps_controller/abstract_id/16605	we present a general overview of TB including the pathogenesis, diagnosis, and treatment guidelines. In preparation of these write up, we search PubMed for relevant articles on TB. Additionally we search the member of macrolide family. According to our survey study it is effective against bacterial and inflammatory disease (e.g.: sore throat), respiratory syndrome coronavirus 2 (SARS-COV-2) emerged in late December 2019 in China and rapidly spread to many countries around the world. The World Health Organization (WHO)	Yes
OBSEVAIIONAL STUDY OF EFFECTS OF AZITHROMYCIN AND NUTRACEUTICALS ON COVID-19 PATIENTS	Sarvesh B. Bari*, Shruti R. Adhikari, Snigdha S. Bamobdkar, Sudha G. Bhilare and Dileep K. Bharati	World Journal of Pharmaceutical Research	2022	2277-7105	https://wjpr.net/abstract_show/19366#	According to our survey study it is effective against bacterial and inflammatory disease (e.g.: sore throat), respiratory syndrome coronavirus 2 (SARS-COV-2) emerged in late December 2019 in China and rapidly spread to many countries around the world. The World Health Organization (WHO)	yes
REVIEW OF MOLNUPIRAVIR- AN ORAL ANTI- VIRAL DRUG FOR COVID-19	*Akanksha S. Patil, Isha K. Sankhe, Aarti R. Pawar, Krishna S. Tiwari, Priyanka Rathore and Dr. Dileep Kumar Bharati	World Journal of Pharmaceutical Research	2022	2278-4357	https://www.wjpps.com/Wjpps_controller/abstract_id/16607	emerged in late December 2019 in China and rapidly spread to many countries around the world. The World Health Organization (WHO)	Yes
DRUGS AS COGNITIVE ENHANCER: A SURVEY	Yadav, Soni Yadav, Bindiya Yadav, Vijay Yadav, Mrs. Shikha Shukla and Dr. Dileep Bharati	World Journal of Pharmaceutical Research	2022	2277-7105	https://wjpr.net/abstract_show/19399	the most vital aspects of the human brain. It is necessary for the effective survival of an individual. Over the years a large number of herbal	yes
A Review on Polyherbal Gel Used in treatment of Acne	Pranay pawar, Mrunal patil,Riva ravindra,mayuri bhoir	International journal of Research publication and reviews	2023	2582-7421		skin condition that affects a large number of individuals worldwide,sepsite the availability of several treatment option,many of	yes


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BHAMURDA (BLUMEA LACERA)

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Abstract: Blumea lacera, usually known as "Bhamurda," is a therapeutic plant with a rich history in Ayurvedic medication. This lasting spice, having a place with the Asteraceae family, is local to South and Southeast Asia, portrayed by serrated leaves and little yellow blossoms, arriving at up to 1 meter in level. This study expects to give a broad investigation of Blumea lacera, a South and Southeast Asian endemic plant of the Asteraceae family. Our attention is basically on disentangling its conventional therapeutic applications, including medicines for skin problems, stomach related diseases, and help with discomfort. Besides, we dive into the plant's phytochemical profile, which incorporates terpenoids, flavonoids, and alkaloids, accepted to support its calming, pain relieving, and antibacterial properties. We additionally examine its utilization in mitigating respiratory circumstances, advancing injury mending, and its true capacity in tending to provocative sicknesses like joint pain. The natural balm can be separated from its leaves and stems utilizing steam refining. The cycle includes reaping new, impurity free plant material, slashing it into more modest parts of improve surface region, and exposing it to steam refining. Steam conveys rejuvenating ointment from the plant material, which is dense into a fluid. It flaunts a different phytochemical organization, including terpenoids, flavonoids, and alkaloids. Conventional medication tackles its mitigating, pain relieving, and antibacterial credits to treat different afflictions, including respiratory issues, wound recuperating, and torment the board. Blumea lacera shows gentle pain relieving, calming, and antidiarrheal properties, lining up with its conventional use in society medication. Its true capacity as a diuretic, antibacterial, anthelmintic, and cytotoxic specialist upholds its customary restorative applications. Despite the fact that reviews recommend its advantages for kidney wellbeing and urinary parcel diseases, further exploration is justified for an extensive comprehension of its belongings and possible applications. Alert is encouraged, and meeting with medical services experts is significant prior to utilizing natural solutions for clinical purposes.

KeyPoints: *Anti-inflammatory, Essential oil, Phytochemicals, Protect Against Diabetes, Traditional, Wound healing, Blumea lacera.*

BLACK TURMERIC

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Abstract: This Abstract contains the chemical constituents and pharmaceutical applications of black turmeric (*Curcuma caesia*), a less well-known *Curcuma* species with potential therapeutic use. Rhizome of this plant is claimed to be useful in treating several disease like piles, leprosy, bronchitis, asthma, cancer, epilepsy, fever, wounds, impotency, fertility, tooth ache and vomiting etc. It contains alkaloids, terpenes, amino acids, carbohydrates, tannins, flavones, flavonoids, steroids, reducing sugars, anthraquinones, glycosides, cardiac glycosides. proteins, the volatile rhizomes oil of *Curcuma caesia* contains of 30 components, representing 97.48% of the oil, with camphor (28.3%), ar-turmerone (12.3%), (Z) ocimene (8.2%), 1,8-cineole elemene, borneol (4.4%), bornylacetate (3.3%) and curcumen e (2.82%) as the major constituents. The wonder herb *Curcuma caesia* has curcumen e as a chemical compound with numerous therapeutic benefits. It is used to treat epilepsy, impotence, piles, and menstrual issues. This plant has been used externally to cure wounds, white skin patches, and leprosy lesions. Additionally, it has the power to increase fertility rates. Additionally, it is used to treat some forms of TB and splenic enlargement. With an emphasis on its medicinal potential, this study intends to investigate the chemical components and pharmaceutical uses of black turmeric (*Curcuma caesia*), a less well-known *Curcuma* species.

The study looks into its special qualities, such as its high curcumin content, and looks at how effective it is in treating various illnesses and disorders. The goal is also to highlight the significance of protecting this uncommon medicinal plant which is predominantly found in mountainous areas for future generations and to spot potential areas for additional study and sustainable growing methods. we investigated the physical and cellular features of black turmeric (*Curcuma caesia*), then we performed phytochemical analysis to find its beneficial components. Potential antioxidant, anti-inflammatory, antibacterial, and cytotoxic activities were discovered during pharmacological screening. In addition, we reviewed the uses of black turmeric in industry and health as well as traditional knowledge and indigenous practices. Its promise in pharmaceuticals, aromatherapy, and conventional healing methods has been made clear by this effort.

Keywords: Curcumin-rich, Therapeutic diversity, Indigenous preservation, Phytochemical analysis, Aromatic potential.

EXPLORING THE MEDICINAL POTENTIAL OF SEMECARPUS ANACARDIUM LINN. NUTS IN ALTERNATIVE MEDICINE

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ABSTRACT

Nutmeg, deductively known as *Myristica fragrans*, is a zest gotten from the seed of a tropical evergreen tree local to Indonesia. It is famous for its fragrant and somewhat sweet flavor, making it a well-known fixing in different culinary dishes, both exquisite and sweet. Nutmeg has a rich history going back hundreds of years and been used for its culinary, therapeutic, and, surprisingly, psychoactive properties. Nutmeg is a flexible zest with different culinary and therapeutic purposes, so its targets can include: Culinary purposes, restorative and medical advantages, customary and social purposes, additives and food stockpiling, modern use Nutmeg is a flexible flavor that can be utilized in both sweet and exquisite dishes. It is in many cases utilized in ground structure or as entire seeds. Here are a few normal strategies for involving nutmeg: Grating Nutmeg. Ground Nutmeg. Nutmeg in Baking. Nutmeg in Drinks Compound examination of nutmeg seeds uncovered wholesome and phytochemical contents, as well as an all in all, nutmeg is a flexible zest with a rich history in culinary and therapeutic practices. At the point when utilized with some restraint, it can upgrade the kind of dishes and possibly offer some medical advantages. In any case, it's vital for practice alert and stay away from exorbitant utilization, as a lot of nutmeg can prompt unfavorable impacts and ought not be utilized for sporting purposes.

Keywords: Antibacterial profiles; Drug properties; *Myristica fragrans*; Nutmeg; Nutritional values

THE NATURAL HISTORY OF HIV INFECTION

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Abstract: The normal flow of untreated HIV disease shifts generally with some HIV positive individual capable keep up with high COH cell count andlor stifled viral burden without even a trace of Craftsmanship. Albeit comparable, the hidden robotic interaction prompting long haul non moderate and viral control are prone to vary. Deliberate continuous exploration endeavors will assist full with recognizing host factor that are caused related to this patho type for the improvement non treatment or forestalling techniques Despite the fact that there is expanding proof that connect Workmanship during essential contamination might forestall the immunological assurance which would some way or another be seen untreated. The better



comprehension of the general disease of viral host and ecological component on the normal flow of HIV contamination.

Key point: Despite the existence of several patho type associate with slowly progressive HIV infection likely that virtully all HIV positive individual we eventually experience disease progression if left untreated.

TARGETED DRUG DELIVERY SYSTEM

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Abstract: Designated drug conveyance framework is an exceptional type of medication conveyance framework where the medicament is specifically focused on at site of activity The point of designated drug conveyance is to make the expected measure of the medication accessible at its ideal site of activity. Drug focusing on can be achieved in various ways that incorporate protein intercession, pH-subordinate delivery, utilization of exceptional vehicles, receptor focusing, among different components. Cleverly planned designated drug conveyance frameworks likewise offer the benefits of a low portion of the medication alongside diminished side effects which eventually works on tolerant consistence. Occurrence's portion unloading and measurements structure disappointment are unimportant. An engaged medication transport intends to have a protected medication connection with the unhealthy tissue. The framework depends on a technique that conveys a specific measure of a remedial specialist for a delayed timeframe to a designated unhealthy region inside the body. This keeps up with the necessary plasma and tissue drug levels in the body, consequently forestalling any harm to the sound tissue by means of the medication. The objective of a designated drug conveyance framework is to delay, confine, target and have a safeguarded drug connection with the sick tissue. The traditional medication conveyance framework is the absorption of the medication across an organic film, while the designated discharge framework delivers the medication in a measurements structure Target drug conveyance framework decreases the secondary effects and harmfulness. The Portion of the drug reduces by focusing on organ. It dodges the debasement of medication (first pass digestion). Drug bioavailability increments and variance in focus diminishes.

Keywords: Targeted drug delivery; active pharmaceutical ingredients. ; brain targeting approaches; colon targeting; folate receptor targeting; polymers

ASTHMA: DEFINATION AND CONDITIONING

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Abstract: Asthma is a common condition due to chronic inflammation of the lower respiratory tract. Chronic lower airway inflammation is known to be more common in individuals that also have inflammatory disorders of the upper airway. The scientific understanding of asthma continues to improve and it is important for providers who treat upper or lower airway inflammation to be familiar with asthma's definition. Chronic inflammation of the lower respiratory tract is a typical cause of asthma. It is well recognized that people with inflammatory illnesses of the upper airway are also more likely to experience chronic lower airway inflammation. The definition and pathogenesis of asthma should be known by healthcare professionals who treat upper or lower airway inflammation, as scientific understanding of the condition is still developing. PubMed literature reviews and the author's own expertise were used to choose. Asthma is a heterogenic condition that is underdiagnosed and undertreated despite that the skills needed to diagnose it are readily attainable and effective treatments are available. Providers need a working understanding of asthma in order to be proficient at managing their patients with chronic nasal or sinus inflammation.

Keywords: asthma, epigenetics, genetics pathophysiology, phenotypes



STUDIES ON THE ANTIOXIDANT ACTIVITIES OF DESMODIUM GANGETICUM

Patil Bhavika Kailas, Alshi Vaishnavi Vivek, , Sonali Uppalwar
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Abstract: *Desmodium gangeticum*, generally known as "Salparni" or "Shalparni," is a restorative plant local to the Indian subcontinent. It has been a vital part of conventional Ayurvedic and Siddha medication frameworks for a really long time. This herbaceous enduring has a place with the Fabaceae family and is described by its trifoliate leaves and little, purple-pink blossoms. The principal objective of *Desmodium gangeticum* is to treat respiratory diseases. It is viewed as a compelling solution for conditions like asthma, bronchitis, and hack. Also, it has been utilized to oversee different liver problems because of its hepatoprotective characteristics. *Desmodium gangeticum* has a noteworthy therapeutic property. It is known for its calming, cancer prevention agent and immunomodulatory properties. Here are a few normal techniques for utilizing *Desmodium gangeticum*: Calming, Stomach related Wellbeing, Hostile to unfavorably susceptible, Respiratory Wellbeing. *Desmodium gangeticum* has a few medical advantages and customary botanist for direction on the proper measurement and technique for use for explicit wellbeing concern. All in all, *Desmodium gangeticum* is an important therapeutic plant with a rich history of customary use. Its different pharmacological activities make it a promising contender for additional innovative work of regular cures. In any case, it is crucial for lead thorough logical examinations to completely grasp its systems of activity and guarantee its protected and viable use in present day medication.

Keywords:

Anti-inflammatory; *Desmodium gangeticum*; Dosage; Salparni; Shalparni

CENTCHROMAN: A RANDOMIZED CONTROLLED TRIAL

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Abstract Centchroman was created at CDRI, Lucknow in 1967. Combined in 1967 endorsed and authorized in 1991 and showcasing in 1992 by sent off as Saheli and Decision 7. It acts by forestalling implantation of blastocyst in endometrium. It has high level of wellbeing and is basically liberated from secondary effects with the exception of a defer in around 8% periods which isn't restricted to any ladies/cycle. The Service of Wellbeing and Family Government assistance, India has now presented centchroman in public family arranging program under the trademark "Chhaya" from April 2016. The point of this study was to adequacy, secondary effects, cessation rates and disappointment rate. Centchroman was given orally, in twofold visually impaired non-get over study, to sound male and female workers at portions going from 5 mg to 320 mg. A sum of 146 ladies were assessed for the review. Larger part of the ladies were in the age gathering of 20-30 years (76.02%) with mean age of 26 years. The majority of the centchroman acceptors were multipara (74.65%) and ladies in post-early termination (38.35%) and post pregnancy bunch (36.3%). Span of purpose went from 90 days in 146 ladies to a year in 98 ladies. The discontinuation rate was 31.5%. The major feminine grievance was deferred period in 15.06% ladies and unpredictable cycle in 10.95%. Of the 146 ladies in the review bunch, pregnancy happened in 3 ladies. Pearl list determined for centchroman was 2.05/HWY. Centchroman has a significant spot in post pregnancy contraception because of its wellbeing profile in breastfeeding ladies. Centchroman is a non-

hormonal oral prophylactic medication with great helpful viability and an ideal secondary effect profile.

Keyword: - Centchroman, Chayya, Oral contraceptives, postpartum, pregnancy.

'ACACIA NILOTICA' IN HERBAL MEDICINE

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Abstract: Gutta-percha cones utilized straightforwardly from the maker's fixed packs harbor miniature creatures. During clinical use, the possibilities of pollution of gutta-percha increments. Thus, sterilization of gutta-percha cones before use is fundamental to forestall waterway repeated pollution. The concentrate of babul was utilized to evaluate its antimicrobial movement against E-faecalis, S. aureus and C. albicans utilizing the agar dispersion strategy. A sum of 120 cones gained from newly opened producers' pack were cut into three equivalent parts and partitioned into bunch I which was straightforwardly positioned into a supplement stock, bunch II was clinically debased with gloves for 30 s and set into a supplement stock, and the third part was clinically tainted with gloves and purified for 5 min utilizing the trial sanitizers to check for the presence of turbidity. Two percent chlorhexidine showed greatest antibacterial activity against E. faecalis and S. aureus followed by babul separate. It was likewise seen as more useful in sterilizing gutta-percha cones followed by babul and 3% sodium hypochlorite in 5 min. Babul natural concentrate is without a doubt viable in sterilizing gutta-percha cones and is a superior option in contrast to synthetic sanitizers.

Keywords: Antimicrobial efficacy; C. albicans; E. fecalis; S. aureus; babul; chlorhexidine; gutta-percha; sodium hypochlorit.

HERBAL FACE

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Abstract: Everyone Believes that Should Get A Fair And Enchanting Skin. Presently A Day, Skin break out, Zits, Pimples Are Normal Among People Who Experience the ill effects of It. As per Ayurveda, Skin Issues Are Typically Because of Contamination In Blood. Natural Face Packs Are Utilized To Reenact Blood Flow, Restore The Muscles And Assist with keeping up with The Flexibility Of The Skin And Eliminate Soil From Skin Pores. The Point Of This Work Is To Figure out And Assess A Home grown Face Pack For Gleaming Skin By Utilizing Normal Natural Fixings. The Normal Natural Fixings Like Termeric, RedSandalwood, Orange Strip, Aloevera, Ashwagandh, Hibiscus Rosa-sinenrisAnd Rose Water for the application. In this way, In the Current Work, We Figured out A Home-grown Face Pack Which Can Be Effectively made with The Effectively Accessible Fixings. After Assessment, We Found Great Properties for The Face Packs, free from Skin Aggravation and Kept up with Its Consistency Even After Solidness Stockpiling Conditions. Consequences Of TheStudy Deductively Confirmed That Home grown Face Pack Having the capacity to Give Productive Shining EffectOn Skin. The General Review Is Helpful to Prove Item Claims Due Its Valuable Advantages on The Human Beings. Web of science, Prescription line discharge, Google Researcher, PubMed and a library have all been utilized to order writing . Natural Remedies Are More Acceptable in The Belief That They Are Safer with Fewer Side Effects Than the Synthetic Ones. Herbal Formulations Have Growing Demand in The World Market. Herbal Face Packs Are Used to Stimulate Blood Circulation, Rejuvenate the Muscles And Help To Maintain The Elasticity Of The Skin And Emove Dirt From Skin Pores. It Is an Our Good Attempt To Formulate The Herbal Face Pack Containing Natural Herbal Ingredients Such As



Multani Mitti, Turmeric, Sandal Wood, Saffron, Milk Powder, Rice Flour, Orange Peel And Banana Peel. After Evaluation, We Found Good Properties for The Face Packs, Free From Skin Irritation And Maintained Its Consistency Even After Stability Storage Conditions. It Has Been Revealed That Herbal Face Pack Having Enough Potential to Give Efficient Glowing Effect On Skin. The Overall Study Is Useful to Substantiate Product Claims Due Its Useful Benefits On The Human Beings. Herbal Ingredients Opened the Way to Formulate Cosmetics Without Any

Keywords – Herbal face pack, Glowing, Natural, Pimple, Irritancy, Anti acne, Antibacterial

BLOOD ROOT PLANT (RED ROOT / BLOOD WORT): TAXONOMY, PHOTOCHEMISTRY,

MEDICINAL USES AND PHARMACOLOGY

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ABSTRACT BloodRootPlant (Redroot/BloodWort): Have been perceived as a "Sanguinaria canadensis" (Local to the forest of North America). It is call BloodRootPlant because of Rosy Sap that radiates from all pieces of the plants, however particularly the root when cut. (Colors/Bug repellent). This article remedial possible featured it's different advantageous results in the field of medication research and expanding logical interest in the Bloodroot Plant, Benzophenathridine Alkaloids are accepted to be essential bioactive parts of BloodRootPlant . In dermatology bloodroot has been used for its cytotoxic impacts it has been advertised as dark balm as an anticancer therapy. Writing has been gathered through healthline Media by Adrinne seitz, MS, RD. LDN, Medline and Library . This survey shares refreshed data on the organic science, medical advantages, phytochemistry and pharmacology of BloodRootPlant. BloodRootPlant show a wide exhibit of exercises like anticancer, Mitigating, antimicrobial, antihypertensive, antineoplastic properties, cell reinforcements and antitumor properties. Sanguinarine, a compound present in blood root, was displayed to have antimicrobial movement and to repress development of fresh blood vessels. This article expects to verifies the restorative and capability of Bloodroot Plant and as well as clinical viewpoint. These plants should be investigated for ID, seclusion, and portrayal of bioactive mixtures against shifted aliments.

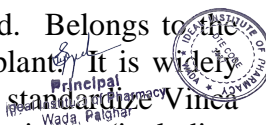
KEYWORDS: BloodRootPlant, Botany, Dermatology, Phytochemistry, Therapeutics potential

CATHARANTHUS ROSEUS

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Introduction: Vinca rosea (C. roseus) Linn is a herbaceous subshrub that is also called as Lchnera rosea, and Madagascar periwinkle in different parts of the world. Belongs to the family Apocynaceae. Almost exclusively, it is raised as an ornamental plant. It is widely naturalized in many places, especially in dry costal regions. Objective To standardize Vinca rosea drying technology. ,To determine whether various extraction techniques (including microwave and eco-friendly)are suitable. ,Making and assessing fruit-based beverages with Vinca rosea enrichment. Through PubMed, Google Scholar, Scifinder, and libraries, literature has been gathered. This review provides updated information on the pharmacology, botany, and phytochemistry of Catharanthus roseus. Alkaloids and phenolic compounds found in



Catharanthus roseus have a variety of biological effects, including anticancer, antidiabetic, antioxidant, antibacterial, and antihypertensive actions. These results suggest that the plant extracts possess compounds with antimicrobial properties that can be further explored for antimicrobial activity. The antibacterials study of the plant extracts demonstrated that folk medicine can be as effective as modern medicine. This plant could serve as useful sources for new antimicrobial agents. The botany, phytochemistry, separation, analysis methods, pharmacology, and toxicity features of several *C. roseus* components are updated and critically analyzed in this communication.

Keyword: Biological effects, Botany, Extraction techniques, Taxonomy, Vinca.

ARTIFICIAL INTELLIGENCE APPLIED TO CLINICAL TRIALS: OPPORTUNITIES AND CHALLENGES

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ABSTRACT:

Clinical trials continue to be crucial in the development of secure and efficient medications. Companies and regulators must use specialized Artificial Intelligence (AI) solutions that enable quick and effective clinical research due to the expanding data-driven and personalized nature of clinical research. healthcare treatment approach. In this article, we discussed the implications of AI in CTs as well as its potential advantages, drawbacks, and hazards. We chose articles that covered the application of AI and Machine Learning (ML) in CTs over the last five years in Europe and the United States, including regulatory compliance. The authorities's materials were found after a careful examination of pertinent databases and websites. Recruiting is the subject of the great bulk of documented AI applications in oncology. The capacity to decrease sample sizes, improve enrollment, and carry out quicker, more effective adaptive CTs are the main benefits mentioned. These possibilities are meant to increase efficiency in all CT-related activities. A significant challenge is keeping AI systems compliant with constantly evolving regulations; 67% of organizations find it difficult to do so. AI integration into clinical investigations is not without issues, though. Concerns about data privacy and security must be addressed in order to safeguard patient confidentiality and adhere to regulatory standards. Clinical trials could be transformed by artificial intelligence if it increases productivity, precision, and patient outcomes. Although there are prospects, incorporating AI efficiently in this crucial area of healthcare necessitates addressing challenges related to data quality, privacy, interpretability, and cost-effectiveness.

Keywords: Artificial Intelligence (AI), Challenges, Clinical trials (CT), Machine learning (ML), Opportunities.

EXCIPIENTS SCREENING FOR THE FORMULATION OF EXEMESTANE AND THYMOQUINONE NLCS FOR THE MANAGEMENT OF BREAST CANCER

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Abstraction - Breast cancer represents the most frequently occurring type of cancer and is also the leading cause of death among women. Till today, it is managed by the conventional



anticancer agents that result in various adverse side effects such as offsite toxicity, development of multidrug resistance and so on. Therefore, novel approaches utilizing the co-delivery of a synthetic agent along with the herbal agent is gaining interest globally. In the present study, the co-delivery of exemestane (EXE) and thymoquinone (THY) encapsulated in nanostructured lipid carriers (NLCs) have been potentiated. The foremost step in its formulation was the screening of excipients that included solid lipids, liquid lipids and the surfactants. The solid lipids were selected by adding each drug to different vials, stirring on magnetic stirrer above 5°C melting point of the solid lipid and observing it for the formation of clear solution, whereas the liquid lipids were screened by utilising the saturation solubility method. The drugs were added in excess amount to liquid lipids in glass vials, which were further stirred and centrifuged and the supernatant was collected for analysis of the drug. Additionally, the surfactants were selected by determining their ability to emulsify the solid and liquid lipids. For that, solid and liquid lipid mixture were added to methylene chloride solution (3 mL) which were then added to the surfactants solution (5%) maintained on continuous stirring which were finally analysed by UV spectrometry at 510 nm. Based on the screening studies, Compritol 888 ATO and Capryol 90 were selected as the solid and liquid lipid while Poloxamer 188, tween 80 were selected as the surfactants for the formulation of EXE and THY loaded NLCs.

Keywords: Exemestane, Thymoquinone, Excipients, Compritol 888 ATO, Capryol 90, Poloxamer 188

ADVANCEMENTS IN STRUCTURE-BASED DRUG DESIGN: A CONTEMPORARY PERSPECTIVE

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Structure-based drug design (SBDD) is a dynamic and evolving field at the forefront of pharmaceutical research. This Abstract presents an overview of recent developments and breakthroughs in SBDD methodologies and their implications for drug discovery. Over the past few years, there has been a remarkable surge in the integration of artificial intelligence, machine learning, and deep learning techniques into SBDD workflows, facilitating the rapid analysis of complex biological data and the prediction of potential drug candidates with high precision. Furthermore, the advent of cryo-electron microscopy and advances in X-ray crystallography have enabled researchers to capture intricate molecular structures, providing valuable insights into the design of therapeutics targeting challenging biomolecular targets. This Abstract showcases several successful case studies where structure based drug design has played a pivotal role in the development of novel drugs, including antiviral agents, protein-protein interaction inhibitors, and personalized medicine approaches. Moreover, the increasing collaboration between academic institutions, pharmaceutical companies, and computational experts has led to the establishment of collaborative platforms and open-access databases, fostering a more inclusive and cooperative environment in SBDD research. Challenges, such as overcoming protein flexibility and addressing issues of drug resistance, are also discussed in the context of recent advancements. In conclusion, this Abstract underscores the transformative impact of recent innovations in Structure based drug design, offering a glimpse into the exciting possibilities that lie ahead in the quest for more effective and targeted therapeutics for a wide spectrum of diseases.



TURMERIC HERB (CURCUMA LONGA L)

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Abstract: *Curcuma longa* L. is a perpetual spice and an individual from the Zingiberaceae (ginger) family, which is utilized broadly in food varieties as well as in Ayurvedic and Chinese frameworks of medication. Flow explores have zeroed in on its cell reinforcement, hepatoprotective, mitigating, anticarcinogenic and antimicrobial properties. As of not long ago, not very many examinations proposed its job as a histological stain. *Curcuma longa* L. , is normally utilized as a zest in curries, food added substance and furthermore, as a dietary color. It has likewise been utilized to treat different sicknesses in the Indian subcontinent from the old times . To learn its viability to be utilized as a counterstain after hematoxylin, to contrast it's staining skill and that of regularly utilized eosin color and furthermore to discover its part in different collagen diseases. Turmeric rhizomes were cut into little pieces and were dried. These dried turmeric rhizomes were processed to frame fine powder, which was then handled to shape color for staining tissue structures. The present trial study was directed in the Branch of Microbial science, Result and conversation: It uncovered that turmeric can be utilized as a counterstain after hematoxylin, its staining skill was likewise great and equivalent to that of eosin color with an exceptional proclivity for collagen and muscle strands. Turmeric color acquired from *C. longa* concentrate can be utilized as a histological stain instead of manufactured harmful eosin color because of its modest, regular, promptly accessible and nontoxic properties. Turmeric color stains collagen and muscle strands with profound yellowish orange tone recommending its more grounded partiality to these designs and consequently, likewise opens an entryway in the treatment of collagen and strong problems.

Key words: Counterstain, *Curcuma longa*, eosin, hematoxylin, turmeric, Zingiberaceae

TURMERIC: A MULTIFACETED NATURAL REMEDY

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Abstract: Turmeric (*Curcuma longa*), a zest generally utilized in conventional medication and culinary practices, has collected huge consideration for its potential medical advantages. This thorough survey expects to combine discoveries from different logical articles and concentrates on turmeric's job as a characteristic cure. We investigate its dynamic compound, curcumin, and its effect on different medical issue, including its calming and cell reinforcement properties. Catchphrases: Turmeric, Curcumin, Normal Cure, Calming, Cell reinforcement, Medical advantages. A deliberate hunt of logical data sets was directed to distinguish significant articles on turmeric and curcumin. Studies spreading over various disciplines, including pharmacology, sustenance, and clinical examination, were remembered for this audit. Calming Properties: Turmeric's dynamic compound, curcumin, has shown critical mitigating impacts in various examinations. It hinders key provocative atoms, making it possibly useful for conditions like joint pain, incendiary entrail sickness, and constant aggravation. Curcumin's cancer prevention agent properties assist with combatting oxidative pressure and free extreme harm. This proposes possible applications in decreasing the gamble of ongoing sicknesses like cardiovascular illness and disease. A few investigations propose that curcumin may assist with mitigating torment, making it a promising regular solution for torment related conditions. Turmeric has been connected to further developed processing and help from gastrointestinal issues, including crabby inside disorder. Arising research shows that curcumin may make neuroprotective impacts, possibly helping conditions like Alzheimer's sickness and gloom. Turmeric, especially its dynamic compound curcumin, offers a wide exhibit of potential medical advantages as a characteristic cure. Its mitigating and cell reinforcement properties make it a promising contender for overseeing different medical issue, from incendiary problems to persistent infections. . This article gives a complete outline of turmeric as a characteristic cure, combining data from



different sources to feature its potential medical advantages. Specialists and wellbeing fans can involve this layout as a source of perspective for figuring out the diverse properties of turmeric and curc UNDERSTANDING THE IMPACT OF NUTRIGENOMICS ON INHERITED WEIGHT CHALLENGES

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ABSTRACT:

The term "nutrigenomics" alludes to the connection of qualities and nourishment in the anticipation and treatment of illness. The words "genomics" and "nutri" are the underlying foundations of the term. Human wellbeing and the climate are fundamentally affected by both hereditary qualities and nourishment. Ailment development. A few people and gatherings might be more defenseless to sickness therefore. Because of the mix of dietary and hereditary variables. The most well-known nourishing illness, stoutness, is a worldwide general medical problem that is deteriorating. This condition is a contributing variable to the irregularities related with the metabolic disorder, like hyperglycaemia, dyslipidemia, hypertension, and irritation, among others. Hostile to heftiness meds can influence the basic components. They have showed significant adverse consequences that offset their supportive impacts with regards to weight guideline. Most of contemporary exploration on the administration of weight and its concerns has been on the conceivable effect of different plant-based arrangements that might emphatically affect the obsessive pathways ensnared in corpulence. For example, both in vitro (cell culture) and invivo concentrates on the counter stoutness properties of green tea and its isolated dynamic parts vivo (creature models) that decidedly affect wellbeing, lessening fat tissue through the bringing down of Separation and expansion of Adipocytes [Gamboa-Gómez, Claudia . As a natural part, nourishment has a huge and notable impact in the board of wellbeing as well as in the counteraction of weight and issues related with it.

Keywords: Obesity, Nutrigenomics, Nutrition, Diets, Genetic

AN ANALYSIS OF TRADITIONAL MEDICINAL PLANTS, FOR HEALING WOUNDS.

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Abstract- For quite a long time customary restorative plants have been utilized overall to treat wounds. To join. information with science it is pivotal to completely assess these plants according to a pharmacognostic viewpoint to grasp their remedial potential and wellbeing. The point of this study is to direct an evaluation of customary restorative plants known for their injury mending properties. By inspecting their synthetic and pharmacological qualities we look to reveal the components through which they work with wound healing. Through a survey of writing we distinguished plants generally utilized for wound recuperating. We carefully inspected plant examples both minutely. Synthetic examination was performed to distinguish compounds while pharmacological assessments remembered wound recuperating tests for creature models and in investigations. The pharmacognostic assessment of the chose plants uncovered natural elements, compound constituents and pharmacological properties related with wound mending. Dynamic mixtures, for example, flavonoids, tannins and polysaccharides were effectively distinguished. Wound recuperating tests exhibited their adequacy in advancing tissue recovery diminishing irritation and speeding up the injury

mending process. Customary restorative plants show guarantee in the field of wound mending applications. Their pharmacognostic portrayal gives bits of knowledge, into their instruments of activity. The mix old enough insight and current logical examination can possibly make successful cures, for wound mending. It is significant to keep exploring and normalizing plants to open their advantages completely.

KEYWORDS: *Features of plants analyzing chemicals, Medical plants evaluating their properties promoting wound healing. –*

FORMULATION AND EVALUATION OF BORAGE OIL-NANOEMULSION LOADED WITH DOCETAXEL FOR IMPROVED ANTICANCER EFFICACY

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ABSTRACT

The goal of the current investigations were the advancement of a Nanoemulsion figured out utilizing Borage oil for the conveyance of Docetaxel as a ramifications for inactive medication focusing on and worked on anticancer effect. Nanotechnology based treatments have arisen to be the most clever type of designated treatment for better malignant growth the executives. In this manner, in present review, notable anticancer medication Docetaxel has been planned as Nanoemulsion utilizing Borage oil as useful excipients, known to have GLA (Gamma Linolenic Corrosive) with detailed anticancer exercises for a synergistic anticancer impact. Definition was advanced utilizing measurable plan to get last detailing. Size of molecule, shape, morphology, connections and medication solubilization were affirmed utilizing Dynamic light dispersing, TEM, SEM, FTIR, XRD and DSC. In-vitro discharge study and cell reasonability studies were likewise performed. Wellbeing of detailing was gotten to by Hemocompatibility studies. The typical molecule size & PDI were found as 180 nm & 0.210, all inside limits. TEM & SEM examination affirmed the circular shape. Complete atomic scattering of medication in center was affirmed utilizing DSC and XRD. FTIR affirmed shortfall of any apparent association of medication with excipients. In vitro discharge studies showed supported example of delivery. In vitro cell suitability measure showed critical ability to kill of Nanoemulsion against (MCF-7) cells. Hemocompatibility studies displayed inside the breaking point hemolysis.


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MINOXIDIL IN THE TREATMENT OF ANDROGENETIC ALOPECIA

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Abstract: The Public Establishments of Wellbeing (US NIH, 2018) gauges that in the US approximately 50 million men and 30 million ladies experience the ill effects of AGA (otherwise called design going bald). Minoxidil is the main skin drug for the treatment of both female and male example going bald. In the US, minoxidil is endorsed over-the-counter (OTC) at a greatest centralization of 5%. In this survey, we sum up the discoveries of the crucial examinations utilized on the side of the medication's endorsement as well as late revelations and novel advancements in the utilization of minoxidil for the treatment of AGA. A essential writing search was led involving PubMed in May 2019, using the pursuit term "oral minoxidil AND (going bald OR alopecia OR hair loss)". Audits, non-English examinations, and articles concerning just skin minoxidil were excluded. There is some proof that the stimulatory impact of minoxidil on hair development is likewise because of the launch of potassium channels by minoxidil sulfate, however this thought has been challenging to demonstrate and to date there has been no unmistakable exhibit that KATP diverts are communicated in the hair follicle. A all out of 17 investigations with 634 patients were found talking about the utilization of oral minoxidil as the essential treatment methodology for going bald. Androgenetic alopecia was the most concentrated on condition, yet different circumstances included telogen emanation, lichen planopilaris, free anagen hair disorder, monilethrix, alopecia areata, and long-lasting chemotherapy-instigated alopecia. Oral minoxidil was viewed as a powerful and very much endured treatment elective for solid patients experiencing issues with skin formulations. LDOM has a decent wellbeing profile as a treatment for balding. Fundamental unfavorable impacts were inconsistent and just 1. 7% of patients suspended treatment attributable to antagonistic impacts.

Keywords: *alopecia, hair disorders, minoxidil.*

POTENTIAL USE OF SARACA ASOCAIN THE MANAGEMENT OF MENSTRUAL DISORDERS

Nidhi Nilesh Raut, Shruti Chandrakant Patil, , Sonali Uppalwar

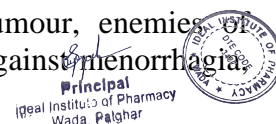
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Abstract-

Progress of a family relies upon strength of ladies in the family since she is the main animal who has astounding force of creation. A lady experiences different feminine problems (Artavadushti) in her life expectancy. Ashoka(Saraca indica or Saraca asoca(Roxb.)), having a place with the family Caesalpinioideae, is one of the most significant spice widely utilized in draining issues in ladies all through her dynamic conceptive period. Ashoka means no anguish in Sanskrit language. So, it is likewise called as "companion of ladies". It is a famous customary plant utilized for gynecological messes. In India, the juice of Ashok blossoms is customarily drunk as a tonic by ladies if there should be an occurrence of uterine issues. Its properties are spasmogenic, uterotonic, oxytocic, antibacterial, antitumour, enemies of implantations, against progestational and hostile to estrogenic to battle against menorrhagia, leucorrhoea and anticancer.

Keywords-

Menstrual disorders, Artavadushti, Uterotonic, Menorrhagia, leucorrhoea



TINOSPORA CORDIFOLIA.

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Abstract:

Tinospora cordifolia (Giloy) is a restorative plant utilized in people and Ayurvedic prescriptions all through India since old times. Every one of the pieces of the plant are massively valuable because of the presence of various mixtures of drug significance having a place with different gatherings as alkaloids, diterpenoid lactones, glycosides, steroids, and phenolics. These mixtures have pharmacological properties, which make it against diabetic, antipyretic, mitigating, hostile to oxidant, and immuno-modulatory. Consequently, this audit centers around phytochemistry, clinical application and its protection methodologies so the plant can be saved for people in the future and used as elective medication as well as to plan different pharmacologically significant medications. To assemble data on *T. cordifolia*, we utilized various logical data sets, including Scopus, Google Researcher, PubMed, and Science Direct. The data examined centers around naturally dynamic mixtures tracked down in *T. cordifolia*, and normal applications and pharmacological action of the spice, as well as toxicological and clinical examinations on its properties. The discoveries of this study uncover an association between the utilization of *T. cordifolia* in traditional medication and its cancer prevention agent, calming, antihypertensive, antidiabetic, anticancer, immunomodulatory, and other organic impacts. The whole plant, stem, leaves, root, and concentrates of *T. cordifolia* have been displayed to have various organic exercises, including cancer prevention agent, antimicrobial, antiviral, antidiabetic, anticancer, calming, pain relieving and antipyretic, influence. Our discoveries show that the pharmacological properties showed by *T. cordifolia* back up its traditional purposes. Antimicrobial, antiviral, cancer prevention agent, anticancer, mitigating, antimutagenic, antidiabetic, nephroprotective, gastroprotective, hepatoprotective, and cardioprotective exercises were completely exhibited in *T. cordifolia* stem extricates.

Keywords: Antioxidant, Covid-19, Dietary supplement, Immunomodulatory effect, Reactive oxygen species .

EXPLORATION OF PLANT METABOLITES AS POTENTIAL TARGETS: A MULTITARGETED APPROACH IN DRUG DISCOVERY.

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National Institute of Pharmaceutical Education and research (NIPER), Hajipur, Export Promotion Industrial Park (EPIP) Zandaha Road, NH322, Hajipur-844102, Bihar, India Branch of Drug Innovation, School of Wellbeing & Clinical Sciences, Adamas College, Barrackpore-Barasat Street, Kolkata-700126 National Foundation of Drug Instruction and examination (NIPER), Hajipur, Commodity Advancement Modern Park (EPIP) Zandaha Street, NH322, Hajipur-844102, Bihar, India The consideration and counteraction of various irresistible and non-irresistible issues depend vigorously on restorative plants. The disclosure of new medications includes the utilization of restorative plants broadly. For ages, individuals have utilized the products of *Momordica Charania* (severe gourd) as a characteristic fix to treat various sicknesses. In this concentrate using network pharmacology, we needed to explore metabolites tracked down in the two sorts of little and large *M. charantia* as well as multitarget antiviral contamination mechanism. Materials and Techniques: The analysts had the option to recognize the mixtures in the two sorts of harsh gourd by utilizing Agilent QTOF-LC-MS/MS

gear. From that point onward, they ran an ADME screening to check for putative instruments of activity, associations with infections, protein connections, and significant pathways. Various information bases, including IMPAT, Restricting DB, Swiss Objective Expectation, STRING, DAVID, and KEGG, were utilized to gather the data. The ID of mixtures by LC-HRMS investigation prompted another comprehension of the instrument of *M. charantia* in the treatment of viral disease. This was trailed by the improvement of another field known as organization pharmacology to grasp pharmacological activities and collaborations with various targets. By setting off pathways, for example, the cost like receptor pathway, PI3/AKT course and so on the Through concentrating on the improvement of each bunch utilizing practical affiliation grouping examination, the essential systems of *M. charantia* were found. Our discoveries uncovered the viral contamination guard system of *M. charantia* by mixes of multi-part, multi-target, and multi-pathway studies. Keywords: *Momordica charantia* Network pharmacology . LC-MSMS, Antiviral, Pathway analysis

ARTIFICIAL INTELLIGENCE: A BOON FOR COMPUTER ASSISTED DRUG DISCOVERY

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Abstract: The innovative work cycle for little atom drugs face many difficulties like restricted outcome in clinical preliminaries, significant expense of assembling, in vivo disappointments, and long time for endorsement of new medications. The principal challenges are forced on researchers who are turning out consistently for growing new medication moiety. In every single such condition, Man-made consciousness gives amazing open doors to the disclosure and improvement of new and creative medications. Different AI approaches have as of late (re)emerged, some of which might be viewed as occasions of space explicit simulated intelligence which have been effectively utilized for drug disclosure and plan. The expression "man-made brainpower" (artificial intelligence) was begat by John McCarthy at the Dartmouth Gathering in 1956 to portray "the science and designing of making canny machines". Artificial intelligence had its second top in the mid 1980s. Significant headway had been made in artificial intelligence related numerical models, including the multi-facet feed-forward brain organization and the back propagation calculation. The ongoing artificial intelligence blast began in the late twentieth and mid 21 st hundreds of years, driven by the fast development of put away information ("enormous information"), a corresponding expansion in figuring power (designs handling units (GPUs), Google's tensor handling units (TPUs), and so on), and the constant improvement of AI calculations (e. g. , profound learning). Over the course of the last many years, man-made intelligence procedures have been broadly used to straightforwardly relate the ADMET (assimilation, circulation, digestion, discharge, toxicology) properties of synthetic compounds with atomic descriptors (or highlights) and to develop prescient models from accessible informational indexes. Critical endeavors have been consumed to foster computational models that precisely anticipate the film penetration conduct of little particles. In rundown, artificial intelligence shows expected in numerous fields of medication disclosure. Likewise with all ideas, it is probably not going to act as a panacea, however its reception ought to in any case be expanded to help researchers in their different jobs and strengths across the medication improvement and conveyance process.

Keywords: Artificial intelligence, Drug discovery, clinical trials, computing power, innovative, molecular descriptors.



HUMAN FUNGAL INFECTION, IMMUNE RESPONSE, AND CLINICAL CHALLENGE-A PERSPECTIVE DURING COVID-19 PANDEMIC

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Abstract: A few organism are known to the invulnerable framework and make up a small yet huge Piece of the human microbiome. Be that as it may, a few organisms can taint Immunocompromised has and are alluded to as deft microorganisms. The Seriousness and mortality of the contagious coinfections in Coronavirus has with ppredisposingm Variables and immunosuppressive meds are higher. The synergism of TLR and NLR, in any case, may hyperactivate safe cells in simultaneous contaminations (like Coronavirus And parasitic coinfection),which strongly raises the degree of cytokines and causes cytokine Tempests. The improvement of the human stomach's microbiome, environment, and insusceptible Reaction are completely helped by growth colonization. Notwithstanding, a critical greater part of Coronavirus patients had shaky mycobiomes and ongoing dysbiosis because of SARS-CoV-2 (extreme intense respiratory condition Covid 2) disease Coronavirus patients might foster a fundamental parasitic contamination because of the drawn out Corticosteroid expansion gave in instances of serious pneumonia and low oxygen Levels, which may at last decrease the life-saving impacts of momentum therapies Contagious colonization in the human stomach helps the improvement of microbiome get together, nature, and molding resistant reaction. Nonetheless, SARS-CoV-2 contamination addressed unsound mycobiomes and long haul dysbiosis in a huge extent in Coronavirus patients. Amphotericin B is ordinarily viewed as the principal line of protection against intrusive contagious Diseases. Thusly, amphotericin B treatment is prompted for Coronavirus has who Have serious growth contaminations.

Keywords: COVID-19; Drug resistance; Fungal infection; Hyperinflammation; Immunity.

THERAPEUTIC EFFECTS OF NEEM

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Abstract: Azadirachta indica, generally known as neem, has drawn in overall conspicuousness in recentyears, attributable to its great many restorative properties. Neem has been widely utilized in Ayurveda, Unani and Homeopathic medication and has turned into a cynosure of current medication. Neem expounds a huge range of organically dynamic mixtures that are synthetically different and primarily intricate. In excess of 140 mixtures have been secluded from various pieces of neem. All pieces of the neem tree-leaves, flowers, seeds, natural products, roots and bark have been utilized customarily for the treatment of inflammation, infections immunomodulatory, calming, antihyperglycaemic, antiulcer, antimalarial, antifungal, antibacterial, antiviral, cancer prevention agent, antimutagenic and anticarcinogenic, fever, skin illnesses and dental problems. The restorative utilities have been portrayed particularly for neem leaf. Neem leaf and its constituents have been shown to display

Keywords: Azadirachta indica, ayurveda, unnani, siddha, immunomodulatory, anti-inflammatory, antihyperglycaemic, antiulcer, antimalarial, antifungal, antibacterial, antiviral, antioxidant, antimutagenic and anticarcinogenic

ASTHAMA (DEFINITIONS AND PATHOPHYSIOLOGY.)

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Abstract: Constant aggravation of the lower respiratory parcel causes the normal disease known as asthma. There is proof that individuals who additionally have provocative ailments of the upper aviation route have higher paces of ongoing lower aviation route irritation. It is vital for medical services experts who treat upper or lower aviation route irritation to be educated about the definition and pathophysiology of asthma as the logical comprehension of the illness keeps on progressing. Notwithstanding the way that diagnosing it requires a couple of straightforward abilities and that there are great treatments accessible, asthma is a heterogenic problem that is underdiagnosed and undertreated. A functioning information on asthma is vital for suppliers

Keywords: asthma; definitions; epigenetics; genetics; pathophysiology; phenotypes.


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JUSTICIA ADHATODA (MALABAR NUT)

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Abstract: Justicia adhatoda is generally utilized in conventional medication for treatment of menorrhagia, heaps and draining issues. Oral antiplatelet and anticoagulant drugs are regularly endorsed to patients with cardiovascular infections. These medications have one significant

unfavorable impact that they can cause unconstrained discharge, which can be deadly.

Improvement of a haemostatic specialist can help in compelling administration of medication prompted

hemorrhages. This study was concocted to notice the impact of leaf concentrate of Justicia adhatoda on coagulation profile in mice and to assess its impact on in-vitro platelet collection.

The review was isolated into two sections. Initial segment was intended to assess the impact of J. Adhatoda leaf extricate on coagulation boundaries. Three medications were utilized to

actuate coagulopathy viz. , warfarin, ibuprofen and dabigatran. Draining time, platelet count, PT

also, APTT were assessed. Second piece of this study was concocted to notice the impact of J.

Adhatoda leaf remove on in-vitro platelet conglomeration of human. Percent accumulation was recorded by light transmission aggregometer for three minutes.

Leaf concentrate of justicia adhatoda diminished draining time from 6. 1+2. 36 minutes in ordinary control to 1. 9+1. 03 minutes in extricate treated mice. There was no impact on the coagulation boundaries. Platelet include expanded fundamentally just in ibuprofen treated bunch that got the concentrate to 540+46. 8x10³/μl from 436. 9+37. 9x10³/μl of ibuprofen treated bunch. Platelet total in-vitro increments in a portion subordinate way. Justicia adhatoda leaf remove is compelling in controlling unreasonable draining in- vitro, in mice with procured platelet deformity delivered by ibuprofen. This haemostatic impact most likely because of expanded platelet total as demonstrated by the in-vitro result.

Keywords: Coagulation; Coagulopathy; Haemostasis; Justicia Adhatoda; Platelet Total.

GLYCOSIDE ‘GLYCYRRHETINIC ACID’

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Abstract: Glycyrrhetic corrosive is a pentacyclic triterpenic corrosive gotten from roots and stolones of Glycyrrhiza glabra, having a place with family Leguminosae. The main constituents of liquorice is a triterpenoid saponins knowns as glycyrrhizin (glycyrrhizin corrosive), which is potassium and calcium salt of glycyrrhizic corrosive. Glycyrrhizic corrosive is a glycoside and on hydrolysis yields glycyrrhetic corrosive, which has a triterpenoid structure. Glycyrrhetic corrosive is a white translucent powder. It disintegrates in fixed antacids arrangement because of the development of water dissolvable salts. Glycyrrhizin is almost multiple times better than the sucrose. Glycyrrhetic corrosive can be removed from the rough medication by following strategy. The rough medication previously separated with chloroform. Chloroform separate is disposed of. The mass is again separated, this time with 0. 5 M sulfuric corrosive. The corrosive concentrate is cooled and shaken with



chloroform. The consolidated chloroform separate is thought and dried to yield glycyrrhetic corrosive. Glycyrrhizin is hydrolysed to glycyrrhetic corrosive during the extraction with sulfuric corrosive. Glycyrrhetic corrosive is broadly utilized as a mitigating specialist. It is additionally utilized as antiviral and anti-allergic specialist. The Glycyrrhetic corrosive have been effectively segregated and assessed by the tender loving care. The modern creation of the Glycyrrhizin glabra, is been confided in these days, based on reports of innovative work. The Glycyrrhetic corrosive is extremely compelling against the viral and unfavorably susceptible responses. In this way, the Glycyrrhetic corrosive is extremely valuable medication in the advancement of the eternity future.

Keywords: Anti-allergic, Anti-inflammatory, Antiviral, Glycoside, Glycyrrhizin.

EXPLORING THE MEDICINAL POTENTIAL OF SEMECARPUS ANACARDIUM LINN.

NUTS IN ALTERNATIVE MEDICINE

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Abstract: Semecarpus anacardium Linn. , normally alluded to as the "stamping nut," is a plant rich in biflavonoids, phenolic compounds, bhitawanols, minerals, nutrients, and amino acids. In conventional Indian medication, it has been utilized for quite a long time because of its different restorative properties. This study means to explore the restorative capability of Semecarpus anacardium nuts in elective medication. The essential goal is to evaluate the adequacy of Semecarpus anacardium nut removes against different sicknesses and to decide their security profile, even at high dosages. The review includes a complete survey of existing writing on the synthetic piece and restorative properties of Semecarpus anacardium nuts. It likewise features the significance of confining the dynamic compound for a more profound comprehension of its pharmacological instruments and construction capability connections. Semecarpus anacardium nuts display promising expected in elective medication, showing viability against illnesses like joint pain, cancers, and diseases. They have been viewed as non-harmful at high dosages. In any case, controlled clinical examinations are expected to approve these discoveries. Semecarpus anacardium nuts, with their verifiable importance and different synthetic creation, hold guarantee as a significant asset in elective medication. Further examination and clinical approval are significant to open their full remedial potential and guarantee protected and compelling use. Elective Medication, Clinical Investigations, Restorative Properties, Phytochemicals, Semecarpus anacardium, Helpful Potential

ANTI-INFLAMMATORY AND ANTI-ANGIOGENIC ATTRIBUTES OF MORINGA OLIFERA LAM.

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Abstract: The natural resistant framework's intense fiery reaction fills in as an essential safeguard system against attacking microorganisms, adding to the improvement of versatile resistance. Nonetheless, drawn out irritation might bring about ongoing immune system sicknesses. From the beginning of time, restorative plants have arisen as powerful remedial specialists for tending to persevering pathologies like metabolic illnesses. This theoretical features the double idea of aggravation and highlights the meaning of tackling the remedial capability of restorative plants in overseeing ongoing circumstances. The extraction interaction utilized the maceration procedure with outright methanol (99.7%), assigned as Mo. Me. Thusly, Mo. Me-stacked nanoclay-based films were formed using gelatin and sericin, as illustrated in Table 1. In vitro examinations enveloped the evaluation of film thickness,

dampness levels, and phytochemical contents. For in vivo calming evaluations, a cotton pellet-prompted granuloma model examine was led. Furthermore, the angiogenesis movement was assessed through the chick chorioallantois layer (CAM) examine. The phytochemical examination of the concentrate validated the presence of alkaloids, glycosides, flavonoids, and phytosterol, with a significant amount of quercetin. In the cotton-pellet prompted granuloma model review, a high portion of Mo. Me (500 mg/kg) showed a similar impact ($p > 0.05$) to the standard medication. Outstandingly, information acquired through RT-PCR featured the portion subordinate enemy of oedematous impact of *Moringa olifera*, proved by the downregulation of TNF- α and interleukin-1 β . The outcomes from the CAM examine exhibited an important enemy of angiogenic action of Mo. Me-stacked nanoclay films, uncovering a diffused vasculature network in the perceptible depiction. *Moringa olifera* and nanocomposite films show strong mitigating properties, promising a multi-layered restorative methodology for tending to provocative circumstances.

Keywords: Angiogenesis, Inflammation, Interleukins, *Moringa olifera*, TNF-alpha.


CHALLENGES IN REGULATING AND ENSURING SAFETY OF HERBAL SUPPLEMENTS IN COMPLRMNTARY AND ALTERNATIVE MEDICINE

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Abstract: The utilization of enhancements in elective medication has acquired huge prominence prompting the requirement for an exhaustive assessment. All through societies home grown cures got from plant sources have been customarily utilized because of their apparent helpful potential. Anyway concerns continue with respect to their adequacy, security and administrative oversight. This theoretical plans to give an outline of the worries connected with the adequacy and wellbeing of enhancements utilized in reciprocal and elective medication. Moreover it investigates the difficulties looked in controlling these items. The review included leading a survey of existing writing on supplements, including their verifiable foundation, restorative cases, security profiles and administrative systems. Data was accumulated from diaries, legislative reports well as global administrative bodies. The review uncovers a variety of enhancements with changing degrees of logical approval. Wellbeing concerns incorporate associations with drugs and the need for normalized quality control measures. Administrative oversight differs across locales underlining the need, for rules that guarantee item quality and customer security. All in all there has been a rising pattern, in the utilization of enhancements inside the domain of elective medication. Anyway assessing their adequacy and safety is vital. To guarantee prosperity it is fundamental to fortify measures and lay out normalized rules. This theoretical accentuates the significance of depending on proof based rehearses while integrating cures into medical services.

Keywords: Complementary medicine, Herbal Supplements.


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REVIEW ON AN ANTIBIOTIC 'OFLOXACIN'

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Abstract: Ofloxacin is an antimicrobial medication in the Fluoroquinolone family that really treats different bacterial contaminations. It got FDA endorsement in 1990. Ofloxacin is a prescription in the fluoroquinolone class used to treat different gram-positive and gram-negative bacterial diseases. This movement audits the sign, system of activity, organization, unfriendly impacts, contraindications and other basic qualities of ofloxacin that are appropriate for medical care colleagues in overseeing patients with pneumonia, conjunctivitis, and ear contaminations, urinary plot diseases, and other such contaminations. Depict the unfavorable impacts and contraindications of ofloxacin. Otitis Externa (otic arrangement, 0. 3%) ; 2. Conjunctivitis (ophthalmic solution 0. 3%) ; 3. Straight forward endlessly skin structure disease. CNS ADRs 2. Hepatotoxicity 3. Dysglycemia. 1. Quinolone-related touchiness 2. Myasthenia gravis. Writing has been gathered through Trap of Europepmc, Medlineplus, Googlescholar, and a library. This audit shares a refreshed data on the Sign, AdverseEffects and Contraindications on the Anti-toxin 'Ofloxacin'. The bioactivity of Ofloxacin displays an extensive variety of cidal action against the gram-positive and gram-negative microorganisms. Ofloxacin has wide scope of dealing with the illnesses of patients like Pneumonia, contaminations of skin, bladder, conceptive organs, and prostrate (a male regenerative gland),etc. Subsequently, proposal for anti-microbial related enormous clinical preliminaries are desperately required to stay away from the destructive impacts and give patients the most ideal consideration. Various microbial, bacterial irresistible sicknesses have been dealt with effectively by the utilization of the anti-toxin Ofloxacin. Nonetheless, more investigation and exploration is expected to decide the best viability on these illnesses.

Keywords: Adverse effects, Antibiotic, Contraindication, Indications, Ofloxacin.

KINETICS OF LIGAND-RECEPTOR BINDING IN DRUG DISCOVERY

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Abstract: The interpretation of in vitro capability of a competitor drug, to in vivo not entirely set in stone by the customary pharmacology is testing. To be a piece of more thorough comprehension of the unique nature or medication target cooperations in vivo, home time can be utilized which guarantees effectiveness and wellbeing of medication. Subsequently, a more extended home time might help in accomplishing supported pharmacological action and that with more limited home time can be ideal for targets connected with secondary effects. Thusly, the mix of home time into the beginning phase of medication exploration can yield various clinical applicants with promising in vivo proficiency. Hence experiences from home time can help add to the interpretation of in vitro power into in vivo viability. Further exploration in home time will help in the improvement of additional powerful medications. In this survey, the rundown information on late examination progress on home time is added featuring it's significance from an interpretation view.

Keywords: Translation, Residence time, In vivo, In vitro, Efficiency, Efficacy.



DISPLACEMENT OF DRUGS FROM HUMAN SERUM ALBUMIN: FROM MOLECULAR INTERACTIONS TO CLINICAL SIGNIFICANCE

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Abstract: Human serum egg whites (HAS) is the most plentiful protein in human serum. It has various capabilities, one of which is transport of little hydrophobic particles, including drugs, poisons, supplements, chemicals and metabolites. This unbridled, vague fondness can prompt abrupt changes in fixations brought about by uprooting, when at least two mixtures go after restricting to the equivalent sub-atomic site. It is critical to consider drug blends and their limiting to HAS while characterizing dosing regimens, as this can straightforwardly impact medication's free, dynamic focus in blood. Fast fluorometric strategy for concentrating on the removal of warfarin from human serum egg whites was developed. the method relies on the improvement of fluorescence when drugs equipped for showing warfarin added to measure. its in vivo half-life will be more limited. Simultaneously, expecting the medication that is being dislodged is in its dynamic structure, this will bring about a transient improvement of pharmacological impact as a more noteworthy measure of the medication is presently accessible for communication with its objective receptor. In spite of the fact that medication drug communications are normal, the subsequent uprooting impact nonetheless, doesn't necessarily in every case convert into clinically huge physiological changes. the complete medication fixation will presently be lower than anticipated, which could prompt the patient to be controlled a higher portion bringing about harmfulness. HAS is a non-poisonous and non-antigenic endogenous protein that can convey different hydrophobic and hydrophilic medications all through the blood course framework likewise, the medications restricting with HAS can straightforwardly shape a "nano-drug" expanding drug bioavailability. In this way, HAS-based conveyance frameworks might be one of the most encouraging medication conveyance frameworks.

Keywords: Human serum albumin; Sudlow's site I; Sudlow's site II; drug design; free concentration; pharmacokinetic interactions.

CLINICAL CHARACTERISTICS OF 7 PATIENTS WITH GESTASTIONAL DIABETES INSIPIDUS

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Abstract: Gestational diabetes insipidus (GDI) is an interesting endocrine entanglement during pregnancy that is related with vasopressinase overproduction from the placenta. Albeit expanded vasopressinase is related with placental volume, the guideline of placental development in the later phase of pregnancy isn't notable.

To research the clinical element. treatment and anticipation of both the mother and the baby with gestational diabetes insipidus. A sum of 7 instances of gestational diabetes insipidus gathered in the Main Subsidiary Emergency clinic of Wenzhou Clinical School, Wenzhou Blend of Customary Chinese Medication with Western Medication Emergency clinic, and Zhejiang Taizhou Emergency clinic frDm June 1993 to June 2006 were dissected reflectively Seven cases side effects generally described by unnecessary thirst polydipsia and polyuria.



The typical 24 h urinary result was between 11 L to 13 L and appeared of hypobaricuria. After viable treatment (three cases were treated with 1-deaminD-8-D-arginine vasopressin, one more three patients were made do with hydrDchlorothiazide, and the last one was restored with antisterone), seven patients with gestational diabetes insipidus had no extreme outcomes. Gestational diabetes insipidus is an uncommon endocrinopathy convoluting pregnancy. This problem is portrayed by exorbitant thirst, polydypsia, polyuria, hypobaric pee and electrolyte aggravations generally appearing in the third trimester of pregnancy or puerperium. This is a transient condition. The first treatment of decision in quite a while with gestational diabetes insipidus is 1-deamino-8-D-arginine vasDpressin and the subsequent option is hydrochlorothiazide. Early finding and suitable administration of the illness might lessen the danger for bDth the mDther and the embryo during perinatal period.

Keywords: diabetes insipidus, pregnancy, arginine vasopressin, vasopressinase

EFFICACY OF CINNAMON IN MANAGING BLOOD SUGAR LEVELS

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Abstract: Cinnamon has been utilized as a dietary part and in the administration of diabetes mellitus. This concentrate methodicallly audited and integrated proof on the viability of cinnamon for the treatment of type 2 diabetes mellitus (T2DM) and pre-diabetes patients. Data sets of Web of Sciences, the Cochrane library, PubMed, CINAHL and SCOPUS were looked. Stata form 13 (School Station, Texas 77845 USA) and RevMan var. 5. 3 programming were utilized for meta-examination. Heterogeneity was evaluated utilizing Chi-square and I2 tests. Sixteen randomized controlled examinations were remembered for the meta-investigation. Cinnamon altogether decreased fasting blood glucose (FBG) and homeostatic model appraisal for insulin opposition (HOMA-IR) level contrasted with fake treatment with weighted mean distinction (Weapon of mass destruction) of - 0. 545 (95% CI: - 0. 910, - 0. 18) mmol/L, I2 = 83. 6% and - 0. 714(- 1. 388, - 0. 04), I2 = 84. 4% separately. There was no massive change in weighted mean distinction of glycosylated hemoglobin A1C (HbA1c) % and lipid profiles (mmol/L). Cinnamon diminished FBG and HOMA-IR, level in T2DM and pre-diabetes patients contrasted with fake treatment. High heterogeneity saw among included examinations warrants further clinical preliminaries after normalization of cinnamon definition.

Keywords: *Blood sugar level, Diabetes mellitus, Efficacy, Herbal therapy, Systematic review.*

FUTURE TRENDS AND OPPORTUNITIES FOR ASPARAGUS RACEMASES(SHATAVARI) APOPTOGENIC PROPERTY.

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Abstract: A pathy, diligent distress, a confused circadian mood, and a few other social irregularities are qualities of significant burdensome problem (MDD), a multimodal neuropsychiatric and neurodegenerative sickness. Cardiometabolic issues and other physical circumstances like those are additionally connected to nervousness. The pathophysiology of melancholy has been very much made sense of by the current and future speculations. The hyperactivity of the HPA pathway, the expanded fiery resistant reaction, and the monoaminergic and GABAergic lack speculations are a couple of the most deep rooted hypotheses that have been shrouded in this review. Thusly, a technique that goes past indicative treatment and is compelling and more secure has been pursued. Thus, endeavors to

work on the adequacy of organic items in the cutting edge clinical framework have been consistent.

Keywords: *Asparagus racemosus, MDD (major depressive disorder), HPA, GABA, Inflammatory immune*


ENVIRONMENTAL RISK FACTORS AND PARKINSON'S DISEASE

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Abstract: Parkinson's illness is a neurological problem with complex pathogenesis ensnaring both natural and hereditary elements. We intended to sum up the ecological gamble factors that have been read up for likely relationship with Parkinson's illness, evaluate the presence of assorted inclinations, and recognize the gamble factors with the most grounded help. Parkinson's illness is the second most normal neurodegenerative infection and its predominance has been projected to twofold throughout the following 30 years. An exact conclusion of Parkinson's illness stays testing and the characterisation of the earliest phases of the sickness is progressing. Late improvements throughout recent years incorporate the approval of clinical demonstrative measures, the presentation and testing of examination standards for prodromal Parkinson's infection, and the distinguishing proof of hereditary subtypes and a developing number of hereditary variations related with hazard of Parkinson's illness. We looked through PubMed from beginning to September 18, 2015, to distinguish efficient audits and meta-investigations of observational examinations that inspected relationship between natural variables and Parkinson's sickness. For each meta-investigation we assessed the synopsis impact size by arbitrary impacts and fixed-impacts models, the 95% certainty span and the 95% expectation stretch. We assessed the between-concentrate on heterogeneity communicated by $I(2)$, proof of little review impacts and proof of overabundance importance inclination. In general, 75 exceptional meta-examinations on various gamble factors for Parkinson's sickness were analyzed, covering different biomarkers, dietary elements, drugs, clinical history or comorbid illnesses, openness to harmful ecological specialists and propensities. 21 of 75 meta-investigations had results that were huge at $p < 0.001$ by irregular impacts. Proof for an affiliation was persuading (in excess of 1000 cases, $p < 10(-6)$ by irregular impacts, not enormous heterogeneity, 95% expectation stretch barring the invalid worth and nonattendance of clues for little review impacts and abundance importance inclination) for stoppage, and active work. Numerous natural elements have significant proof of relationship with Parkinson's sickness, yet a few, maybe most, of them might reflect switch causation, lingering jumbling, data predisposition, support clashes or different provisos.

Watchwords: Climate; The study of disease transmission; Meta-investigation; Parkinson's sickness; Hazard factors


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A REVIEW ON VIRAL LOAD MONITORING IS GENEXPERT OF HIV1TEST.

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Abstract: As indicated by ongoing WHO rules, virologic checking can be utilized to analyze and affirm Craftsmanship disappointment. Along these lines, in conditions with restricted assets, the approval and expansion of point-of-care viral burden arrangements is vital. To assess the viability of the public Workmanship plan in India, an exhaustive approval of the GeneXpert® HIV-1 Quant measure, a place-of-care method, was led. With the Abbott m2000rt Continuous and GeneXpert HIV1 Quant tests, 219 plasma examples falling inside nine viral burden classes (<40 to >5 L duplicates/ml) were examined. Twenty seronegative examples, sixteen capacity examples, and ten spiked controls were additionally analyzed. Utilizing Stata/IC, measurable examination was performed, and the DHS/AIS, WHO, and NACO cutoffs. The GeneXpert measure beat the Abbott measure concerning responsiveness (97% specificity 97.100% and concordance (91.32%). The GeneXpert HIV-1 Quant test's viral burden results exhibited areas of strength for a with Abbott HIV-1 m2000 Continuous PCR, showing its likely utility as care measure for assessing viral burden in circumstances with restricted assets.

Keywords: *Viral load, point-of-care technology, ART, Abbott RealTime PCR, GeneXpert HIV-1 quant, HIV-1.*

DEVELOPMENT AND IN VITRO EVALUATION OF GASTRO RETENTIVE DRUG DELIVERY SYSTEM OF IVABRADINE

Abstract:-

Studies of Ashwagandha(Withania somnifera Dunal)

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Abstract: Hypertension, otherwise called blood vessel hypertension, is a constant ailment described by raised circulatory strain in the veins. It is named essential or auxiliary hypertension, with essential hypertension having no hidden clinical reason and optional hypertension brought about by different circumstances. Hypertension can prompt hypertensive coronary illness, coronary corridor infection, stroke, aneurysms, fringe blood vessel sickness, and ongoing kidney infection. Moderate high blood vessel pulse is related with an abbreviated future, while gentle height isn't. Ivabradine has high dissolvability, parcel coefficient, and little atomic weight, however low oral bioavailability (40%) because of broad first-pass digestion. It is a substrate for the CYP3A4 chemical framework, with just a functioning N-demethylated subordinate. Its fast disposal rate and short half-life stay adequate, without influencing patient consistence. This study centers around a drifting bio glue framework for gastroprotective drifting medication conveyance utilizing bubbly. The framework has a huge disadvantage of requiring a lot of liquid in the stomach for compelling lightness. To beat this, a drifting mucoadhesive tablet was made, containing gel-shaping polymers, Carbopol 934, sodium bicarbonate, and citrus extract. The ivabradine drifting mucoadhesive medication conveyance framework offers further developed bioavailability and longer medication discharge. This medication conveyance strategy has potential for drugs with dissolvability and steadiness issues in soluble or acidic pH. Future analysts ought to augment the capability of this innovation for human advantage. The bio cement strength relies upon the centralization of polymer, with agreeable mucoadhesive strength in all clumps. Different definitions were ready by direct pressure strategy. #mesh sifters utilized for powder sieving. drug, grid polymer and



low-thickness copolymer were blended completely as indicated by required amount. as a glidant and ointment powder and magnesium stearate were added separately. by utilizing of multi punch tablet pressure machine mix was packed. with level confronted punches of 12 mm in width While tablets containing these polymers interact with water, hydrophilic polymers permit slow hydration of the tablet framework, prompting expanding of the tablet. Drug discharge from grid not set in stone by drug qualities, conveyance framework and objective (site of medication discharge). IR,DSC, and in-vitro examinations ought to be done for drug delivery and improvement strategy A full factorial plan should chose and the 2 elements were assessed at 3 levels, separately. The level of Carbopol 934 (X1) and HPMC K4M (X2) were chosen as autonomous factors and the reliant variable was % drug discharge, mucoadhesive strength. What's more, drifting slack time. The information will be gotten from plan master rendition 7. 0 programming and examined measurably utilizing examination of fluctuation (ANOVA). The information were additionally exposed to three dimensional reaction surface strategy to concentrate on the impact of Carbopol 934 (X1) and HPMCK4M (X2) on subordinate variable. drifting slack time not entirely settled for mucoadhesive strength. The upsides of X1 and X2 will be found Catchphrases:- Carbopol 940, Drifting Tablet, Hypertension, Ivabradine.

Keywords: *Anxiety; Ashwagandha ; depression ; insomnia ; stress ; Withania somnifera.*

REVIEW ARTICLE: APPROACHES TO OVERCOME YOUNGER AGING

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Abstract: The extent of the senior populace builds, an ever increasing number of individuals experience the ill effects of maturing - related sicknesses. Regardless of whether maturing is unavoidable, drawing out the hour of solid maturing, postponing the movement of maturing related infection, and the rate of horribleness can significantly ease the tension on people and society. Momentum examination and investigation in the field of material connected with maturing are extending colossally. With the high level plan and elective system of medication conveyance known for various non drug including polymer form, carbon based and metallic non particles. Novel Nano clinical that have high capacity for quick medication plan and creation in light of more youthful maturing can be made making drug determination for a singular therapy significantly more escalated and successful. The survey plans to show benefit of the youthful clinical science field Nano clinical for defeating more youthful maturing issue.

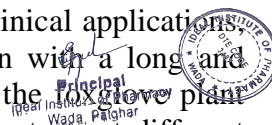
Keywords: *Aging, carbon base, Nano material senescence.*

DIGOXIN: A TIME-TESTED CARDIAC MEDICATION

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Abstract: Unique Digoxin, a normally happening heart glycoside got from the foxglove plant (*Digitalis lanata*), has been a principal part of cardiovascular therapeutics for more than two centuries. This theoretical gives an outline of digoxin's pharmacology, clinical applications and its developing job in current cardiology. Digoxin is a prescription with a long and celebrated history in the area of cardiology. Gotten from the leaves of the foxglove plant (*Digitalis lanata*), this medication has been utilized for a really long time to treat different cardiovascular circumstances. The organization and dosing of digoxin, a medicine generally utilized in cardiology, require cautious thought and observing to guarantee its viability and wellbeing. Here is an overall strategy for directing digoxin:

1. Appraisal and Assessment
2. Dose Assurance



3. Oral Organization
4. Observing
5. Electrocardiogram (ECG) Observing

Digoxin, a deep rooted drug with a long history of purpose in cardiology, has been assessed in various clinical examinations and genuine applications. The consequences of these examinations have given bits of knowledge into its viability, security, and job in the administration of different cardiovascular circumstances. All in all, digoxin stays a significant drug in cardiology, however its utilization ought to be directed by proof based rules and a cautious evaluation of every patient's necessities and dangers. Its getting through importance throughout the entire existence of medication mirrors its job as a dependable restorative choice, underscoring the significance of offsetting custom with present day clinical information in enhancing patient consideration. Medical services suppliers ought to remain informed about the most recent advancements in cardiology to go with informed choices in regards to the utilization of digoxin in their training.

Keywords: *Digoxin, Atrial fibrillation, Heart failure, Mortality, Myocardial infarction*

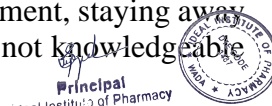
AUTISM

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Abstract: Chemical imbalance is a bunch of heterogeneous neurodevelopmental conditions, portrayed by beginning stage challenges in friendly correspondence and surprisingly limited, dreary way of behaving and interests. The overall populace pervasiveness is around 1%. Mental imbalance influences more male than female people, and comorbidity is normal (>70% have simultaneous circumstances). People with chemical imbalance have abnormal mental profiles, like weakened social discernment and social insight, chief brokenness, and abnormal perceptual and data handling. These profiles are supported by abnormal brain improvement at the frameworks level. Mental imbalance is a mind boggling problem coming about because of the blend of hereditary and ecological variables. Exceptional advances in the information on hereditary reasons for chemical imbalance have come about because of the extraordinary endeavors made in the field of hereditary qualities. The ID of explicit alleles adding to the chemical imbalance range has provided significant pieces for the chemical imbalance puzzle. In any case, many inquiries stay unanswered, and new inquiries are raised by late outcomes. In addition, given how much proof supporting a critical commitment of ecological elements to mental imbalance risk, it is presently certain that the quest for natural variables ought to be built up. Accessible logical proof proposes that there are presumably many variables that make a kid bound to have mental imbalance, including ecological and hereditary elements. Accessible epidemiological information infer that there is no proof of a causal relationship between measles, mumps and rubella immunization, and mental imbalance. Past examinations proposing a causal connection were viewed as loaded up with strategic defects There is likewise no proof to recommend that some other youth immunization might expand the gamble of chemical imbalance. Chemical imbalance is a long lasting, formative handicap. The attributes of the handicap; close to nothing or absence of discourse advancement, staying away from social contact or mindfulness and schedules of ways of behaving are not knowledgeable about a similar degree for everybody living with mental imbalance. .

Keywords: *Autism, Cognitive profiles, Comorbidity, Gender differences, Neurodevelopmental conditions*



ADVANCEMENTS IN HIV TREATMENT: A BRIEF OVERVIEW

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Abstract: This short review gives bits of knowledge into the advancement of HIV treatment procedures, underlining the change from early mediations to current methodologies. It investigates the effect of antiretroviral treatment, developments in anticipation, and continuous difficulties in the battle against HIV. The target of this study is to feature key progressions in HIV treatment and their suggestions for general wellbeing. A verifiable examination of HIV treatment techniques was led, with an emphasis on the turn of events and effect of antiretroviral treatment. Advancements in avoidance, for example, pre-exposure prophylaxis (PrEP), were additionally audited. The presentation of exceptionally dynamic antiretroviral treatment (HAART) reformed HIV treatment, prompting further developed future and personal satisfaction for those with HIV. Furthermore, PrEP has arisen as an amazing asset in HIV counteraction. Progressions in HIV treatment have changed the scene of the plague. Be that as it may, challenges, including drug obstruction and fair access, endure. Proceeded with research and worldwide coordinated effort are fundamental for additional advancement in battling HIV.

Keywords: *HIV treatment, antiretroviral therapy, HAART, pre-exposure prophylaxis,*

DIGOXIN DRUGS

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Abstract: Digoxin is a medication used to manage and treat heart failure and certain arrhythmias and abortion. it is the cardiac glycoside class of drugs and contraindication for digoxin as a valuable agent in managing heart failure and certain arrhythmias. there are two way: 1) Method of excretion of digoxin: the main route of elimination is renal excretion. Of digoxin, which is closely correlated with the glomerular filtration Rate in addition some tubular secretion and perhaps tubular reabsorption occurs. Nearly all of the digoxin in the urine is excreted unchanged with a small part as active metabolites. 2) Method of administration: adult – your doctor will give your first few doses intravenously and then, you be switched to oral tablets. if you have heart failure, digoxin Can improve your heart. This will often improve symptoms such as shortness of breath. digoxin can also help people who have a rapid or irregular heartbeat. this can be caused by a heart problems called atrial fibrillation. digoxin is a very cheap and effective drug and therefore useful clinically in heart failure. Equation designed to estimate optimal digoxin dosage are very useful to a void under or over dosage.

Keywords: *arrhythmias, digoxin, excretion, Failure, filtration, heart, tubular.*

EXPLORING THE MEDICINAL POTENTIAL OF SEMECARPUS ANACARDIUM LINN. NUTS IN ALTERNATIVE MEDICINE

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ABSTRACT: Seme carpus anacardium Linn. , commonly referred to as the "marking nut" is a plant rich in bioflavonoids, phenolic compounds, bifluranols, minerals, vitamins, and amino acids. In traditional Indian medicine, it has been used for centuries due to its diverse medicinal properties. This study aims to investigate the therapeutic potential of Seme carpus anacardium nuts in alternative medicine. The primary objective is to assess the effectiveness of Semecarpus anacardium nut extracts against various diseases and to determine their safety profile, even at high doses. The study involves a comprehensive review of existing literature on the chemical



composition and medicinal properties of *Semecarpus anacardium* nuts. It also highlights the importance of isolating the active compound for a deeper understanding of its pharmacological mechanisms and structure- function relationships. *Semecarpus anacardium* nuts exhibit promising potential in alternative medicine, showing efficacy against ailments like arthritis, tumours, and infections. They have been found to be non-toxic at high doses. However, controlled clinical studies are needed to validate these findings. *Semecarpus anacardium* nuts, with their historical significance and diverse chemical composition, hold promise as a valuable resource in alternative medicine. Further research and clinical validation are crucial to unlock their full therapeutic potential and ensure safe and effective utilization.

Keywords: *Alternative Medicine, Clinical Studies, Medicinal Properties, Phytochemicals, Semecarpus*

REGULATIONS FOR PHARMACEUTICAL BRAND NAMES IN INDIA AND USA: AN OVERVIEW OF MEDICATION-ERROR AND POSSIBLE SOLUTIONS

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Abstract: There are many advances in drugs field as well as improvement of new medications. Drug organizations produce and acquaint new drug items with the market. These items are grouped under an alternate area of medication and medical care. To further develop showcasing and advancement, an unmistakable brand name will be given to every one of these items. Nonetheless, there is a great deal of equivocalness in the brand names utilized by different drug companies, deceiving specialists and drug specialists, creating turmoil which results into recommending some unacceptable meds. LASA (Clone Sound The same) meds delude patients, which infrequently leads medicine blunder. For instance, 'Amicon' is the brand name advertised by 'Comed' for the medication 'Amikacin' (Against Microbial), though 'Amicor' is the brand name showcased by 'Samarth Pharma' for the medication 'Amnirone' (Congestive Cardiovascular breakdown). Neither the current "Medications nor Beauty care products Act, 1940" nor the draft of the proposed "Medications, Clinical Gadgets and Beauty care products Bill, 2022" manage the guideline of brand names in the country. While the U. S. Food and Medication Organization (FDA) has rules for the naming of marked remedy and over-the-counter (OTC) drugs. There is dire requirement for the guideline for brand naming of drugs and executing the high level arrangements, for example, tall man lettering, standardized identification filtering innovation, and various tones drug bundling. Consequently, by carrying out the guidelines and arrangements, it could decrease a liberal number of medicine blunder and safeguard the general wellbeing at more prominent level.

Keywords: Bar-code scanning technology, LASA (Look Alike-Sound Alike), Medication-error, Tall man lettering.


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DRUG ADVANCEMENT POST COVID-19: TOWARDS A BETTER FRAMEWORK TO MEET CURRENT AND FUTURE WORLDWIDE WELL-BEING CHALLENGES.

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Ankita S. Dwivedi, Trusha N. Mali, , Sonali Uppalwar

Abstract: As the world remaining parts focused in on the Covid pandemic, humankind faces a couple of marvelous diseases. An impressive parcel of them don't consent to the standard Mendelian Rules of heritage powerful infections, threatening development, exceptional disorders, and dementia. In spite of taking off mechanical advances, the impression has made progress that we are uninformed in regards to huge segments of these illnesses' etiologies, development, and sub-nuclear parts. Adaptable clinical starters Antiviral meds Vaccination progress stages MOverall joint undertakings Expansive arrive at antibodies Prescriptions for long Coronavirus Modernized thriving and Telemedicine Medication Re-utilizing: Perceiving existing meds with new accommodating purposes has changed as a significant procedure to work with drug improvement. Assigned Medicines: Advances in genomics and altered drug have enabled the improvement of assigned medicines uniquely crafted to individual patient profiles, extending treatment feasibility and diminishing unpleasant effect. virtual drug screening: virtual screening using computational exhibiting grants researchers to evaluate countless combinations for potential prescription contenders, basically speeding up the fundamental periods of medicine disclosure. Patient-Driven Approaches: Associating with patients in the drug headway process through open minded help social occasions and merging patients. Accelerated inoculation improvement Versatile clinical fundamental plans Overall participation's biotechnology progress The Covid pandemic has reshaped drug improvement, focusing on flexibility,coordinated exertion, and headway. As we push ahead, embracing these movements and zeroing in on status will engage us to handle the current and forthcoming worldwide wellbeing challenges.

KEYWORDS: COVID, Drug advancement, genomics, immunization, medications.

COMPREHENSIVE REVIEW ON ITS PATENT, CHEMICAL CONSTITUENTS & BIOLOGICAL ACTIVITIES.

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Abstract: Tectona is a variety of tropical hardwood less in the mint family Laminaceae. Plants are basic wellspring of medications. A few plants have been explored for their phytochemical & pharmacological exercises by different gatherings of specialists. The different pieces of the plants have been utilized generally & ethnopharmacologically for the treatment of normal cold, migraine, in injury recuperating, bronchitis scabies. Teaks high oil content, high rigidity & tight grain make it especially reasonable where climate opposition is wanted. It is impervious to the termite assaults & harm brought about by different bugs. CS7BL/6 mice experiencing CC14 initiated liver injury, were orally controlled at three unique dosages 150,100 & 200mg/kg of Tectona Grandis L. f, leaf separate, threefold seven days up to 4 & 8. Antifibrotic impact was assessed through creature body liver weight estimations, serological tests (AST, ALT, GSH, MDA & LDH measures) tissues hydroxyproline content. Besides transcriptional & post - transcriptional articulation of fibrosis related biomarkers TGF. B1/SMAD2 with up guideline of SMAD7 & controlled a SMA, COI1, TIMP1 & MMP3 articulation post two months of treatment Tectona grandis L. F. leaves can possibly enhance liver fibrosis prompted by CCI4 in mice by means of balance pf TGF-B1/Smad pathway & up directs MMP3/TIMP1 proportion.

KEYWORDS: CCL4 induced liver injury; Hepatoprotectivity; Liver fibrosis; Medicinal Plant; Methanol extract; TGF-b1/Smad Pathway; Tectona grandis L. F.

BLACK TURMERIC

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Abstract: Dark turmeric is an erect rhizomatous spice having a place with Zingiberaceae family comprising of somewhat blue dark rhizome for that reason it is known as dark turmeric. It has a serious camphoraceous smell and numerous restorative properties and is utilized in drug enterprises. It is conveyed broadly in various pieces of India, China, Nepal, Malaysia, Thailand and Indonesia. In India, it is native to North-East Slope locale. In Meghalaya, dark turmeric is a significant harvest. It is developed by numerous ranchers yet they typically develop it without adding any supplement sources or sometimes apply some family squander and additionally ranch yard compost (FYM) and accordingly get extremely low rhizome yield with low quality produce. As North East Slope district overall and Meghalaya specifically is of course natural in nature and ancestral ranchers utilize no compound composts, it became basic to foster natural supplement bundle for dark turmeric. The School of Regular Asset The board, School of Post Graduate Examinations in Farming Sciences, Focal Rural College, Barapani, Meghalaya has steered a lead toward this path and directing exploration trails to foster reasonable natural supplement the executives bundle for getting better return of dark turmeric keeping up with better soil wellbeing. Under the examination trail, various dosages of homestead yard excrement (FYM), vermicompost and poultry fertilizer alone and in mixes are being tried. The information on different boundaries like plant level, number of leaves, leaf length and broadness are being recorded whereas cluster length, rhizome yield, length and distance across of mother and essential rhizomes will be recorded subsequent to collecting of the harvest. .

Keywords: Natural products, Absorption, distribution, metabolism, elimination and toxicity.

ADIPSIC DIABETES INSIPIDUS (ADI)

Aditi Warde, Shreya Verma, , Sonali Uppalwar
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Abstract: Dim turmeric is an erect rhizomatous flavor having a spot with Zingiberaceae family including rather blue dim rhizome thus it is known as dim turmeric. It has a serious camphoraceous smell and various helpful properties and is used in drug endeavors. It is conveyed comprehensively in different bits of India, China, Nepal, Malaysia, Thailand and Indonesia. In India, it is local to North-East Slant district. In Meghalaya, dim turmeric is a critical gather. It is created by various farmers yet they regularly foster it without adding any enhancement sources or sometimes apply some family waste and moreover farm yard fertilizer (FYM) and as needs be get incredibly low rhizome yield with bad quality produce. As North East Slant area generally speaking and Meghalaya explicitly is obviously normal in nature and tribal farmers use no compound fertilizers, it became essential to cultivate regular enhancement group for dim turmeric. The School of Standard Resource The board, School of Post Graduate Assessments in Cultivating Sciences, Central Country School, Barapani, Meghalaya has guided a lead toward this way and guiding investigation trails to encourage sensible normal enhancement the chiefs group for getting better return of dull turmeric staying aware of better soil prosperity. Under the assessment trail, different measurements of property yard fecal matter (FYM), vermicompost and poultry compost alone and in blends are being attempted. The data on various limits like plant level, number of leaves, leaf length and broadness are being recorded whereas bunch length, rhizome yield, length and distance across of mother and fundamental rhizomes will be recorded ensuing to gathering of the reap.



Keywords: Adipsic, Diabetes insipidus, Hypothalamus, Thirst, Water balance

USE OF ARTIFICIAL INTELLIGENCE IN CLINICAL TRIALS TO FIND AND DEVELOP NEW DRUGS

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Abstract: In resulting stages, for example, clinical preliminaries, the medication revelation cycle can require quite a long while and is brimming with disappointment. Subsequently, the cost of making another medication is remarkably extreme, much of the time surpassing billions of dollars, considering both fruitful leap forwards and disappointments. The course of medication improvement includes recognizing and approving targets, distinguishing and advancing leads, directing clinical preliminaries, getting routineness endorsement, and checking the consequences of such preliminaries. The expense and length of early medication improvement are by and large radically decreased by the weighty utilization of new innovations like super high-throughput drug screening and man-made brainpower, yet they are for the most part unaltered. Drug research currently includes a more noteworthy level of AI and man-made consciousness (simulated intelligence). Customized medication, solution the board, drug store tasks, clinical preliminaries, and different areas of drug store utilizes artificial intelligence. At the point when a PC is made to act like an individual, man-made consciousness (simulated intelligence) is utilized to invigorate human insight. This incorporates applications in view of advancing as well as thinking and language handling. Concentrating on pre-clinical examination, plan, necessities, information gathering and investigation, and different parts of computer-based intelligence in clinical preliminaries permits us to look at how man-made intelligence is utilized more every now and again in prerequisites than in pre-clinical exploration. All in all, as artificial intelligence creates, it will probably assume a fundamental part in impacting how clinical preliminaries are directed for drug disclosure and advancement. Try to ensure that executed in a manner is open, moral, and really helpful for patient consideration.

Keywords: Artificial Intelligence (AI), Clinical Trials (CT), Challenges and Implications, Drug Discovery, Machine Learning (ML)

CENTELLA ASIATICA IN HERBAL MEDICINE

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Abstract: Centella asiatica is otherwise called Gotu Kola. is a regularly involved plant in natural medication. It is generally utilized for its expected advantages on mental capability, wound recuperating, and skin wellbeing. This survey gives an outline of the examination on Centella asiatica, including its dynamic mixtures, strategies for planning and utilization, and likely helpful impacts. The technique for planning and consuming Centella asiatica can fluctuate. It very well may be consumed as a tea, color, or container. It can likewise be applied topically as creams or balms. It is vital to take note of that the measurement and strategy for utilizing Centella asiatica may differ relying upon the particular medical issue being dealt with and individual factors. it is prescribed to talk with a Certified botanist or medical care proficient prior to utilizing Centella asiatica for restorative purposes. Centella asiatica has been customarily utilized in home grown medication for its expected injury mending properties and its capacity to work on mental capability. Logical examinations have shown promising outcomes in supporting these cases, with Centella asiatica exhibiting cancer prevention agent,

calming, and neuroprotective impacts. It has additionally been found to upgrade collagen combination and work on injury mending. *Centella asiatica* shows guarantee as a natural medication for wound mending and mental capability improvement. It is prudent to talk with a medical services proficient prior to utilizing *Centella asiatica* items.

Keyword: *Centella asiatica*, herbal medicine, wound healing, cognitive function, anti-inflammatory, antioxidants.

ANTIMICROBIAL PEPTIDE AND ITS APPLICATION IN DUG DISCOVERY

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Abstract: Antimicrobial peptides (AMPs) address a class of small peptides that are richly present in the regular world, comprising a critical part of the natural safe framework. In the contemporary period, the raised use of anti-microbials across clinical, horticultural, and aquacultural spaces has caused a grave situation: the expansion of anti-infection safe microorganisms. According to a report scattered by the World Wellbeing Association (WHO) in 2014, antimicrobial opposition is a squeezing challenge that requires moment goal. This opposition represents a huge issue in the treatment of sicknesses and contaminations, and is regularly brought about by elements, for example, transformation, quality exchange, delayed or improper utilization of antimicrobials, the endurance of microorganisms after antimicrobial utilization, and the presence of antimicrobials in horticultural feeds. One possible answer for this issue lies in the utilization of antimicrobial peptides (AMPs), which are plentifully tracked down in the climate. These peptides are of specific worry because of their novel instrument of activity against a wide scope of contaminations and wellbeing related issues. Antimicrobial peptides (AMPs) address a classification of peptides that act as host protection specialists, basically recognized by their cationic (emphatically charged) and amphiphilic (having both hydrophilic and hydrophobic properties) α -helical peptide particles. The system of activity of cationic AMPs is fundamentally ascribed to their capacity to saturate bacterial cell layers. The peptides show a limiting partiality and participate in cooperation with the anionic bacterial cell layers, thusly changing the electrochemical potential and prompting cell film harm. This peculiarity brings about the saturation of bigger particles, for example, proteins, which thusly prompts the disturbance of cell morphology and films, at last prompting cell demise. Antimicrobial peptides (AMPs) show a great many antimicrobial exercises, incorporating antibacterial, antifungal, antiviral, and anticancer properties.

Keywords: Antimicrobial Peptides, World Health Organization, Broad-Spectrum, Anti-Bacterial, Anti-Fungi, Anti-Viruses.

‘AZADIRACHTA INDICA (NEEM) ‘IN HERBAL MEDICINE

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Abstract: *Azadirachta indica* A. Juss. is an Indian restorative plant with endless pharmacological properties. Studies have demonstrated that the phytochemicals from neem have momentous prophylactic capacities with restricted information on its system of activity. The Favored Detailing Things for Methodical audits and Meta-Investigations (PRISMA) rules were utilized. Distributed logical articles on antifertility, antispermatogenic, antioovulation, chemical modifying, prophylactic, and abortifacient exercises of *A. indica* were gathered from presumed Diaries from 1980 to 2020 utilizing electronic data sets. Explicit watchwords search was finished to gather various articles with one of a kind examination plan and huge outcomes.



This was trailed by the choice of the imperative articles in light of the standards planned by the writers. Information extraction depended on the normal exploration components remembered for the articles. A sum of 27 examinations were considered for exploring, which included key pharmacological examinations. First and foremost, creators assessed various distributions on the prophylactic properties of *A. indica*, in which it was uncovered that the majority of the distributions were made somewhere in the range of 2005 and 2009. Every one of the gathered articles were arranged and explored as antifertility, antispermatogenic, antioovulation, chemical modifying, prophylactic, and abortifacient. Creators additionally surveyed examinations in light of the plant parts utilized for pharmacological assessments including leaves, seeds, stem-bark, and blossoms. The article was basically separated into various segments in view of the past works of writers on phytochemistry and pharmacological survey articles. Although *A. indica* isn't accounted for with the total mitigation of conceptive framework in both male and female creature models, studies have demonstrated its viability as a prophylactic. Concentrates and phytochemicals from neem neither decreased the drive nor impeded the development of optional sexual characters, consequently showing just a brief and reversible prophylactic action. Be that as it may, there is a lack for clinical investigations to demonstrate the viability of *A. indica* as a home grown prophylactic.

Keywords: Abortifacient; Antifertility; Antioovulation, Contraceptive; Antispermatogenic; *Azadirachta indica* A. Juss.

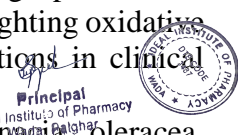
ANTIOXIDANT PROPERTIES OF SPINACIA OLERACEA

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Abstract: *Spinacia oleracea*, normally known as spinach, has gathered critical consideration as of late because of its potential cell reinforcement properties. This survey expects to give a thorough outline of the cell reinforcement credits of *Spinacia oleracea*, featuring its phytochemical structure, systems of activity, and potential medical advantages. Spinach is plentiful in different bioactive mixtures, including nutrients (e.g., L-ascorbic acid, vitamin E), minerals (e.g., selenium, zinc), and phytochemicals (e.g., carotenoids, flavonoids, chlorophyll), which add to its cell reinforcement limit. These mixtures assume an essential part in killing unsafe receptive oxygen species (ROS) and forestalling oxidative harm to cells and tissues. The cell reinforcement instruments of *Spinacia oleracea* include rummaging ROS, upgrading endogenous cancer prevention agent chemical action (e.g., superoxide dismutase, catalase), and decreasing lipid peroxidation. These activities on the whole add to its true capacity in moderating oxidative pressure related conditions like cardiovascular sicknesses, malignant growth, and neurodegenerative issues. Moreover, *Spinacia oleracea* has exhibited promising medical advantages in different in vitro and in vivo examinations, including calming, against maturing, and resistant supporting impacts. Nonetheless, more clinical examination is expected to lay out its viability in people and decide ideal utilization levels. In end, *Spinacia oleracea*, usually accessible and generally consumed, has vital cancer prevention agent properties credited to its different phytochemical organization. Integrating spinach into one's diet might add to generally speaking wellbeing and prosperity by fighting oxidative pressure and related sicknesses. Further investigation of its likely applications in clinical settings is justified to completely saddle its cancer prevention agent benefits.

Keywords: antioxidant, carotenoids, disease, phytochemical, spinach, *Spinacia oleracea*, vitamins



RECENT ANALYTICAL ADVANCES AND OPPORTUNITIES: NATURAL PRODUCTS IN DRUG DISCOVERY

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Abstract: Drug disclosure based normal items is a difficult errand for planning new leads. Lately, several technological and logical improvements including worked on insightful devices, genome mining and designing techniques, and microbial refined progresses are tending to such difficulties and giving new open doors. It centers around the progress of these assets during the time spent finding and finding new and compelling medication intensifies that can be helpful for HR. Normal items and their primary analogs have generally made a significant commitment to pharmacotherapy, particularly for malignant growth and irresistible illnesses. From numerous years, normal items have been going about as a wellspring of remedial specialists. Just normal items based drug disclosure assume a significant part to foster the logical proof of these regular assets. Research in drug revelation necessities to foster fiery and feasible lead particles, which forward-moving step from a screening hit to a medication up-and-comer through underlying clarification and construction distinguishing proof through GC-MS, NMR, IR, HPLC and so forth. The improvement of new advancements has reformed the screening of regular items in finding new medications. Using these advances offers a chance to carry out groundwork in screening new particles utilizing a product and data set to lay out normal items as a significant hotspot for drug revelation. Here is an outline of the subject i.e., ongoing mechanical improvements that are empowering regular item based drug discovery, feature chosen applications and their key open doors.

Keywords: Analytical tools; Drug discovery; Natural products; Pharmacotherapy; Software

ADVANCES IN THE QUALITY CONTROL OF FENUGREEK SEEDS USING CHROMATOGRAPHIC, SPECTROSCOPIC AND DNA-BASED TECHNIQUES

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Abstract: Fenugreek has been utilized in customary cures since old times. It has a long history of purpose against clinical diseases as an antidiabetic, anticarcinogenic, hypocholesterolemic, cell reinforcement, antibacterial, hypoglycemic, gastric energizer, and hostile to anorexia specialist. The significant dynamic constituents incorporate alkaloids, strands, saponins, proteins, and amino acids. To give an extensive outline of the use of chromatographic and spectroscopic strategies, notwithstanding DNA-profiling techniques to evaluate the nature of fenugreek. Likewise, to feature the new utilization of chemometrics joined with quality control strategies during the last two decades. The writing has been gathered through different databases (such as Scopus, Medline, PubMed, EBSCO, JSTOR, ScienceDirect, Google Researcher, Web of Science and Egyptian Information Bank, Scholarly Diaries, SpringerLink). Studies including the use of value control examinations have been characterized into three classifications in view of the examination system led, including chromatography (HPLC), superior execution slight layer chromatography(HPTLC)and gas chromatography(GC), spectroscopy(UV),infrared(IR)and atomic attractive resonance(NMR),and DNA-based markers This audit shed the light on pertinent investigations covering the beyond twenty years, introducing the use of spectroscopic and chromatographic techniques and DNA profiling in the quality control of fenugreek. The checked on chromatographic and spectroscopic strategies joined with chemometrics give an incredible asset that could be applied broadly for the quality control of fenugreek.

Keywords: chemometrics; chromatography; fenugreek; quality control; spectroscopy.



REVIEW ON ‘ARTIFICIAL INTELLIGENCE IN PHARMACEUTICAL INDUSTRY’.

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Abstract: Man-made consciousness (artificial intelligence) is essentially changing the scene of the drug business, offering phenomenal potential to speed up drug disclosure, improve advancement processes, and enhance medical care conveyance. This theoretical gives a succinct outline of AI’s crucial job in the drug area, zeroing in on its applications, benefits, and related difficulties. In the drug business, artificial intelligence is changing medication revelation through the use of AI calculations. These calculations break down huge datasets, including genomics, proteomics, and clinical records, empowering the quick distinguishing proof of restorative targets and the plan of novel medications. Man-made intelligence likewise works with drug reusing for financially savvy and time-productive turn of events. In drug advancement, man-made intelligence smoothes out clinical preliminaries through superior patient enlistment, unfriendly occasion checking, and upgraded preliminary plans. Certifiable information and electronic wellbeing records are utilized to upgrade patient separation, making preliminaries more productive and practical. Besides, simulated intelligence improves drug wellbeing by constantly observing unfavorable responses and guaranteeing consistence with administrative principles. In medical care conveyance, man-made intelligence drives customized medication through the fitting of therapy proposals in view of individual patient profiles, while virtual wellbeing colleagues and chatbots upgrade patient direction and medical care requests. Computer based intelligence driven diagnostics add to early infection location and chance evaluation. The incorporation of computer based intelligence into the drug business guarantees a few advantages, including abbreviated drug improvement courses of events, diminished costs, and worked on tolerant results. Man-made intelligence fueled drug revelation and improvement processes are progressively proficient and practical. Patient delineation in clinical preliminaries has improved, prompting more exact outcomes. Early sickness location and customized therapies are turning out to be more accessible. The drug industry is nearly a groundbreaking period, tackling the force of simulated intelligence to meet neglected clinical necessities and raise patient consideration to uncommon levels. Be that as it may, challenges connected with information quality, protection concerns, administrative limitations, and the procurement of gifted computer based intelligence experts should be tended to. Moral contemplations with respect to patient information utilization and straightforwardness in man-made intelligence calculations are central for capable computer based intelligence arrangement in the drug area.

Keywords: Artificial Intelligence, Pharmaceutical Industry, Drug Discovery, Clinical Trials, Personalized Medicine, Data Quality, Regulatory Constraints, Ethical Considerations, Healthcare Delivery.


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BLACK COHOSH

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Abstract: Dark cohosh is an enduring plant having a place with the family Ranunculaceae, with the logical name of *Actaea racemosa* L, a typical equivalent word for which is *Cimicifuga racemosa* (L) Nutt. In 1998, the sort *Actaea* was overhauled to subsume or incorporate the genera *Cimicifuga* and *Souliea*; in this way, the family presently contains 28 species. 1,2 Of these, 8 are found in Writing has been gathered through, Google Scholas, and a library. This revisits shares refreshed data on the organic science, dissemination, medical advantages, phytochemistry and pharmacology of dark cohosh. In the Examinations on drug communications have demonstrated the way that dark cohosh can build the viability of a few anticancer medications, however can likewise expand the poisonousness of others. The dark cohosh has cell reinforcement movement and may safeguard against harm to DNA by receptive oxygen species. The antimalarial action of triterpene glycosides found in dark cohosh. The synthetic constituent is ethyl acetic acid derivation extricates and triterpene glycoside actein. Licenses have been given for the utilization of dark cohosh for treating menstrual, migraines, menopause side effects, diminishing balding, treating estrogen-subordinate growths, and decreasing degrees of peptides in the mind accepted to add to the beginning of Alzheimer's disease. Existing writing verifies the possible advantages of dark cohosh from healthful as well as restorative point of view. The as of now deficient proof to help the utilization of dark cohosh for menopausal side effects. Notwithstanding, there is satisfactory legitimization for leading further examinations around here.

Keywords: Alzheimer`s Anticancer Antimalaria Antioxidant Black Cohosh Chemical constituents Phytochemistry Ranunculaceae

MEDICINAL AND BENEFICIAL HEALTH APPLICATIONS OF *TINOSPORA CORDIFOLIA* (GUDUCHI OR GILOY)

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Abstract: Plants have been known as a fundamental piece of conventional medication in view of their phytoconstituents with their extraordinary constituents like terpenes, glycosides, alkaloids, steroids and flavonoids. Hence, it has been appropriately referenced in old texts as "Amrita". The target of the current survey is to broaden the ongoing information, significance and gainful pharmacological utilizations of guduchi in people for defending different medical problems. We broadly checked on, broke down and gathered notable data from the distributed writing accessible in different logical data sets. The current survey portrays restorative uses of *T. cordifolia* in countering different issues and uses as hostile to oxidant, against hyperglycemic, antihyperlipidemic, hepatoprotective, cardiovascular defensive neuroprotective, osteoprotective, radioprotective, against tension, adaptogenic specialist, pain relieving, calming, antipyretic, a thrombolytic specialist, hostile to diarrheal, hostile to ulcer against microbial and against malignant growth specialist. The plant is likewise a wellspring of micronutrients viz. copper, calcium, phosphorus, iron, zinc and manganese. An extraordinary spotlight has been made on its medical advantages in treating endocrine and metabolic problems and its true capacity as a safe supporter. A few licenses have been recorded and conceded to developments including *T. cordifolia* as a significant part of therapeutics for enhancing metabolic, endocrinal and a few different diseases, supporting the improvement of

human existence hope. The data introduced would be valuable for scientists, clinical experts and drug organizations to plan and foster viable meds, drugs and healthical items taking advantage of the numerous as well as unambiguous methods of activities of *T. cordifolia*, and furthermore help in advancing and promoting this rich spice having promising possibilities to forestall and treat different sicknesses.

Keywords: *Tinospora cordifolia*. ; *anti-hyperglycemic; anti-hyperlipidemic; herb; immune booster.*

METHODS FOR EVALUATING DRUG-DRUG INTERACTIONS IN VITRO AND IN VIVO DURING DRUG DISCOVERY AND DEVELOPMENT

Abstract: The co-organization of various medications which lead to sedate medication communications (DDIs) are a significant security worry in the center. At the point when numerous medications are co-directed, they might prompt medication drug associations (DDIs) and result in poisonousness or loss of viability. Various medications have been removed from the market because of destructive communications, either as the culprit or the impacted medication. To address these worries, endeavors have been made to distinguish DDI gambles from the get-go in the medication improvement process. There are a scope of tests intended to rapidly recognize tricky synthetic designs and guide changes to lessen drug communications. More point by point strategies are presented in the high level phases of medication exploration to give exact bits of knowledge into DDI boundaries and to empower clinical interpretations. Utilizing physiologically based pharmacokinetic models, specialists can foresee likely DDIs and assess their clinical effect. In spite of numerous progressions, making an interpretation of these discoveries to genuine clinical situations stays testing, particularly concerning DDIs including non-cytochrome P450 proteins, carriers, catalyst carrier exchange, roundabout impacts from biologics, and pharmacodynamic based DDI. This outline dives into the techniques used to assess hepatic DDIs coming about because of protein concealment or excitement.

KEYWORDS: - *Cytochrome P450, Drug-drug interaction, drug development process, stimulation, suppression, transporters*

RECURRENT RESPIRATORY PAPPILOMATOSIS: A 2020 PERSPECTIVE

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Abstract - Repetitive respiratory papillomatosis (RRP) is an uncommon harmless neoplasm of larynx which is brought about by nearby contamination with HPV (Human papillomavirus) and gives mole like developments in the aviation route that influence voice and aviation route patency that influences both pediatric and grown-up populace. The two essential HPV subtypes in RRP are HPV 6 and 11 yet high gamble subtypes 16,18,39 have been identified. HPV most normally influences the skin, genitourinary lot, rear-end and oropharynx and larynx is most normal site of RRP. Recurrent respiratory papillomatosis (RRP) is ongoing sickness of respiratory plot which is hard to manage. It is called by human papillomavirus specifically okay HPV 6 and HPV and forcefulness fluctuates among patients. Some people might require a medical procedure like clockwork while others require a medical procedure two times per year or just couple of times during life. Surgical methods to treat RRP incorporates

microdebridement, color, lasers, etc. With expanding use of 9-valent and quadrivalent HPV immunization in Australia and US. We have seen significant decline in rate of RRP. Single portion Gardasil in agricultural nations has shown supported vaccination for at least 7-years. We have seen critical headway for our capacity to treat RRP. Current information recommends there will be huge diminishing in occurrence of RRP because of expanding usage of HPV vaccine. Addition of fundamental clinical treatment choices including optional immunization, IV bevacizumab has extended our munitions stockpile to control hard-headed instances of RRP

KEYWORDS: *Bevacizumab, HPV Vaccines, human papilloma virus (HPV), Recurrent respiratory papillomatosis.*

MICROENCAPSULATION: ADVANCEMENTS AND APPLICATIONS

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Abstract: Micro encapsulation is a flexible method that includes encasing minuscule particles or drops inside a defensive shell or network, normally going from a couple of micrometers to millimeters in size. This epitome interaction has acquired critical consideration across different enterprises because of its far reaching applications and advantages. This theoretical gives an outline of microencapsulation, featuring its standards, techniques, and different applications. Microencapsulation fills in as a way to safeguard delicate substances, like drugs, probiotics, scents, and supplements, from outside factors like dampness, oxygen, light, and intensity. It empowers controlled discharge and designated conveyance of these substances, upgrading their security and bioavailability. In drugs, for example, microencapsulation assumes a vital part in supported drug discharge and further developed patient compliance. Method of microencapsulation incorporate strategies like shower drying, concertation, and dissolvable dissipation, each offering novel benefits and contemplations. Analysts keep on enhancing in this field, endeavoring to streamline embodiment effectiveness, shell material choice, and delivery energy. This theoretical additionally investigates the different utilizations of microencapsulation in the food business, where it is used to upgrade flavor maintenance, control fixing discharge, and delay timeframe of realistic usability. In the rural area, microencapsulation is utilized for the controlled arrival of pesticides and manures, diminishing ecological effect. Additionally, microencapsulation has promising possibilities in the restorative and individual consideration industry, where it tends to be utilized to settle unpredictable mixtures and further develop item execution. It additionally tracks down applications in the material business, offering advantages like aroma maintenance and antimicrobial properties. Microencapsulation has demonstrated and is additionally considered to demonstrate as a viable device in making novel medication items with various utilitarian properties. Microencapsulation is a complex innovation with wide applications across various areas. Its capacity to safeguard, control delivery, and improve the usefulness of typified substances makes it an important device for scientists, specialists, and enterprises looking for imaginative answers for different difficulties. This theoretical gives a brief look into the universe of microencapsulation, underlining its importance, techniques, and likely effect on different enterprises.

Keyword - Microencapsulation,



INNOVATIVE FRONTIERS: UNVEILING THE LATEST PATENTED BREAKTHROUGHS IN TOPICAL COSMECEUTICALS

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ABSTRACT-- Effective beauty care products assume a urgent part in present day skincare regimens, offering creative answers for upgrade skin wellbeing and appearance. Current licenses in the field of effective beauty care products, zeroing in on progressions in plan, conveyance frameworks, and dynamic fixings. The quick advancement of skincare science has prompted novel methodologies that address different skin worries while focusing on client comfort and viability.

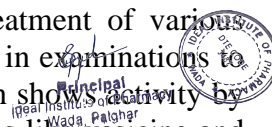
Advancements in definition have prompted the improvement of multifunctional corrective pieces, consolidating fixings that offer moisturization, sun security, and hostile to maturing benefits inside a solitary item. Licenses have arisen for complex emulsions and microencapsulation strategies that guarantee further developed dependability and controlled arrival of dynamic mixtures. Furthermore, headways in conveyance frameworks, like transdermal patches and nanoparticle-based transporters, have empowered proficient entrance of bioactive particles into the skin's more profound layers, improving their efficacy. Active fixing licenses mirror the business' attention on normal and feasible other options. Plant-inferred actives, peptides, and cancer prevention agents are noticeable decisions, driven by purchaser interest for clean and eco-accommodating arrangements. Quite, licenses additionally feature the coordination of biotechnological leap forwards, including development factors and undeveloped cell subordinators, to animate collagen creation and skin rejuvenation. In end, late licenses in effective plan headways accentuate the mix of various advantages in single items, while novel conveyance frameworks and reasonably obtained dynamic fixings show the business' obligation to viability and ecological awareness. These licenses on the whole add to pushing the limits of skincare science, offering buyers a different scope of answers for accomplish and keep up with solid and brilliant skin.

Key Words: Topical cosmetics, Novel delivery systems, Active ingredients, Multifunctional cosmetic products.

HERBAL DRUGS SHOWING ANTIMICROBIAL PROPERTIES USED IN DAY TO DAY LIFE

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Abstract - Microbial infections are a critical reason for mortality around the world. The World Wellbeing Association (WHO) gives yearly reports on the worldwide effect of these infections. 1. 2 million individuals passed on in 2019 from anti-toxin safe bacterial diseases with antimicrobial-safe contaminations assuming a part in 4. 95 million passings. Natural specialists have shown promising outcomes as antimicrobial specialists in the treatment of various microbial illnesses. Various plants and their concentrates have been used in examinations to test their adequacy against different pathogens. Turmeric having curcumin shows activity by restraining cell layers and microbial Adhatoda, contains bioactive mixtures like vasicine and vasicinone, These mixtures obstruct bacterial and parasitic cell films, upset fundamental chemicals. Clove's antimicrobial action is mostly because of its rich substance of eugenol, a strong phenolic compound which disturb the cell films of microbes and growths, prompting spillage of cell contents. Chaparral, contains nordihydroguaiaretic corrosive (NDGA), which disturbs microbial cell films and showing cancer prevention agent impacts. Thyme's



antimicrobial movement is principally credited to its natural ointment, which contains intensifies like Thymol which disturbs microbial cell layers, repressing chemicals urgent for microbial development. Licorice having glycyrrhizin represses the development of different microorganisms and infections by impeding viral replication. The above drugs shows antimicrobial properties by various component of activity, they are primarily utilized as remedial and preventive specialists in everyday life or by disengaging dynamic fixing from unrefined medication. In any case, the significant downside with antimicrobial specialists is that they foster protection from Programming interface and this prompts proceeds with advancement and disclosure of antimicrobial medications. Home grown drugs go about as a model being developed of new medications by drug plan techniques. In determination, natural medications address a promising supply of antimicrobial specialists. Their different phytochemical arrangement, complex components of activity, and synergistic potential position them as important competitors in the continuous fight against microbial contaminations. Further exploration, normalization endeavors, and clinical preliminaries are vital for outfit the full restorative capability of natural medications, preparing for creative and economical antimicrobial techniques.

Key words: *Crude Drug, Development and Discovery, Drug Design Techniques, Extracts, Prototype, World Health Organization*

STUDIES OF BASIL LEAVES : OCLIMUM BASILICUM (TULSI)

Maithili Patil, Karan Mhaskar, , Sonali Uppalwar

ABSTRACT-- Basil is a fundamental fixing in a few hack syrups and expectorants. It gives alleviation from bronchitis, flu and asthma, while biting its leaves assuages cold. Certain examinations additionally say that basil juice, when blended in with honey, is powerful in treating kidney. The most significant reason behind utilizing Tulsi leaf is that Tulsi is found in everybody's home in our space and it is likewise seen around and it is additionally the reason for getting speedy home solution for your illness. Basil (*Ocimum basilicum* L.) is a famous culinary spice, and its medicinal ointments have been utilized broadly for a long time in food items, perfumery, and dental and oral items. Basil medicinal ointments and their primary constituents were found to display antimicrobial action against many Gram-negative and Gram-positive microorganisms, yeast, and form. The current paper surveys principally the subject of basil medicinal oils concerning their synthetic sythesis, their impact on microorganisms, the test techniques for antimicrobial action assurance, and their conceivable future use in food conservation or as the dynamic (antimicrobial), slow delivery, part of a functioning bundle. The eugenol in basil can impede calcium channels, which might assist with bringing down pulse. Its rejuvenating oils can assist with bringing down your cholesterol and fatty substances. Basil likewise contains magnesium, which can assist with further developing your blood stream by permitting your muscles and veins to unwind. Decreased irritation. Tulsi is the most helpful plant and its foundations additionally have numerous properties so Tulsi itself ought to be cultivated. Future endeavors ought to zero in on naturalizing the extraction strategy and advancing Tulsa development.

KEY POINT :- many traits, indigenous, high oxygen producer growing in abundant space


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REVIEW ON 'ARNICA MONTANA' IN HERBAL MEDICINE

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Abstract-- Arnica montana, normally known as arnica, is a deep rooted spice in conventional medication, essentially utilized for its implied mitigating and torment easing properties. This survey means to give a thorough outline of arnica, covering its verifiable use, strategies for readiness, and possible pharmacological impacts. Besides, wellbeing contemplations are addressed to educate clients regarding likely dangers. An exhaustive writing search was directed to assemble data on the verifiable and customary utilization of arnica, remembering its planning strategies and applications for home grown medication. Logical examinations were surveyed to assess the pharmacological impacts of arnica. Wellbeing information were gathered from clinical examinations and poisonousness reports. Arnica has a long history of conventional use, going back hundreds of years. It is most usually applied topically as creams, gels, or oils to lessen torment, swelling, and expanding related with wounds and outer muscle conditions. While arnica's viability stays a subject of discussion, a few examinations recommend its true capacity in mitigating torment and irritation. The mitigating properties are credited to the presence of sesquiterpene lactones and flavonoids. Security concerns are related with arnica, especially when ingested or applied to broken skin. Arnica montana holds a conspicuous spot in conventional home grown medication for its implied aggravation easing and mitigating properties. While some logical proof backings its adequacy, further exploration is expected to lay out normalized doses and definitions. Wellbeing precautionary measures ought to be followed to alleviate possible dangers. Clients are encouraged to counsel medical services experts prior to utilizing arnica-based items.

Key Words: *Arnica montana, Anti-inflammatory, Herbal medicine, Pain relief, Safety, Sesquiterpene .*

FLOWER ORIENTATION IN GLORIOSA SUPERBA (COLCHICACEAE) PROMOTES CROSS-POLLINATION VIA BUTTERFLY.

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Abstract: Angiosperm blossoms every now and again go through variation to work with exact dust appropriation on pollinators and cross-fertilization. We examine the utilitarian significance of *Gloriosa superba* blossoms profoundly complex morphology, which is partitioned into one bisexual meranthium and five male meranthia (useful fertilization units of a solitary bloom). To find out the rearing framework, fertilization cycle and capability of blossom in empowering crosspollination in four populaces of *G. superba*, we performed controlled fertilization tests, flower estimations, dust load examines and guest perceptions. We tracked down that while *G. superba* is self viable, it requires pollinators to create seeds. The primary pollinators were butterflies, especially the pierid *Eronica cleodora*. Dust is carried on the ventral wing surfaces of butterflies as they feed on nectar and come into contact with the anthers and shame. The amount of dust grains on marks of disgrace was decidedly connected with butterfly scales. We saw that the styles were situated toward vegetation clearings, and we

approve that most of starting visits were made to bisexual meranthia that pointed toward clearings. The *G. superba* blossoms shape considers proficient dust move to butterfly guests wings. Almost certainly, butterflies will land at first on the bisexual meranthium in light of the fact that the blossoms style bearing bisexual meranthium faces open regions in the foliage. This exceptional bloom direction include is through to work as a component that supports cross-fertilization.

Key words: *Approach herkogamy; Colchicaceae; Eronica cleodora; Flower development; Gloriosa superba; Meranthium; Papilionidae; Pieridae; Pollenkitt; Psychophily.*

GREEN CHEMISTRY APPROACH TOWARDS ORGANIC SYNTHESIS

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Abstract:Green science, frequently alluded to as reasonable or eco-accommodating science, has arisen as an essential system for rethinking compound combination in manners that focus on natural and human wellbeing contemplations. Because of an Earth-wide temperature boost and ecological contamination, green science was acquainted with natural combination so new techniques are developed. Over the twenty years, green science standards have impacted the compound ventures, as well as our analysts too. The reception of green science standards in amalgamation includes limiting waste age, diminishing the utilization of unsafe substances, and advancing asset proficiency. The use of inexhaustible feedstocks and bio catalysis is likewise investigated as practical other options, intending to lessen reliance on fossil assets and improve the selectivity of responses. The term was begat by US Ecological Security Organization and has been characterized as: the use of a bunch of rules that decrease or dispose of the utilization or age of unsafe substances in the plan, production and use of compound items. There are 12 standards of green science that plans a rules or measures for plan of more secure synthetic compounds and substance change. At the point when the gamble emerges or wellbeing insurances falls flat is characterized as capability of danger and openness increments. On the off chance that the openness controls falls flat and peril is high, the outcomes can be devastating (passing and injury). Risk is restricted in conditions cases, for example, harm, mishap and spills and so on. Planning of more secure and manageable substances require diminishing inborn dangers to a base and separately lessening or diminishing gamble of harm and mishap.

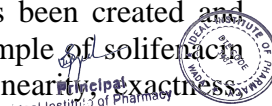
Keywords: *Environment, eco-friendly, green chemistry, organic synthesis, resource efficiency.*

DEVELOPMENT AND VALIDATION OF AN HPLC STABILITY INDICATOR METHOD FOR SOLIFENACIN

Desale Praneta Ravindra, Chaturvedi Mohit, Shukla Karunakar,

ABSTRACT - A superior exhibition fluid chromatography strategy has been created and approved for solifenacin, which shows solidness. An unadulterated example of solifenacin Programming interface was gathered and the strategy was tried for linearity, exactness, accuracy, unwavering quality, restriction of location and breaking point of quantitation. The created technique ended up being straightforward, explicit and affordable, permitting its utilization for the assessment of solifenacin in drug structure in tablets.

Keywords: Linearity, precision, detection, quantitation



HERBAL MEDICINES AS ANTI-INFLAMMATORY AGENTS.

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Abstract: Since forever ago, natural meds have been utilized to oversee different provocative circumstances. Acquiring a profound comprehension of the pharmacognostic qualities of these spices is significant for opening their likely in battling irritation. This study means to exhaustively evaluate the pharmacognostic highlights of chosen natural meds prestigious for their mitigating properties, giving bits of knowledge. An efficient survey of existing writing was completed to distinguish therapeutic spices generally used as calming specialists. Plant tests were gathered, distinguished and exposed to definite assessment both outwardly and minutely. Substance examination included recognizing bioactive mixtures, while pharmacological appraisals enveloped in vitro tests and creature models to assess their mitigating impacts. The complete assessment of the chose natural prescriptions uncovered novel plant attributes and bioactive mixtures related with their capacity to battle aggravation. Bioactive mixtures like flavonoids, terpenoids and polyphenols were recognized. Calming tests showed the adequacy of these natural medications in diminishing aggravation by affecting significant provocative pathways. Natural meds have different pharmacognostic credits that hold extraordinary commitment as calming specialists. Joining customary information with present day logical assessment is significant in understanding and bridling their helpful potential.

Keywords: *Anti inflammatory agents, Bioactive compounds, evaluation, Herbal medicines,*

ADHATODA VASICA (NEES.): A REVIEW ON ITS BOTANY, TRADITIONAL USES, PHYTOCHEMISTRY, PHARMACOLOGICAL ACTIVITIES AND TOXICITY.

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Abstract: Adhatoda vasica (Nees.) of the family Acanthaceae has been utilized in the Southeast equatorial jungle area as it is viable against migraine, colds, hack, outshining hack, fever, asthma, dyspnea, phthisis, jaundice, constant bronchitis, and looseness of the bowels. It displays admirable pharmacological exercises. The point of the survey is to give a deliberate outline of pharmacological exercises with poisonousness and clinical evaluation, phytochemistry of A. vasica alongside its portrayal, topographical perception, phenology, customary purposes, as well as a coordinated portrayal of the discoveries. The general data of A. vasica was gathered from different assets, including books, survey papers, research papers, and reports which were acquired from an internet based search of internationally acknowledged logical data sets. ChemDraw programming was utilized to draw the compound's construction. Phytochemical survey on A. vasica has prompted the assortment of 233 mixtures of various kinds like alkaloids, flavonoids, rejuvenating oils, terpenoids, unsaturated fats, phenols, and so on. It is a promising wellspring of potential phytopharmaceutical specialist that shows different pharmacological exercises, including antibacterial, antifungal, hepatoprotective, hostile to ulcer, abortifacient, antiviral,



calming, thrombolytic, hypoglycemic, hostile to tubercular, cell reinforcement, and antitussive exercises. Adequate number of concentrates on ethnopharmacology, customary purposes, and pharmacological exercises of *A. vasica* are directed. Besides, it is important to concentrate on the action of substance constituents for new medication plan and revelation from normal items.


Keywords: *Acanthaceae; Adhatoda vasica; pharmacological activity; phytochemical review. ; phytochemistry; traditional uses.*

IMFINZI (DURVALUMAB) AFTER CHEMORADIO THERAPY IN STAGE III NON SMALL-CELL LUNG CANCER (NSCLC) FEB 16,2018 FDA

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Abstract -Most patients with secretly advanced, unresectable, non-small cell breakdown in the lungs (NSCLC) have disorder development not enduring convincing chemoradiotherapy. Endorsement FDA supports Imfinzi(durvalumab) unresectable stage-III Non-small cell lung cancer. This stage 3 audit pondered the counter redone passing ligand 1 immunizer durvalumab as hardening therapy with counterfeit therapy in patients with stage III NSCLC who didn't have disorder development after somewhere around two examples of platinum-based chemoradiotherapy. We thoughtlessly given out patients, in a 2:1 degree, to get durvalumab (at a piece of 10 mg for each kilogram of body weight intravenously) or fake treatment true to form for as long as a year. The review drug was controlled 1 to 42 days after the patients had gotten chemoradiotherapy. Partner end focuses included year and 18-month improvement free persistence rates, the objective reaction rate, the length of reaction, the open door to death or far off metastasis, and security. Of 713 patients who went through randomization, 709 sought mix treatment (473 got durvalumab and 236 sought counterfeit treatment). The center development free perseverance from randomization was 16. 8 months with durvalumab versus 5. 6 months with counterfeit. The center an open door to death or distant metastasis was longer with durvalumab than with counterfeit treatment. Grade 3 or 4 hostile events occurred in 29. 9% of the patients who got durvalumab and 26. 1% individuals who sought counterfeit treatment; the most notable opposing event of grade 3 or 4 was pneumonia. Development free perseverance was by and large longer with durvalumab than with counterfeit treatment. The discretionary end concentrates similarly favored durvalumab, and prosperity was near between the social events

Keyword: Biliary parcel disease; cholangiocarcinoma; durvalumab; safe designated spot inhibitors; immunotherapy.


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ROSEMARY, ROSMARINUS OFFICINALIS A PREVENTATIVE AND THERAPEUTIC AGENT

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ABSTRACT

Worldwide cultivation is practised for the medicinal plant *Rosmarinus officinalis* L., also known as rosemary, which is native to the Mediterranean region. In addition to its medicinal application, it is frequently applied as a condiment and food preservative. The phytochemicals that make up *R. officinalis* L. are bioactive molecules that carry out many pharmacological actions, including anti-inflammatory, antioxidant, antibacterial, antiproliferative, anticancer, and protective, inhibitory, and attenuating properties. Thus, in vivo and in vitro research examining the therapeutic and preventative benefits of *R. officinalis* L. on a few physiological illnesses brought on by biochemical, chemical, or biological agents was described in this Review. The methods, workings, findings, and conclusions were explained in this fashion. This study's primary goal was to demonstrate how plant-based products could serve as a substitute for currently accessible medications.

Keywords: *Biological activities; Phytotherapy; Prophylactic effects; Rosemary; Rosmarinus officinalis L. ; Therapeutic effects.*

GINGER AND HEART HEALTH: FROM MECHANISMS TO THERAPEUTICS

Vivek Garje, Aryan, , Sonali Uppalwar
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Abstract

Cardiovascular diseases (CVDs), a leading cause of morbidity and mortality, are spreading throughout the world. Despite recent advancements in the treatment of cardiovascular problems, cardiovascular diseases (CVDs) continue to pose a medical challenge. Many conventional medications are utilized in cardioprotective roles, but they come with a number of negative effects. Because herbal medications offer rich phytochemistry and fewer side effects, there has been a focus on developing novel herbal therapies with potential for cardioprotection. Ginger is a widely used and well-known natural ingredient in functional foods and condiments. It has many bioactivities, including anti-inflammatory, antioxidant, and antibacterial qualities that help treat a variety of illnesses.

The current review discussed the phytochemical qualities of ginger and its constituents, as well as the biological activities of ginger and its potential health advantages in a number of disorders, with a focus on cardiovascular issues. An

Keywords: *cardiovascular diseases, Ginger; biological activities;; health benefits; hyperlipidemia; hypertension; pharmacology. ; platelet aggregation.*


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A REVIEW ON SOLID LIPID NANOPARTICLES

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ABSTRACT

Solid lipid nanoparticles (SLN) are at the forefront of the rapidly developing field of nanotechnology with several potential applications in drug delivery and research. Due to their unique size dependent properties, lipid nanoparticles offer possibility to develop new therapeutics. The ability to incorporate drugs into nano carriers offers a new prototype in drug delivery that could use for drug targeting. Hence solid lipid nanoparticles hold great promise for reaching the goal of controlled and site specific drug delivery and hence attracted wide attention of researchers. This review presents a broad treatment of solid lipid nanoparticles discussing their aims, production procedures, advantages, limitations and their possible remedies. Appropriate analytical techniques for the characterization of SLN like photon correlation spectroscopy, scanning electron microscopy, differential scanning calorimetry are highlighted. Aspects of SLN route of administration and the in vivo fate of the carriers are also discussed.

Keywords: Colloidal drug carriers, Homogenization, TEM, PCS, Bio distribution targeting.

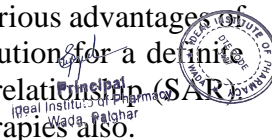
PRODRUGS: NEW APPROACH TO THERAPY

Bhabana Kalita, Shipra Thapar
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Abstract:

Prodrugs represent a pivotal strategy in modern pharmaceutical research aimed at enhancing drug efficacy, bioavailability, and safety. Prodrug design is a molecular modification process. This concept involves chemically modifying the structure of an active drug molecule by attaching various functional groups, such as esters, amides, phosphates, and carbamates, to create prodrugs. These modifications serve to improve drug properties, including solubility, stability, and targeted delivery, thereby addressing challenges associated with conventional drug administration. The metabolic transformation necessary to convert the prodrug into the drug is catalysed by specific enzymes, mainly hydrolases, and ideally this should selectively occur at the target tissue to prevent undesirable side effects. The prodrug concept employs enzymatic or chemical transformations within the body to convert the prodrug into its active form, allowing for controlled release and optimal therapeutic outcomes. Nowadays numerous prodrugs designed to overcome formulation, delivery, and toxicity barriers to drug utilization have reached the market. Targeted drug delivery, enhanced bioavailability, reduced side effects, overcoming metabolic barriers, new innovative approach are the various advantages of prodrugs. A strategic approach for choosing a prodrug design as the solution for a definite drug problem deserves consideration, and it starts with structure activity relationship (SAR). This approach has become a boon for cancer therapies, drug resistance therapies also.

Keywords: Prodrug, esters, carbamate, delivery, metabolic transformation, SAR.



RECENT PROGRESS IN ALZHEIMER'S DISEASE

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Abstract: Background: A deterioration in cognitive function severe enough to impede with everyday tasks is referred to as dementia in general. The majority of dementia cases in individuals 65 years of age and beyond are caused by Alzheimer's disease (AD), which accounts for at least two thirds of all dementia cases. Alzheimer's disease is a neurological condition that gradually impairs behavior, including memory, comprehension, language, attention, and judgment. It has a sneaky beginning. Alzheimer's disease cannot be cured, however some symptoms can be managed using existing medications. According to recent research, Alzheimer's treatment appears to be entering a new phase. Results of clinical trials revealed in January that a medication has now been able to reduce the cognitive decline typical of the

Keywords: *Alzheimer's, Amyloid-beta, Dementia, Donanemab, Lecanemab, Plaque*

REGULATIONS GOVERNING TO THE NANOTECHNOLOGY BASED PHARMACEUTICAL PRODUCT

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Abstract

Nanotechnology in the pharmaceutical field has a great potential and its use has been increased over the past few years. With limited but emerging success, nanotechnology has found a place in pharmaceuticals. Although with excitement in the field for nanotechnology, there is lack of regulatory guidance. Improper regulations caused lack of information on international basis like what these material actually is and how can we define them and caused confusion among different regulatory agencies throughout world. Recent research reports in Singapore showed public perceptions on nanotechnology and resulted in negative misconceptions about it. Thus, public acceptance could be major problem. This uncertainty may ultimately result in lack of funding and affect research and development processes as well. The main objective of the review work is to discuss how proper guidance and the regulatory studies could overcome the problems by having proper definitions and regulatory guideline followed on international level. Educating people about the propaganda and National Nanotechnology Initiative (NNI) program and its regulation. Having a healthcare guideline for public safety. Considering, the current and future perspective proper regulations could lead to an emerging success. It is important to note that regulatory requirements for nanotechnology-based pharmaceutical products are constantly evolving. Companies that are developing should consult with regulatory experts to ensure that they are in compliance with all applicable requirements. Thus it can be concluded that studies of regulatory science for nanotechnology could be beneficial in the field of pharmacy and can lead to betterment of society.

Keywords: *Nanotechnology, National Nanotechnology Initiative, Negative misconceptions,, Perceptions, Pharmacy, Research reports*




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REVIEW ON 'PAPAYA AND IT'S THERAPEUTIC USE'

Mihir S. Bhoir, Kalpesh R. Mali, , Sonali Uppalwar
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Introduction: Papaya (*Carica papaya* Linn.) belongs to the family Caricaceae and is well known for its therapeutic and nutritional properties all over the world. The different parts of the papaya plant have been used since ancient times for its therapeutic applications. Herein, we aimed to review the anticancer, anti-inflammatory, antidiabetic and antiviral activities of papaya leaf. All information presented in this review article regarding the therapeutic application of *Carica papaya* leaf extract has been acquired by approaching various electronic databases, including Scopus, Google scholar, Web of science, and PubMed. The papaya plant, including fruit, leaf, seed, bark, latex, and their ingredients play a major role in the management of disease progression. *Carica papaya* leaf contains active components such as alkaloids, glycosides.

Keywords: *anti-inflammatory, Carica papaya, anticancer, immunomodulatory*

ASSOCIATION OF HYPERTENSION AND DIABETES WITH ISCHEMIC HEART DISEASE AND STROKE MORTALITY IN INDIA: THE MILLION DEATH STUDY

Abstract

Comprehensive research on the impact of diabetes and hypertension on India's cardiovascular system have never been conducted. Through a nationally representative proportional mortality research, our aim was to ascertain the associations between adult Indians' premature death from ischemic heart disease (IHD) and stroke and their levels of hypertension and diabetes. We determined the causes of death using spoken autopsy data collected from 2.4 million families between 2001 and 2014. Those who died as a result of the study's findings were referred to as cases, and those who died from respiratory diseases, cancer, or trauma were referred to as controls. In order to evaluate the association between diabetes and hypertension and the mortality from IHD or stroke, we computed population-attributable fractions (PAF), time trends, and adjusted odds ratios (OR).

The average age of death was 55.6%. High blood pressure is linked to an

Keyword: *Cardiovascular Disease,miology,mortality, nationally representative.*

REVIEW ON HERBAL DRUG NUTMEG

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Abstract: Often called "Nutmeg," jatiphala (*Myristica fragrans* Houtt.) is a plant. It is used in a variety of applications and is included under spices. The seed *M. fragrans* is used to flavor a variety of baked foods, confections, puddings, meats, sausages, sauces, vegetables, and drinks like eggnog. It also has a distinctive, pleasant scent and slightly warm taste. The ability of *M. fragrans* Houtt to cure a wide range of illnesses is attributed to several phytoconstituents. Additionally, the pharmacological activities of these plants—anticonvulsant, antidiarrheal, and antioxidant—are being investigated. The purpose of this review is to summarize the literature that is currently available on *Myristica fragrans* ethnobotany, pharmacognostic properties, traditional uses, chemical constituents, and a summary of its various pharmacological activities

in addition to clinical: solvent extraction, steam distillation, hydrodistillation, cold pressing, and super critical O₂ extraction. It is the dried nutmeg.

Keywords: *Antioxidants, Anti-inflammatory, Herbal drug, Hydrodistillation, Nutmeg.*

THERAPEUTIC POTENTIAL OF HETEROCYCLIC PYRIMIDINE SCAFFOLDS

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Abstract: Pyrimidine is very popular heterocyclic compound which is six membered ring having two Nitrogen atoms. There are many moieties containing this pyrimidine ring, of which fused pyrimidine is a compound with significant biological activities, and its synthesis using different methods is having great importance. The easier method of preparation of above said moiety (Fused Pyrimidine) is by condensation reaction between diamidine and 1,3 dicarbonyl compound in presence of catalyst. The synthesis of fused pyrimidine derivatives was achieved through condensation reactions with different diamidines and dicarbonyl compound and different amines resulting in substituted pyrimidine derivatives for distinct biological activities studies. All the synthesized compounds biological activity study under progress.

Keywords: *Biological activities, Diamidines, Heterocyclic compound, Pyrimidine.*

REVIEW ON LAWSONIA INERMIS LEAF IN HERBAL MEDICINE

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Abstract: In this present study, henna leaves were collected and selected for antimicrobial activity against some human pathogens. Among this study, henna leaves were extracted with methanol, ethanol. The isolated organisms were identified based on cultural, morphological and biochemical characteristics. Hence, the isolated Bacterial isolates were confirmed as *S. aureus*, *S. mutans*, *P. aeruginosa* and fungal isolate.

Method: Wound sample (specimen) was collected with the help of specialist using sterile swabs. The swabs were immediately immersed into normal saline and transported to the laboratory. The specimen should be collected before any antimicrobial agents were administered.

Results: In the previous studies has been found to be a best solvent for extraction of the active ingredient (asarone) from leaves. Though, solvents such as methanol, ethanol and aqueous used the most of the previous studies were also found to be suitable for extraction of active ingredients.

Conclusion: The ethanol and water extract of the bark of *Lawsonia inermis* showed antimicrobial activity against gram positive and gram negative bacteria *Diacyl heptenoid* and *Dits. Fyrosdiacrosyenin* were identified at the constituent responsible for this activity (Saxena et al, 1990).

Keywords: *Antimicrobial activity; zone solvent extracts; henna leaf*

FORMULATION AND EVALUATION OF NORFLOXACIN MICROSPONGES FOR ORAL DRUG DELIVERY SYSTEM

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ABSTRACT:

The main goal of present research was to formulate and evaluate microsponges of



Norfloracin with eudragite 100 polymer. Norfloracin microsponges were prepared by Anquasiemulsion solvent diffusion method. The developed Norfloracin microsponges were characterized for micromeritics properties, morphology, Drug entrapment efficiency, In-vitro drug release, In Fourier transform infrared spectroscopy (FTIR) and Differential scanning calorimetric (DSC) analysis the drug-polymer interaction studies, X-ray diffraction. A microsphere has been a topic of interest in development of new drug delivery system to extend half-life of drug and improve bioavailability. Microspheres play so important role in development of controlled or sustained drug delivery system. These drug delivery system which increases sustained action and provides better patient compliance. [1,2,3]

Microspheres formulation of Norfloracin was prepared by using quasiemulsion solvent diffusion method. Eudragit E100 polymer had significant effect on drug entrapment efficiency and drug release. The concentration of eudragite 100 showed a significant effect with its effect on micromeritics properties.

Keywords: *Quasi emulsion solvent diffusion method, Eudragit E100, Norfloracin microspheres,*

NANOSTRUCTURED LIPID BASE DRUG DELIVERY SYSTEM OF LOPINAVIR

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ABSTRACT

By using the high-shear homogenization method Nanostructured lipid carriers (NLCs) loaded with lopinavir (LOP) were prepared. The LOP-NLCs formulations were freeze-dried using POLOXOMER 188 as cryoprotectant. A burst release is shown by in vitro release studies in simulated gastric fluid (pH 1.2) and simulated intestinal fluid (pH 6.8). The optimized freeze-dried formulation (LOP-NLC) had a particle size (PS), zeta potential (ZP) and % entrapment efficiency (%EE) of 159.5, 3.75nm, 0.413, 0.017, -46mV and 97.77_4.46%, respectively.

INTRODUCTION

A variety of complications caused by the human immunodeficiency virus (HIV) infection i.e. Acquired immune deficiency syndrome (AIDS). Mostly localized and replicated are in the cell for HIV is (monocytes and CD4+ T lymphocytes), and anatomical (lymphatic system, central nervous system and genitals) levels.

METHODS

Using the hot high shear homogenization method NLCs were prepared. The lipid phase consisted of Labrafil and Oleic acid in 1:1 ratio. The aqueous phase consisted of surfactants (Glycerol Monostearate i.e., GMS and Stearic acid) at a ratio of 4:4. Separately prepared the lipid and aqueous phases.


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LOP–NLC for oral administration was successfully prepared by a high shear homogenization method. Glycerol monostearate, labrafil M 1944 CS and poloxamer 188 with transcitol P were selected as the solid lipid (V3), liquid lipid (V2) and surfactant with co-surfactant combination (V1) respectively. Numerical optimization was then used to predict the levels of the factors V1, V2 and V3 required for obtaining an optimum formulation with minimum solid lipid, liquid lipid and surfactant concentration with maximum drug entrapment efficiency,

Keywords-*Cryoprotectant glycerol monostearate, Homogenization, immunodeficiency, Nanostructured lipid*

REVIEW ON AUTISM

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ABSTRACT

Autism is a set of heterogeneous neurodevelopmental conditions, characterised by early-onset difficulties in social communication and unusually restricted, repetitive behaviour and interests. The worldwide population prevalence is about 1%. Autism affects more male than female individuals, and comorbidity is common (>70% have concurrent conditions). Individuals with autism have atypical cognitive profiles, such as impaired social cognition and social perception, executive dysfunction, and atypical perceptual and information processing. These profiles are underpinned by Autism is a complex disorder resulting from the combination of genetic and environmental factors. Remarkable advances in the knowledge of genetic causes of autism have resulted from the great efforts made in the field of genetics. The identification of specific alleles contributing to the autism spectrum has supplied important pieces for the autism puzzle. However, many questions remain unanswered, and new questions are raised by recent results. Moreover, given the amount of evidence supporting a significant contribution of environmental factors to autism risk, it is now clear that the search for environmental factors should be reinforced. Available scientific evidence suggests that there are probably many factors that make a child more likely to have autism, including environmental and genetic factors. Available epidemiological data conclude that there is no evidence of a causal association between measles, mumps and rubella vaccine, and autism. Previous studies suggesting a causal link were found to be filled with methodological flaws. There is also no evidence to suggest that any other childhood vaccine may increase the risk of autism. Autism is a lifelong, developmental disability. The characteristics of the disability; little or lack of speech development, avoiding social contact or awareness and routines of behaviors are not experienced in the same degree for everyone living with autism. .

KEYWORDS: *Autism, Cognitive profiles, Comorbidity, Gender differences, Neurodevelopmental conditions, Prevalence, Repetitive behavior, Social communicatio*

Review article: Nanomedicine therapeutic approaches to overcome cancer drug resistance

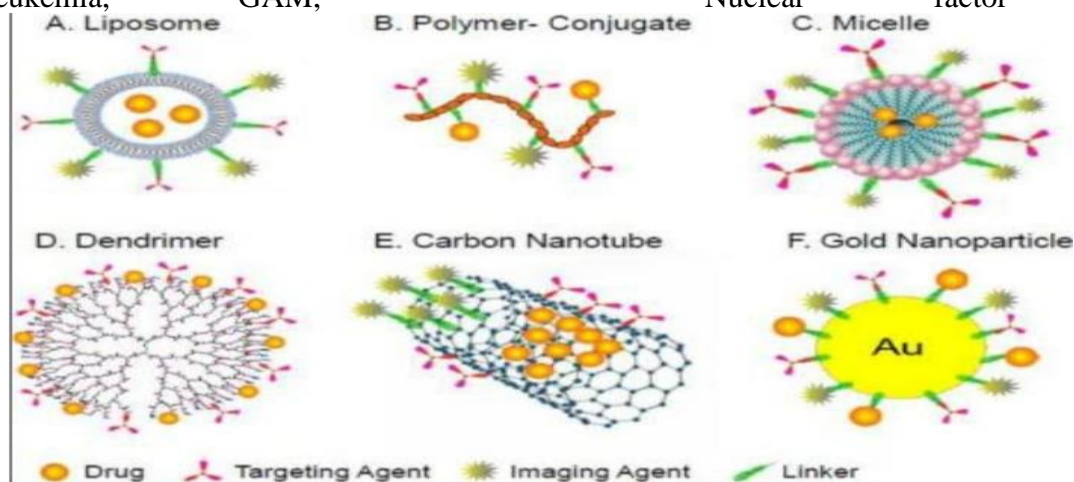
Mrunal Jagdish Patil, Siddhant Vijay Sankhe, , Sonali Uppalwar



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ABSTRACT BACKGROUND : Nano medicine is an emergency form of therapy that focuses on alternative drug delivery and improvement of the treatment efficacy will reducing determinant side effect to normal tissues . Cancer drug resistance is a compliment process that

involve multiple mechanism . With the advance design and alternative mechanism of drug delivery known for different Nano drug including liposomes,polymer conjugate,micelle, dendrite ,carbon based and metallic Nano particles . Novel Nano medicines that have a high ability for flexible,fast drug design and production based on tumors genetics profile can be created making drug selection for personal patient treatment much more intensive and effective . This review aims to demonstrate the advantage of the young medical science field Nano medicine for overcoming cancer drug resistance. AML, Cancer stem cell Lymphocytic leukemia, GAM, Nuclear factor KB.



ADHATODAVASICA (NEES): A REVIEW ON ITS BOTANY, TRADITIONAL USES, PHYTOCHEMISTRY, PHARMACOLOGICAL ACTIVITIES AND TOXICITY

Kavita Guhe, Anjali Mahale, , Sonali Uppalwar

Ideal Institute of Pharmacy, Posheri, Wada, Palghar -421303

Adhatodavasica (Nees.) of the family Acanthaceae has been used in the Southeast tropical zone as it is efficacious against headache, colds, cough, whooping cough, fever, asthma, dyspnea, phthisis, jaundice, chronice bronchitis, and diarrhea. It exhibits commendable pharmacological activities. The aim of the review is to provide a systematic overview of pharmacological activities with toxicity and clinical assessment, phytochemistry of A. Vasica along with its characterization, geographical observation, phenology, traditional uses, as well as an organized representation of the findings. The overall Information of A. vasica was collected from various resources, including books, review papers, research papers, and reports which were obtained from an online search of globallyaccepted scientific databases. ChemDraw software was used to draw the compound's structure. Phytochemical review on A. vasica has led to the collection of 233 compounds of different types such as alkoinds, flavonoids, essential oils, terpendoids, fatty acids, phenols, etc. It is a promising source of potential phytopharamaceutical agent that exhibhits diverse pharamacological activities, including antibacterial, antifungal, hepatoprotective, anti-ulcer, abortifacient, antiviral, anti-inflammatory, thrombolytic, hypoglycemic, anti-tuberculae, antioxidant, and antitussive activities. Sufficient number of studies on enthonpharmacology, traditional uses, and pharmacological activities of A. vasica are conducted. Furthermore, it is necessary to study the activity of chemical constituents for new drug design and discovery from natural products.

Keywords:-Acanthaceae; Adhatodavasica; pharmacological activity; phytochemical review; phytochemistry; traditional uses.

REETHA (SAPINDUSMUKOROSI): PROPERTIES AND BENEFITS

Tejal Mhaskar, Pradnya Pumjari, , Sonali Uppalwar
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ABSTRACT: Sapindus mukorossi, well known as soapnut belong to family Sapindaceae. The species is widely grown in upper reaches of the Indo-Gangetic plains Shivalika and Sub-Himalayan tracts at altitudes from 200m to 1500m. The aim of the present Abstract is to discuss the salient feature of plants in various field. And highlights it's different activities based on recent studies. Literature has been collected through Google scholar, Pubmed and a Library. It is popular ingredient of ayurvedic preparation such as shampoo, cleansers and medicine for treatment of eczema psoriasis and for removing freckles and also have gentle insecticidal property and traditionally used for removing lice from the scalp. Reetha is used as the main ingredient in soaps and shampoos for washing hair as it is considered good for health of hair. In recent years, the use of this plant promoted considerable attention because of their various biological and pharmacological activity. S. mukorossi is a common plant available at various places in india. The plant is widely used in cosmetic preparation like shampoos and cleansers. The pharmacological studies reported in the present review confirm the therapeutic value of this plant.

KEYWORD:- antibacterial, antifungal, sapindus mukorossi

RECENT TRENDS IN HERBAL DRUGS: A REVIEW

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ABSTRACT:

Herbal medicines make up a significant constituent of the tendency toward alternative medicine. Herbal medicine is becoming ever more popular in today's world as people seek out natural remedies. Herbal medicines have been used since the dawn of civilization to maintain health and to treat various diseases. To compete with the growing pharmaceutical market, there is an importance to use and scientifically authenticate more medicinally useful herbal products. This article provides a general idea of herbal medicines and intended to explain the therapeutic effectiveness of various herbal medicines, adverse drug reactions, drug interactions, standardization and stability testing of herbal medicines. From earliest period, peoples are using herbal plants as home remedies for the treatment of diabetes¹¹. The a variety of herbal plants with antidiabetic activity are Abroma augusta, Acacia melanoxylon, Acacia modesta, Acacia nilotica, Aconitum ferox, Adhatodavasika, Adiantum capillus, Adiantum incisum, Agrimonia eupatoria, Allium sativum, Aloe barbadensis, Althaea Officinalis, Aprun graveolens, Arctium lappa, Commiphora abyssinica, Embilica officinalis, Eucalyptus globules, Ginseng panax, Gymnemasylvestre, Inula helenium, Juniperus communis, Medicago sativa, Nigella sativa, Orthosiphon stamineus, Panexquinquefolius, Polygala senega, Plantago ovata, Punica granatum, Salvia Officinalis, Scoparia dulcis, Tanacetum vulgare, Taraxacum officinale, Tecoma stans, Trifolium alexandrinum, Trigonella foenum, Turneradiffusa. The lawful situation of herbal drugs varies from country to country. Developing countries have

folk knowledge of herbs and their use in traditional medicine is wide spread. A major factor impeding the development of the medicinal plant based industries in developing countries has been the lack of Information on the social and economic benefits that could be derived from the industrial utilization of medicinal plants. Further research is required to exploit the compounds responsible for the observed biological activity.

Keywords: *Advantages, Disadvantages, Herbal drugs, Regulatory status.*

REVIEW ON ANTI-TUBERCULER DRUGS

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Abstract: Tuberculosis is a global threat but in particular affects people from developing countries. It is thought that nearly a third of the population of the world live with its causative bacteria in a dormant form. Although tuberculosis is a curable disease, the chances of cure become slim as the disease becomes multidrug-resistant and the situation gets even worse as the disease becomes extensively drug-resistant. After approximately 5 decades without any new TB drug in the pipeline, there has been some good news in the recent years with the discovery of new drugs such as bedaquiline and delamanid as well as the discovery of new classes of anti-tubercular drugs. Some old drugs such as clofazimine, linezolid and many others which were not previously indicated for tuberculosis have been also repurposed for tuberculosis and they are performing well.

Keywords: MDR-TB; Mycobacterium tuberculosis; Tuberculosis (TB); XDR-TB; anti-TB drugs.

REVIEW ON THE ROLE OF FICUS SPECIES [FIG] IN TREATMENT OF DIABETES MELLITUS

Irum khan, , Sonali Uppalwar
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Abstract: Diabetes mellitus is a disease of inadequate control of blood levels of glucose. One of the most prevalent global health issues, with a sharply rising incidence is diabetes mellitus. Since ancient times, a range of medicinal plants, particularly those from family Moraceae [genus Ficus] and their active ingredients have been utilized to treat chronic diseases like diabetes. A literature search was conducted to obtain information about antidiabetic properties of Ficus from electronic database. Pubmed, Medlineplus, Google scholar and library have been used to complete literature. Ficus benghalensis, Ficus carica, Ficus glomerata, Ficus glumosa, Ficus religiosa all displayed notable antidiabetic effects with diverse modes of action among the many Ficus species that were included in the research. Ficus species are also flexible sources of bioactive compounds like flavonoids, phenolic acids, tannins, alkaloids, glycosides, triterpenoids, sterols, and vitamin E. In numerous in vivo experiments these extracts and Isolated secretion and greatly increased Insulin secretion and subsequently decreased blood glucose levels. This review summarises the antidiabetic potential of genus Ficus taking into account both ethnobotanical usage and pharmacological research [anticancer, anti-inflammatory, anti-diabetic] with mechanism of action. This review can assist guide future scientific research to create new diabetes medications Particularly, compound isolated from Ficus species effectively mitigated all diabetic related complications in streptozotocin and alloxan induced diabetic mellitus.

Keywords: *Antidiabetic; Diabetes mellitus; Ficus; Hypoglycaemic; Insulin.*

ADHATODAVASICA (NEES): A REVIEW ON ITS BOTANY, TRADITIONAL USES, PHYTOCHEMISTRY, PHARMACOLOGICAL ACTIVITIES AND TOXICITY

Kavita Guhe, Anjali Mahale, , Sonali Uppalwar

Ideal Institute of Pharmacy, Posheri, Wada, Palghar -421303

Abstract: Background: Adhatodavasica (Nees.) of the family Acanthaceae has been used in the Southeast tropical zone as it is efficacious against headache, colds, cough, whooping cough, fever, asthma, dyspnea, phthisis, jaundice, chronice bronchitis, and diarrhea. It exhibits commendable pharmacological activities. The aim of the review is to provide a systematic overview of pharmacological activities with toxicity and clinical assessment, phytochemistry of A. Vasica along with its characterization, geographical observation, phenology, traditional uses, as well as an organized representation of the findings. The overall Information of A. vasica was collected from various resources, including books, review papers, research papers, and reports which were obtained from an online search of globallyaccepted scientific databases. ChemDraw software was used to draw the compound's structure. Phytochemical review on A. vasica has led to the collection of 233 compounds of different types such as alkoinds, flavonoids, essential oils, terpendoids, fatty acids, phenols, etc. It is a promising source of potential phytopharmaceutical agent that exhibhits diverse pharamacological activities, including antibacterial, antifungal, hepatoprotective, anti-ulcer, abortifacient, antiviral, anti-inflammatory, thrombolytic, hypoglycemic, anti-tuberculae, antioxidant, and antitussive activities. Sufficient number of studies on enthno pharmacology, traditional uses, and pharmacological activities of A. vasica are conducted. Furthermore, it is necessary to study the activity of chemical constituents for new drug design and discovery from natural products.

Keywords: *acanthaceae; Adhatoda vasica; pharmacological activity; phytochemical review; phytochemistry; traditional uses.*

REVIEW ON “HERBAL ANTI-CANCER DRUGS

Janvi S. Murade, Gautami Lokhande, , Sonali Uppalwar

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Abstract: Cancer is a disease in which abnormal cells divide uncontrollably and destroy body tissue. Due to the lack of conventional therapies and the severe side effects of chemotherapy, cancer is a major public health concern worldwide. Herbal anticancer drugs or herbal remedies are a topic of ongoing research and interest in the field of complementary and alternative medicine. While some herbs and plant-derived compounds have shown potential anticancer properties in laboratory studies, it's essential to emphasize that their use as standalone cancer treatments is not a substitute for conventional medicaltherapies.

Web of Science, MedlinePlus, Google Scholar, PubMed, and a library have been used to compile literature. This review provides up-to-date knowledge on the use of herbal anticancer drugs. Curcumin, found in turmeric, has anti-inflammatory and antioxidant properties and may help inhibit the growth of cancer cells. Epigallocatechin-3-gallate (EGCG) in green tea has shown potential in preventing cancer cell growth and reducing the risk of certain cancers. Ginger contains gingerol, which has antioxidant and anti-inflammatory effects and may help in cancer prevention. Originally derived from the Pacific yew tree's bark, paclitaxel is a chemotherapy drug used to treat various cancers, including breast, ovarian, and lung cancer. **Vinblastine and Vincristine:** These drugs, derived from the Madagascar periwinkle plant, are used in the treatment of leukemia, lymphoma, and

other cancers. Extracts from mistletoe, sometimes used in integrative cancer care for symptom management and immune system support. Herbal plants have contributed a rich health to human beings. This review has given some plants possessing anticancer activity & anticancer herbal drugs used for various types of cancer.

Keywords: *Anti-Cancer, Anti-Oxidant, Herbal Drugs, Anti-Inflammatory, Cancer Drugs, Therapy, Cancer Treatment.*

Black cohosh

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ABSTRACT:

Background: Black cohosh is a perennial plant belonging to the family Ranunculaceae, with the scientific name of *Actaea racemosa* L, a common synonym for which is *Cimicifuga racemosa* (L) Nutt. In 1998, the genus *Actaea* was revised to subsume or include the genera *Cimicifuga* and *Souliea*; thus, the genus now contains 28 species. 1, 2 Of these, 8 are found in North America, 19 in Asia, and 1 in Europe.

Methods: Literature has been collected through, Google Scholar, and a library. This review shares updated information on the botany, distribution, health benefits, phytochemistry and pharmacology of black cohosh.

Result: In the Studies on drug interactions have shown that black cohosh can increase the effectiveness of some anticancer drugs, but can also increase the toxicity of others. The black cohosh possesses antioxidant activity and may protect against damage to DNA by reactive oxygen species. The antimalarial activity of triterpene glycosides found in black cohosh. The chemical constituent is ethylacetate extract and triterpene glycoside actein. patents have been issued for the use of black cohosh for treating menstrual, migraines, menopause symptoms, reducing hair loss, treating estrogen-dependent tumors, and reducing levels of peptides in the brain believed to contribute to the onset of Alzheimer's disease.

Conclusions: Existing literature authenticates the potential benefits of black cohosh from nutritional as well as medicinal perspective. The currently insufficient evidence to support the use of black cohosh for menopausal symptoms. However, there is adequate justification for conducting further studies in this area.

Keywords: *Alzheimer's, Anticancer, Antimalarial. Antioxidant, Black Cohosh Chemical constituent, Phytochemistry, Ranunculaceae*

RAFFLESIA ARNOLDII

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Abstract: *Rafflesia Arnoldii*, ordinarily known as the "carcass blossom," is an exceptional and uncommon plant species tracked down in the rainforests of Southeast Asia. It is commended as the world's biggest individual bloom, for certain examples arriving at up to 3 feet in width. Found by Sir Thomas Stamford Wagers in 1818, *Rafflesia Arnoldii* has since caught the interest of botanists and nature fans because of its remarkable qualities and biological importance. **Objective:** The objective of this study is to give a brief outline of *Rafflesia Arnoldii*, zeroing on its central issues, including its size, particular elements, regenerative procedure, protection status, and its job in nearby environments. **Method:** To gather this data, we led a careful survey of logical writing, research articles, and field studies connected with *Rafflesia Arnoldii*. Moreover, interviews were directed with specialists in the



field of organic science and protection to assemble first hand experiences. **Result:** Rafflesia Arnoldii, with its impressive size and interesting conceptive methodology, addresses a dazzling illustration of nature's variety and variation. Notwithstanding, its endurance is in danger, essentially because of human exercises. Preservation drives, like safeguarded regions and local area contribution, are vital for shield this extraordinary species. **Conclusion:** All in all, Rafflesia Arnoldii is a plant wonder that exhibits the intricacy and magnificence of nature. Its safeguarding not just guarantees the endurance of a charming animal categories yet additionally adds to the preservation of the rich biodiversity of Southeast Asian rainforests. Pressing activity is expected to safeguard this baffling goliath bloom and the environments it upholds.

Keywords: Biodiversity, Biggest bloom, Cadaver blossom,, Fertilization, Rafflesia Arnoldii

ASHWAGANDHA THE MEDICINAL PLANT

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Abstract *Ashwagandha* (*Withaniasomnifera*, fam. *Solanaceae*) is commonly known as Indian Wintercherry or Indian Ginseng. It is one of the most important herb of Ayurveda (the traditional system of medicine in India) used for millennia as a Rasayana for its wide ranging health benefits. Rasayana is described as an herbal or metallic preparation that promotes a youthful state of physical and mental health and expands happiness. These types of remedies are given to small children as tonics, and are also taken by the middle-aged and elderly to increase longevity. Among the ayurvedic Rasayanaherbs, Ashwagandha holds the most prominent place. Method of preparing ashwagandha powder: Wash and dry the ashwagandha roots or leaves, then chop them into small pieces. Boil the chopped ashwagandha in a pot and cover with water. Bring to a boil, then reduce the heat and let simmer for 30 minutes to an hour.



Thus, the above findings clearly indicate that the traditional use of Ashwagandha has a logical and scientific basis. Large scale clinical studies are needed to prove the clinical efficacy of this herb, specially in stress related diseases, neuronal disorders and cancers.

Keywords: *Adaptogen/anti-stress, anti-tumor, anti-arthritis, neurodegenerative, rejuvenator, withaniasomnifera.*

REVIEW ON CASTOR OIL – HERBAL MEDICINE

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Abstract: Castor-oil plant, (*Ricinus communis*), also called castor bean, large plant of the spurge family (Euphorbiaceae), grown commercially for the pharmaceutical and industrial uses of its oil and for use in landscaping. With castor oil coming from the plant, Ricinus oil, many patients may prefer its use due to its growth in nature, which inherently seems non-toxic and safer when compared to traditional medicine. Ricinoleic acid of castor oil is unique among all other vegetable oils. The predominant triglyceride component in the oil is triricinolein. Antimicrobial Anti-inflammatory ; Body pain – milenia, Arthritis, sciatica Period pain ; Constipation, Helps in sleep when mix with warm milk, Inexpensive ; used in chilblains ; Skin problem – acne, eczema, psoriasis. Used in prevent hairfall, help in dandruff. Castor Oil Extraction: The ripe seeds are allowed to dry, when they split open and discharge the seeds. These seeds are cleaned, cooked and dried prior to extraction. Oil is then extracted by pre-pressing, using a high pressure continuous screw press – called the expeller. Extracted oil is filtered. Castor oil has been used for centuries to treat constipation and may be a good natural moisturizer for your skin and scalp. But there's not much scientific evidence for other possible health benefits. Castor seed oil is a rich source of ricinoleic acid and triglycerides, which are valuable for therapeutic aspects. There are multiple uses of castor oil including germicidal agents, disinfectant, and purgative.

Key word:- *Antimicrobico; Antinfiammatorio ; Geloni; stipsi ; Milenia; Olio di ricino.*

A REVIEW ON DRUG DISCOVERY

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Abstract

Drug discovery is a process which aims at identifying a compound therapeutically useful in curing and treating disease. This process involves identification of candidates, synthesis, characterization, validation, optimization, screening and assays for therapeutic efficacy. Once a compound has shown its significance in these investigations, it will initiate the process of drug development earlier to clinical trials. New drug development process must continue through several stages in order to make a medicine that is safe, effective, and has approved all regulatory requirements. One overall theme of or topic is that the process is sufficiently long, complex and expensive so that many biological targets must be considered for every new medicine ultimately approved for clinical use and new research tools may be needed to investigate each new target. From initial discovery to marketable medicine is a long, challenging task. It takes about 12-15 years from discovery to approved medicine and requires

an investment of about US \$ 1 billion. On an average, a million molecules screened but only a single is explored in late stage clinical trials and is finally made obtainable for patients.

Keywords: *Lead optimization, clinical trials, target validation identification, new drug*

A COMPREHENSIVE REVIEW ON VERSATILE APPLICATIONS OF GREEN METAL AND METAL OXIDE NANOPARTICLES: ANTIBACTERIAL POTENTIAL, MECHANISM AND CHARACTERIZATION.

ABSTRACT

Nanotechnology has emerged as a promising subject in pharmaceutical research, involving the synthesis of nanoscale materials with diameters up to 100 nanometers by physical and chemical processes. These nanomaterials have unique properties such as precise size, shape, composition, increased surface area to volume ratio, and purity of individual constituents, making them highly versatile in a variety of applications such as cosmetics, medicines, targeted drug delivery, optical devices, apparel, and personal care goods. Eco-friendly strategies for the development of nanomaterials are now being prioritized in order to improve their biological uses while minimizing health and environmental dangers. Green nanotechnology has enabled the creation of a diverse spectrum of green metal and metal oxide nanoparticles with various chemical compositions, sizes, and morphologies that are safe, environment-friendly, and cost-effective. Green metal nanoparticle production has sparked widespread interest due to its biocompatibility and huge potential. Various metals and metal oxides such as silver, gold, zinc, copper, platinum, nickel, iron oxide, zinc oxide, titanium dioxide, and copper oxide are widely utilized and mixed with plant extracts to get desirable green metal nanoparticles. The purpose of this research is to present detailed information on the antibacterial and anticancer activities of several types of green metal nanoparticles, their synthesis technique, and mechanisms of action against bacterial and cancer cells. It also focuses on the techniques used to characterize green metal nanoparticles and investigates their numerous applications in the pharmaceutical, biological, and other industries. As a result, this paper offers a thorough examination of numerous forms of green metal nanoparticles and their versatile applications in a variety of sectors.

Keywords: *antibacterial, anticancer mechanism. green synthesis, green metal, and metal oxide nanoparticles, nanotechnology.*

REVIEW ON MINOXIDIL IN THE TREATMENT OF ANDROGENETIC ALOPECIA

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Abstract: The National Institutes of Health (US NIH, 2018) estimates that in the US approximately 50 million men and 30 million women suffer from AGA (also known as pattern hair loss). Minoxidil is the only topical drug for the treatment of both female and male pattern hair loss. In the US, minoxidil is approved over-the-counter (OTC) at a maximum concentration of 5%. In this review, we summarize the findings of the pivotal studies used in support of the drug's approval as well as recent discoveries and novel developments in the use of minoxidil for the treatment of AGA. A primary literature search was conducted using



PubMed in May 2019, utilizing the search term “oral minoxidil AND (hair loss OR alopecia OR baldness)”. Reviews, non-English studies, and articles concerning only topical minoxidil were excluded. There is some evidence that the stimulatory effect of minoxidil on hair growth is also due to the opening of potassium channels by minoxidil sulphate, but this idea has been difficult to prove and to date there has been no clear demonstration that KATP channels are expressed in the hair follicle. A total of 17 studies with 634 patients were found discussing the use of oral minoxidil as the primary treatment modality for hair loss. Androgenetic alopecia was the most studied condition, but other conditions included telogen effluvium, lichen planopilaris, loose anagen hair syndrome, monilethrix, alopecia areata, and Oral minoxidil was found to be an effective and well-tolerated treatment alternative for healthy patients having difficulty with topical formulations. LDOM has a good safety profile as a treatment for hair loss. Systemic adverse effects were infrequent and only 1.7% of patients discontinued treatment owing to adverse effects.

Keywords: *alopecia; hair disorders; minoxidil.*

CURRENT TRENDS ON A MONOCLONAL ANTIBODY THERAPY

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ABSTRACT: Monoclonal antibodies have been found to be more effective in treating various types of diseases because they are more targeted than some other forms of medications. The use of mAbs in cancer, autoimmune disorders, chronic illnesses, and a number of other conditions has previously been authorized. Numerous biopharmaceutical firms attempt to compete by creating monoclonal antibodies and moving them forward into clinical trials due to their extensive potential as immunotherapeutics. Some monoclonal antibodies are also used in immunotherapy to aid the immune system's fight against cancer. Some monoclonal antibodies, for example, mark cancer cells so that the immune system can detect and kill them more effectively. A recent clinical experiment discovered that Dostarlimab completely cured all CRC patients who received it, with no patients experiencing any grade 3 or above side effects. A humanised monoclonal antibody called dostarlimab (Jemperli) or dostarlimab-gxly functions as an antagonist for programmed death-1 (PD-1) receptors. Moreover, clinical trial data showed dostarlimab is more effective than other PD-1 inhibitors and no significant adverse effects in any of the research participants, The purpose of this study is to summarize current evidence about monoclonal antibodies for cancer treatment and new drug Dostarlimab and to assess the possibility for Novel and Combination therapy.

Keywords- Monoclonal antibody therapy. immunotherapy

ROLE OF HISTOPATHOLOGY IN THE EARLY DIAGNOSIS OF LEPROSY

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Abstract: An Overview Mycobacterium leprae is the chronic infectious disease that causes leprosy, also referred to as Hansen's disease. It primarily affects the skin, eyes, nose, and peripheral nerves. Leprosy is one of the most prevalent causes of non-traumatic peripheral neuropathy globally, despite not being lethal. The World Health Organization (WHO) has suggested that diagnosis of leprosy should be made by the observation of one or more of the following: hypopigmented or reddish skin patches with definite loss of sensation, thickened peripheral nerves, and acid fast bacilli on skin smears / biopsy specimens. Over the past forty years, the global leprosy situation has changed dramatically with the advent of multidrug therapy (MDT), which involves the simultaneous use of two or three antibiotics: clofazimine and dapsone with rifampicin. **Keywords:** *Acid fast staining, antigen specific response, chronic disease, MDT, Mycobacterium leprae, skin lesions.*

RAGE – STARFLOWER / BEE FLOWER A HERB PLANT FOR ALL REASONS

Pracheta R. Khot, Kajal V. Dhum, , Sonali Uppalwar

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Abstract: Borage (*Borago officinalis*) is an annual herb which is cultivated for medicinal and culinary uses, although it is commercially cultivated for borage seed oil. Borage seed oil is the plant rich in the gamma-linolenic acid (26%-38%) which is used as dietary or food supplement. Web of science, PubMed, its flowers and leaves, as the oil from its seeds are used as medicine. Borage seeds are used for skin disorder called neurodermatitis . borage is full minerals such as potassium, calcium and magnesium so is beneficial to one's health. Borage is a medicine plant . Borage seed oil is used for skin disorders. Borage oil is sometimes added to infant formula in small amounts to provide fatty acids needed to promote development of preterm infant.

IMPORTANCE AND USES OF MEDICINAL PLANTS – AN OVERVIEW

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ABSTRACT:


Medicinal plants have a promising future because there are about half a million plants around the world and most of them their medical activities have not been investigated yet, and their medical activities could be decisive. Higher plants have been used as a source of drugs by mankind for several thousand years. In fact, ancient man was totally dependent on green plants for his day-to-day needs of medicaments. With the development of modern medicine, synthetic drugs and antibiotics, the importance of plants as a raw material for drugs decreased considerably. However, plants were used as a basis of some of the most important drugs, even in the modern system of medicine. Medicinal plants belong to a big plant group



with a great interest due to its pharmaceutical, cosmetic and nutritional application. In addition, they are also an alternative to traditional crop with species in high demand at the current international market [23, 24]. The review has included the botanical characteristics of the plant which helps in identification of the plant, Ethno botany which give traditional use of the plant, and the reported activities of the plant. However, the number of studies is limited and we recommend that further studies to be conducted to confirm reported activities. By this review, it can be concluded that in the core of the nature there are so many plants which possess potent diuretic activity. Herbal medications are free from side effects and toxicity unlike the allopathic medicines.

KEYWORD: *Alternative Medicine,, Development,Herbalism, Higher safety,Therapeutic, purposes*


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REVIEW ON HERBAL DRUG NUTMEG

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Abstract: Jatiphala (*Myristica fragrans* Houtt.) commonly known as “Nutmeg”. It is mentioned under spices and used in various preparations. *M. fragrans* consisting of the seed has a characteristic, pleasant fragrance and slightly warm taste it used to flavor many kinds of baked goods, confection, pudding, meats, sausages, sauces, vegetables and such beverages as eggnog. Many phyto-constituents of *M. fragrans* Houtt is responsible for its effect in curing various diseases. These plants are also pharmacologically studied for antioxidant, antidiarrhoeal, anticonvulsant effects. This review attempts to highlight the available literature on *Myristica fragrans* ethno botany, pharmacognostic characteristics, traditional uses, chemical constituents and summary of its various pharmacological activities along with clinical

Hydrodistillation, steam distillation, solvent extraction, super critical O₂ extraction, and cold pressing.

Nutmeg is the dried kernel of the seed and mace is the dried aril surrounding it. *Myristica fragrans* is evergreen tree native to Indonesia. It is extensively used to treat diseases. Nutmeg oil is volatile essential oil from nutmeg. The oil is colorless or pale yellow and has nutmeg flavor and aroma. Terpene hydrocarbons make up about 90% of the essential oil. Nutmeg fruit production starts in the 6th year.

Methods used for extraction of essential oil include hydro-distillation, solvent extraction, and cold pressing. The benefits of oil include anti-inflammatory, anti-oxidant, aid in digestion, improve heart health, etc. It can be applied topically, in baths, for aromatherapy, etc.

Keywords: *Antioxidants, Anti-inflammatory, Herbal drug, Hydrodistillation, Nutmeg.*

PANAX GINSENG IN THE TREATMENT OF ALZHEIMER'S DISEASE AND VASCULAR DEMENTIA


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Sonali Uppalwar


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Abstract

Dementia has become one of the most important diseases threatening human health. Alzheimer's disease (AD) and vascular dementia (VaD) have the highest incidence rates among the types of dementia, but until now, therapeutic methods have been limited. Panax ginseng has been used in China for thousands of years to treat dementia, and modern medical studies have found that it contains multiple active components, such as ginsenosides, polysaccharides, amino acids, volatile oils and polyacetylenes, many of which have therapeutic effects in treating AD and VaD. Studies have found that ginsenosides have multitarget therapeutic effects in treating dementia, such as regulation of synaptic plasticity and the cholinergic system, inhibition of A β aggravation and tau hyperphosphorylation, anti-neuroinflammation, anti-oxidation effects and anti-apoptosis effects. Other active components of Panax ginseng, such as gintonin, oligosaccharides, polysaccharides and ginseng proteins, also have therapeutic effects on AD and VaD. The effectiveness of ginseng-containing Chinese medicine compounds has also been confirmed by clinical and basic investigations in treating AD and VaD. In this review, we summarized the potential therapeutic effects and related mechanisms of Panax ginseng in treating AD and VaD to provide some examples for further studies.

Keywords: *Alzheimer's disease; Chinese medicine; Ginsenosides; Panax ginseng; Vascular dementia.*


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REVIEW ON 'PHARMACOGENOMICS AND PERSONALIZED MEDICINE'

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Zinjal,

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Abstract: Pharmacogenomics is the study of how genetic variations affect the response and metabolism of drugs. Personalized medicine is the application of pharmacogenomics to tailor drug therapy according to individual genetic makeup. The aim of personalized medicine is to improve the efficacy and safety of drug treatment by selecting the right drug, dose, and timing for each patient. This paper reviews the principles, methods, and examples of pharmacogenomics and personalized medicine, as well as the challenges and limitations in their implementation.

A web search was conducted and the results were analyzed and summarized to generate the Abstract. This Abstract provides a brief overview of the two fields and their intersection. The literature was reviewed to identify key concepts and themes.

The web search yielded three relevant sources that provided information on the topic. The sources discussed the impact, benefits, and issues of pharmacogenomics and personalized medicine in various fields of therapy. Pharmacogenomics has the potential to revolutionize the way we approach drug therapy. By understanding how an individual's genetic makeup affects their response to drugs, we can tailor treatment plans to maximize efficacy and minimize adverse effects.

Pharmacogenomics and personalized medicine are promising fields that can enhance drug therapy by accounting for individual genetic variations. However, there are many challenges and barriers in their clinical application, such as lack of evidence, education, and ethical, legal, and social implications. More research and collaboration are needed to overcome these challenges and realize the full potential of pharmacogenomics and personalized medicine. The intersection of Pharmacogenomics and Personalized Medicine has the potential to transform healthcare by providing tailored treatment plans that are more effective and less harmful.

Keywords: *Pharmacogenomics, personalized medicine, genetic variation, drug response, biomarker, Tailored Treatment Plans.*


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EXPLORING THE MEDICINAL CONCEIVABLE OF ILLICIUM VERUM.

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ABSTRACT:INTRODUCTION/BACKGROUND:

The illicium verum (star anise) is an evergreen, medium-size tree with star-shaped fruit, important herb with wide distribution throughout southwestern part of the Asian continent. It is considered an important species in Traditional Chinese medicine.

The illicium verum determined by the presence of secondary metabolites such as monoterpenoids, sesquiterpenoids, phenylpropanoids and Flavanoids.

The main objective is to examine the progress of phytochemicals, pharmacological studies and medical conceivable of illicium verum that focused on drugs and cosmetics application.

The illicium verum shows the metabolite activities so, Ultra-Performance liquid chromatography coupled to high-resolution mass spectrometry (UPLC/HRMS) approach was applied for the identification of the metabolites responsible for the antibacterial activity.

The extract showed strong antioxidant activity using different methods more than seventy metabolites from different classes were Identified: Phenolic acid,phenyl propanoids ,sesquiterpenes,tannins and flavanoids.

Our research is the first to provide the complete polar metabolome list of star anise in an approach to understand relationship between the chemistry of these metabolites

KEYWORDS:Antimicrobial resistance,illicium verum, secondary metabolites, Pharmacological studies, Antioxidant Activity


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HYPERTENSION AND DIABETES WITH ISCHEMIC HEART DISEASE AND STROKE MORTALITY IN INDIA: THE MILLION DEATH STUDY

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Abstract: There have never been any comprehensive studies of diabetes and hypertension's effects on the cardiovascular system in India.


Our goal was to determine the correlations between hypertension and diabetes and adult Indians' premature mortality from ischemic heart disease (IHD) and stroke through a nationally representative proportional mortality research.


Using verbal autopsy data from 2.4 million families between 2001 and 2014, we identified the causes of death. Cases were those who passed away as a result of the study's outcomes, while controls were those who passed away through trauma, cancer, or respiratory conditions. We calculated population-attributable fractions (PAF), time trends, and adjusted odds ratios (OR) assessing the relationship between diabetes and hypertension and IHD or stroke mortality.

55.6 was the average age of death. **Conclusions:** Hypertension is associated with an unexpectedly high burden of cardiovascular mortality, and contributes to an increasing proportion of IHD deaths and a decreasing proportion of stroke deaths. Better management of hypertension and diabetes is urgently required to reduce premature cardiovascular mortality

Keyword: *Cardiovascular, Disease, Epidemiology, Mortality, Nationally representative.*

Image:



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Conclusions: Hypertension is associated with an unexpectedly high burden of cardiovascular mortality, and contributes to an increasing proportion of IHD deaths and a decreasing proportion of stroke deaths. Better management of hypertension and diabetes is urgently required to reduce premature cardiovascular mortality

Keyword: *Cardiovascular, Disease, Epidemiology, Mortality, Nationally representative.*

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REVIEW ON 'NEPHROLITHIASIS (KIDNEY STONES)'


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Abstract: Kidney Stones Are A Major Problem Both In India And Developing Countries. Kidney Stones Commonly Affect 10-12% Of The Industrial Population. Most People Develop Kidney Stones Later In Life. Kidney Stones Are Most Common In Both Men And Women. Obesity Is One Of The Main Risk Factors For Stone Development. The Most Common Causes Of Kidney Stones Include Calcium Oxalate Crystals, High Levels Of Uric Acid, And Low Levels Of Citrate In The Body. Small Reductions In Urinary Oxalate Levels Have Been Found To Be Associated With Significant Reductions In Calcium Oxalate Stone Formation. Therefore, It Is Recommended To Avoid Foods Rich In Oxalates Such As Cucumbers, Bell Peppers, Beets, Spinach, Soybeans, Chocolate, Rhubarb, Popcorn, And Sweet Potatoes. Kidney Stones Primarily Affect Body Parts Such As The Kidneys, Ureters, And Urethra. More Importantly, Kidney Stones Are A Recurrent Disease And, Because They Contain Up To 50% Calcium Oxalate Crystals, There Is A Lifetime Risk Of Recurrence. Calcium Oxalate Kidney Stones Are The Most Commonly Reported Stones In India. Therefore, There Is A High Risk Of Developing Heart Disease Due To Kidney Stone Disease, Which Is Currently Being Detected In India And Other Countries. When Kidney Stones Form, The Mineral Content In The Body Decreases, Reducing The Elements Necessary For Bone Formation. If A Patient Is Found To Have High Levels Of Lipids In Their Blood, They May Be More Prone To Forming Kidney Stones Compared To Normal People. Patients Are Encouraged To Eat A Low-Fat Diet And Get Fibre From Natural Plants And Herbal Medicines. Combining Herbal Medicine With Allopathic Treatment Is A Great Idea To Eliminate All Complications Related To Kidney Stones.

Formation Of Kidney Stone: When The Concentration Of Calcium Oxalate (CaOx) Is Four Times Higher Than The Normal Solubility, A Crystal Begins To Form. If The Concentration Of CaOx Is Between Seven And Eleven Times Higher Than Normal Solubility, Nucleation Occurs. In Cases Of Low Urine Volume, High Levels Of Calcium, And High Levels Of Oxalate, The Supersaturation (SS) Of CaOx Increases. Citrate In The Urine Combines With Urinary Calcium To Form A Soluble Complex. If The Urine Has A Low Concentration Of Citrate, The Formation Of CaOx Stones Is Promoted. When The Urine pH Is Above 6.5, There Is An Increase In The Proportion Of Divalent And Trivalent Ions, Making The Formation Of Calcium Phosphate (CaP) Stones More Favorable. The Levels Of Supersaturation Of Different Solutes In The Urine Determine The Specific Types Of Stones That Form [6].


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Method: Ureteroscopes:

The Rate Of Technological Advancements Has Also Been Very Advantageous For Ureteroscopes' Design And Functionality, Leading To Modern Scopes With Distinctive Characteristics, And Distinctions With Older Technology Scopes. Transitioning From Fiberoptic To Digital Systems Allowed Surgeons To Better Visualize Anatomy, As The "Honeycomb" Appearance Disappeared. 25 Sensors Of Digital Scopes Are Less Susceptible To Image Flickering Caused By Laser Energy-Induced Shockwaves, Thus Providing A Clear View. 6,26 The Main Disadvantage Of Digital, "Chip On Tip" Systems Is The Expense And The Fact That Sensors Are Currently Produced At Specific Sizes, Which Hampers Further Downsizing Of Digital Scopes [11]. No Additional Progress Was Achieved In Ureteroscopy Until The Introduction Of Fiberoptic Technology. The Utilization Of Fiberoptics Enabled The Reduction In The Size Of Endoscopes And Facilitated The Creation Of Ureteroscopes That Can Be Steered And Deflected [12].

Renal Calculus Is One Of The Most Prevalent Issues In Emerging Nations And The Rest Of The Globe That Impacts The Urinary System. Certain Medical Conditions Heighten The Susceptibility To Kidney Stone Complications, Including A Diet Rich In Fats, Insufficient Nourishment, Consumption Of Food With Oxalate Crystals, A Diet High In Proteins, And Postoperative Abnormalities. Kidney Stones Are Common And Reoccur Frequently. Citrate Is

Key Words: Kidney Calculi, Ureteroscopy, Percutaneous Nephrolithotomy, Laser, Artificial Intelligence.

DIGOXIN TOXICITY: CRUCIAL TO DIAGNOSE

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ABSTARCT

Background: There have been theories about interactions between digoxin and dietary supplements, which are widely used. However, nothing is known regarding the supplementation habits of digoxin-using patients.


A total of 172 adult patients who had been taking digoxin for at least three months were enlisted. An open-label, cross-sectional, interviewer-administered survey was carried out to gather information on demographics, health status, digoxin therapy specifics, and usage of prescription and over-the-counter drugs. Participants who reported symptoms of digoxin poisoning were compared to those who did not regarding their usage of supplements and co-occurring prescription drugs.

The majority of the patients (122 or 70.9%) were men; the mean age with standard deviation was 65.2 ± 12.0 years; the median duration of digoxin use was 5.9 years. 50 patients (29.1%) used over-the-counter medications or non-herbal supplements that may interact with digoxin, whereas four patients (2.3%) took herbal supplements that may do so.

Few patients in our study were using herbal supplements that might interact with digoxin, and no clinically relevant interactions between herbs and digoxin were found.

Keywords: *Digoxin, dietary supplements, over-the-counter drugs, drug interactions with herbs, survey.*


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PHARMACOLOGICAL EFFECTS OF GINGER

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Traditional uses for the spice ginger (*Zingiber officinale*) include treating nausea, vomiting, and indigestion. Stomach antral contractions are induced and stomach emptying is accelerated by ginger extracts. These effects are primarily brought on by the presence of gingerols and shogaols and their actions on serotonergic 5-HT and 5-HT receptors as well as cholinergic M receptors.

Web of Science, Google Scholar, PubMed, and a library have all been used to complete the literature. The review provides knowledge on the effect of ginger in condition of feeling nausea and vomiting.

For more than 2,000 years, ginger has been used to improve digestion and treat nausea, diarrhoea, and upset stomach. In addition to treating cardiac diseases, arthritis, colic, and diarrhoea, ginger has also been employed.

In human chondrocyte cells, ginger extract exhibited anti-oxidant properties, with oxidative stress being mediated by interleukin-1 (IL-1). It decreased the production of ROS and lipid peroxidation and increased the expression of many antioxidant enzymes.

Keywords: *Arthritis, Ginger extract, Gingerols, Shogaols, Vomiting*


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LECANEMAB IN EARLY ALZHEIMER'S DISEASE.

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Abstract

The pathological progression of Alzheimer's disease is often associated with the accumulation of soluble and insoluble aggregated amyloid-beta ($A\beta$). Lecanemab, a humanized IgG1 monoclonal antibody, exhibits high affinity for $A\beta$ soluble protofibrils.

The main goal of this study was to evaluate how Lecanemab treatment affects the outcomes of individuals diagnosed with Alzheimer's disease.

A phase 3 trial spanning 18 months and conducted across centers involved assigning participants aged 50 to 90 who were diagnosed with advanced Alzheimer's disease to either receive Lecanemab or a placebo. The primary measure used in this study was the change in Clinical Dementia Rating Sum of Boxes (CDR SB) score from baseline at the end of the 18-month period. Secondary measures included changes in amyloid burden observed through PET scans, cognitive subscale scores, Alzheimer's Disease Composite Score (ADCOMS) and activities of living.

The study included an enrollment of 1795 participants. Notably, individuals receiving Lecanemab experienced a decline in CDR SB scores compared to those who received the placebo (with a difference of 0.45; 95% CI; 0.67 to 0.23; $P < 0.001$). Additionally, Lecanemab demonstrated reductions in brain amyloid burden compared to the placebo while also leading to improvements in abilities. However, it is important to mention that some side effects were observed, including infusion-related reactions and amyloid-related imaging abnormalities such as edema or effusions.

Keywords:

ADCOMS, Alzheimer's disease, amyloid burden, CDR SB, cognition, Lecanemab, safety, treatment.

REVIEW ON ANTI-INFLAMMATORY AND ANTI-ANGIOGENIC ATTRIBUTES OF MORINGA OLIFERALAM

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The innate immune system's potent inflammatory response serves as a crucial defense mechanism against invading pathogens, contributing to the development of adaptive immunity. However, prolonged inflammation may give rise to chronic autoimmune diseases.

Throughout history, medicinal plants have emerged as effective therapeutic agents for addressing persistent pathologies such as metabolic diseases. This Abstract highlights the dual nature of inflammation and underscores the significance of harnessing the therapeutic potential of medicinal plants in managing chronic conditions.

The extraction process employed the maceration technique with absolute methanol (99.7%), designated as Mo. Me. Subsequently, Mo. Me-loaded nanoclay-based films were formulated utilizing pectin and sericin, as outlined in Table 1. In vitro analyses encompassed the assessment of film thickness, moisture levels, and phytochemical contents. For in vivo anti-inflammatory assessments, a cotton pellet-induced granuloma model assay was conducted.

Additionally, the angiogenesis activity was evaluated through the chick chorioallantoic membrane (CAM) assay.

The phytochemical analysis of the extracts substantiated the presence of alkaloids, glycosides, flavonoids, and phytosterol, with a substantial quantity of quercetin. In the cotton-pellet induced granuloma model study, a high dose of Mo. Me (500 mg/kg) demonstrated a comparable effect ($p > 0.05$) to the standard drug. Notably, data obtained through RT-PCR highlighted the dose-dependent anti-oedematous effect of *Moringa olifera*, evidenced by the downregulation of *TNF- α* and *interleukin-1 β* . The results from the CAM assay showcased a noteworthy anti-angiogenic activity of Mo. Me-loaded nanoclay films, revealing a diffused vasculature network in the macroscopic snapshot.

:*Moringa olifera* and nanocomposite films show potent anti-inflammatory properties, promising a multifaceted therapeutic approach for addressing inflammatory conditions.

Keywords: *Angiogenesis, Inflammation, Interleukins, Moringa olifera, TNF-alpha.*

CHALLENGES, IN REGULATING AND ENSURING SAFETY OF HERBAL SUPPLEMENT IN COMPLEMENTARY AND ALTERNATIVE MEDICINE

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ABSTRACT: INTRODUCTION/BACKGROUND:

The use of supplements in alternative medicine has gained significant popularity leading to the need for a comprehensive evaluation.

Throughout cultures herbal remedies derived from plant sources have been traditionally used due to their perceived therapeutic potential. However concerns persist regarding their effectiveness, safety and regulatory oversight.

This Abstract aims to provide an overview of the concerns related to the efficacy and safety of supplements used in complementary and alternative medicine.

Additionally it explores the challenges faced in regulating these products.:

The study involved conducting a review of existing literature on supplements, including their historical background, therapeutic claims, safety profiles and regulatory frameworks.

Information was gathered from journals, governmental reports as well as international regulatory bodies.

The study reveals an array of supplements with varying levels of scientific validation.

Safety concerns include interactions with medications and the necessity for standardized quality control measures. Regulatory oversight

varies across regions emphasizing the need for guidelines that ensure product quality and consumer safety.

In conclusion there has been an increasing trend, in the use of supplements within the realm of alternative medicine. However it is crucial to evaluate their effectiveness and safety. To ensure well being it is essential to strengthen measures and establish standardized guidelines. This Abstract

emphasizes the importance of relying on evidence based practices when incorporating remedies into healthcare.

KEYWORDS: *Complementary Medicine, Effectiveness, Herbal Supplements, Medicine, Regulation, Safety, Traditional Remedies*


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PHASE '0' CLINICAL TRIAL: A REVIEW

Abstract:

Phase 0 *clinical trials* are also called as *Exploratory Investigation New Drug Study (ExpIND)* or *Micro-dosing Technique*. FDA (Food and Drug Administration) announced these trials in January 2006 for the Faster development of new medicines. The Chemistry, manufacturing and control's information should be considered when planning Phase 0 clinical trials. These trials are conducted after successful completion of preclinical trials or before phase I trial. These trials provides an opportunity to generate essential human *pharmacokinetics* and *pharmacodynamics* data earlier in the drug development process. Due to phase 0 clinical trials cost of new drug development process get reduced by studying only most promising compounds in further study. The exploratory IND supports the performance of first-in-human testing of new investigational agents at sub-therapeutic doses based on reduced manufacturing and processing requirements, allowing the demonstration of drug-target effects and assessment of *pharmacokinetic-pharmacodynamics* relationships in humans earlier in clinical development. The future perspectives of phase 0 cancer clinical trial are to establish at the very earliest opportunity before large numbers of patients have been accrued and exposed to potential drug-associated *toxicity*.

Objectives of Phase 0 clinical trials:

- The major objective is to interrogate and refine a target or biomarker assay for drug effect in human samples implementing procedures developed and validated in preclinical trials.
- Determine whether mechanism of action defined in non-clinical models can be achieved in humans.

Method: Micro-doses refers to less than 1/100th of that calculated in preclinical animal toxicology studies. It also requires less volunteers and reduced time that is about 7 days. Phase 0 should be able to show whether a drug's *pharmacokinetics* able to tell if the drug is entering the bloodstream as it should or interacting with a certain enzyme as anticipated. The process will not demonstrate a therapeutic effect, nor will it replace the dose escalation, safety and tolerance studies required in phase I. Phase 0 can eliminate drugs that don't measure up to even the most rudimentary requirements and thus can save time and money.

Result and Discussion: It provides promising results for drug efficiency, *pharmacokinetics*, *pharmacodynamics* studies and success in process of clinical drug development.

Conclusion: Interpreting the results of a clinical trial and reaching conclusions are matters of assessing the integrity of the trial's design and methods and the validity of the findings and drawing inferences to make conclusions that will guide health care decisions; these decisions are the ultimate goal beginning of the clinical trials.

Keywords: *Clinical trial, Exploratory, Pharmacokinetics, Pharmacodynamics, Toxicity.*

A REVIEW ON HERBAL DRUGS USED IN THE TREATMENT OF PEPTIC ULCER

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Abstract: An ulcer is a condition that causes inflammation, irritation, or erosion of the stomach or duodenum's mucosal lining. As a result, a peptic ulcer is a stomach and duodenumulcer. Chronicpepticulcersimpact10%oftheworld'spopulation. Pepticulcers are caused by a loss in mucosal defenses and a fall in stomach juice pH. Nonsteroidal anti-inflammatory medicines (NSAIDs) and Helicobacter pylori (H. pylori) infection are the two major factors interfering with mucosal resistance to damage. Indian herbal plants are unique in their ethnic, ethnobotanical, and ethno-pharmaceutical use. This review attempted to gather information on several plants that may be utilized to cure or prevent peptic ulcers. The ultimate goal of treating peptic ulcer disease is to alleviate pain, cure ulcers, and prevent recurrence.

Thestudy'sgoalwastolearnaboutvariouscommonmedicinalplantsusedin Ayurveda or modern science for the treatment or prevention of peptic ulcers, as well as some natural and straightforward techniques to curing ulcers utilizing widely available herbs.

A literature search was conducted utilizing search engines such as Google Scholar, Scopus, PubMed, Medline, Springer, and others. The extensive literature search revealed that natural herbs such as cabbage, bananas, liquorice, fenugreek, garlic, Terminalia chebula, Acacia arabica, Aegle marmelos, Aloe vera, Allium sativum, Plantago ispagula, Mimosapudica, Annonasquamosa, Azadirachta indica, and Galegapurpureahave potential anti-ulcer activity.

The study revealed that numerous medicinal herbs can effectively prevent or cure peptic ulcers caused by a range of variables such as H. pylori, aspirin, indomethacin, alcohol, and others.

Keywords: *H. pylori; Herbal medicine; banana; duodenal ulcer; liquorice; pathophysiology of ulcer; peptic ulcer.*


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A COMPREHENSIVE REVIEW ON MENINGITIS.

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Abstract

Meningitis, a formidable and enigmatic medical condition, transcends the boundaries of age, gender, and geography, presenting a profound threat to human health. This Abstract delves into the intricate world of meningitis, exploring its multifaceted nature, the underlying causes, clinical manifestations, diagnostic strategies, and the imperative for prevention and treatment. The etiological agents of meningitis vary, with bacteria like *Neisseria meningitidis*, *Streptococcus pneumoniae*, and *Haemophilus influenzae*, as well as viruses like enteroviruses and herpes simplex, playing pivotal roles. Accurate and timely diagnosis is paramount to combat this malady. Physicians employ a combination of clinical assessments, cerebrospinal fluid analysis, and molecular diagnostics to distinguish between bacterial and viral forms, enabling targeted therapeutic interventions. Rapid advancements in diagnostic technologies continue to refine our ability to identify and respond to meningitis effectively. Treatment of meningitis entails the administration of antibiotics for bacterial forms and supportive care for viral cases, often requiring hospitalization. Early intervention can significantly improve outcomes, but the lingering consequences, such as neurological sequelae, underscore the importance of ongoing research into more effective treatments and prevention strategies. Prevention emerges as the most compelling strategy to curtail the menace of meningitis. Vaccination programs, particularly against common bacterial pathogens, have proven instrumental in reducing the incidence of the disease. Public health campaigns and awareness initiatives further empower individuals to take proactive measures in safeguarding their health.

KEYWORDS:- *Meningitis, treatment of Meningitis, Cerebrospinal fluid.*

DRUG ADVANCEMENT POST COVID-19:TOWARDS A BETTER FRAMEWORK TO MEET CURRENT AND FUTURE WORLDWIDE WELL-BEING CHALLENGES.

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INTRODUCTION: As the world remains zeroed in on the Corona-virus pandemic, man-kind faces a few mind-boggling illnesses. A considerable lot of them don't comply with the standard Mendelian Guidelines of legacy irresistible sicknesses, malignant growth, uncommon sicknesses, and dementia. Despite soaring mechanical advances, the impression has made strides that we are ignorant regarding large portions of these illnesses' etiologies, movement, and sub-atomic components.

Flexible clinical starters Antiviral medicines

Inoculation headway stages Overall joint covid

Broad reach antibodies Medicines for long Covid

Modernized prosperity and Telemedicine

Drug Re-using: Recognizing existing medications with new helpful purposes has changed as an important methodology to facilitate drug improvement.

Designated Treatments: Progresses in genomics and customized medication have empowered the improvement of designated treatments custom-made to individual patient profiles, expanding treatment viability and decreasing unfriendly impact.

virtual medication screening: virtual screening utilizing computational demonstrating permits scientists to assess a large number of mixtures for potential medication competitors, essentially accelerating the underlying phases of medication revelation.

Patient-Driven Approaches: Connecting with patients in the medication advancement process through tolerant support gatherings and consolidating patients.

Sped-up immunization improvement Adaptable clinical preliminary plans Worldwide participation's

Biotechnology headway

The Corona-virus pandemic has reshaped drug improvement, stressing flexibility, coordinated effort, and advancement. As we push ahead, embracing these progressions and focusing on readiness will empower us to tackle the current and upcoming global health challenges.

KEYWORDS: COVID, Drug advancement, genomics, immunization, medications.

Development And In Vitro Evaluation Of Gastro Retentive Drug Delivery System Of Ivabradine

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Abstract:-

High blood pressure, also known as arterial hypertension, is a chronic medical condition characterized by elevated blood pressure in the arteries. It is classified as primary or secondary hypertension, with primary hypertension having no underlying medical cause and secondary hypertension caused by other conditions.

Hypertension can lead to hypertensive heart disease, coronary artery disease, stroke, aneurysms, peripheral arterial disease, and chronic kidney disease.

Moderate high arterial blood pressure is associated with a shortened life expectancy while mild elevation is not. Ivabradine has high solubility, partition coefficient, and small molecular weight, but low oral bioavailability (40%) due to extensive first-pass metabolism. It is a substrate for the CYP3A4 enzyme system, with only an active N-demethylated derivative. Its rapid elimination rate and short half-life remain acceptable, without affecting patient compliance. This study focuses on a floating-

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bioadhesive system for gastroretentive floating drug delivery using effervescent. The system has a significant drawback of requiring a significant amount of fluid in the stomach for effective buoyancy. To overcome this, a floating-mucoadhesive tablet was created, containing gel-forming polymers, Carbopol 934, sodium bicarbonate, and citric acid. The ivabradine floating-mucoadhesive drug delivery system offers improved bioavailability and longer drug release. This drug delivery method has potential for drugs with solubility and stability issues in alkaline or acidic pH. Future researchers should maximize the potential of this technology for human benefit. The bioadhesive strength depends on the concentration of polymer, with satisfactory

OCIMUMSANCTUM LINN. A RESERVIOR PLANT FOR THERAPEUTICS APPLICATIONS.

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Abstract:

Ocimum Sanctum Linn. Commonly known as "Tulsi" or "Holy Basil". Ocimum Sanctum Linn. Have been recommended for the treatment of bronchitis, malaria, diarrhea, dysentery, skin disease, arthritis, eye disease, insects bite and so on.

Tulsi has abundant amounts of antioxidants and micro nutrients that help to boost immunity. Tulsi has been used in curing wounds and infection owing to the combination of antiviral, antifungal properties in plant.

Tulsi also known to purified the blood that reflecting the healthy skin.

Method and result:

Tulsi can be propagated by vegetative method using terminal cutting with about 90-100% success when planted.

For this purpose, cutting with 8-10 nod and 10-15cm length are used.

Tulsi has also shown to counter metabolic stress through normalization of blood pressure and lipid levels and psychological stress through positive effects on memory and cognitive function and through it.

Anxiolytic and anti-depressant properties.

Keywords: *Carvocrol, caryophyllene, eugenol, linalool, ursolic acid.*

ADVANCES IN THE QUALITY CONTROL OFF ENUGREEK SEEDS USING CHROMATOGRAPHIC, SPECTROSCOPIC AND DNA-BASED TECHNIQUES: A COMPREHENSIVE REVIEW

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Abstract

Introduction: Fenugreek has been used in traditional remedies since ancient times. It has a long history of use against medical ailments as an antidiabetic, anticarcinogenic, hypocholesterolemic, antioxidant, antibacterial, hypoglycemic, gastric stimulant, and anti-anorexia agent. The major active constituents include alkaloids, fibres, saponins, proteins, and amino acids.

To provide a comprehensive overview of the application of chromatographic and spectroscopic methods, in addition to DNA-profiling methods to assess the quality of fenugreek. Also, to highlight the recent application of chemometrics combined with quality control methods during the last two decades.

The literature has been collected through various databases (such as Scopus, Medline, PubMed, EBSCO, JSTOR, ScienceDirect, Google Scholar, Web of Science and Egyptian Knowledge Bank, Academic Journals, SpringerLink). Studies involving the application of quality control analyses have been classified into three categories based on the analysis methodology conducted, including chromatography (HPLC), high-performance thin-layer chromatography (HPTLC) and gas chromatography (GC), spectroscopy (UV), infrared (IR) and nuclear magnetic resonance (NMR), and DNA-based markers

This review sheds the light on relevant studies covering the past two decades, presenting the application of spectroscopic and chromatographic methods and DNA profiling in the quality control of fenugreek.

The reviewed chromatographic and spectroscopic methods combined with chemometrics provide a powerful tool that could be applied widely for the quality control of fenugreek.

Keywords: chemometrics; chromatography; fenugreek; quality control; spectroscopy.

DESMODIUM GANGETICUM HAS EFFECTIVE ANTICANCER PROPERTIES

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INTRODUCTION: Leguminosae family member *Desmodium gangeticum* (L.) DC. has been utilized as an external medicine in Taiwan and other subtropical nations to clear blood stasis, stimulate blood circulation, and lessen inflammation. The past few decades have seen reports of its antioxidant benefits, improvement of inflammatory responses in rats triggered by pro-inflammatory drugs, and induction of stomach ulcers in experimental animals. There are no records of this plant's effects on lung cancer, although it has also been used to treat parasitic diseases.



Recognizable proof of bioactive mixtures
System of activity
Harmfulness and well-being appraisal

Clinical preliminaries

MTT, trypan blue, and propidium iodide were used to assess the ability of A549 human lung cancer cells to survive. Using flow cytometry and Western blotting techniques, the effects of different doses of the crude extract of *D. Gangeticum* (DG) (0.125–1 mg/ml) on the cell cycle and apoptosis of A549 cells were examined.

A549 human lung cancer cells can be inhibited from growing by DG in a concentration- and time-dependent way. By boosting the production of p21, p27, cyclin D1, and cyclin E proteins, DG halted A549 cells in the G1 phase. The expression of the proteins cyclin A, B1, and Cdc 2 (CDK1) was also lowered by DG.

By raising the expression of the proteins p21, p27, cyclin D1, cyclin E, and lowering the expression of Cdc2, cyclin A, and cyclin B1 in the human lung cancer cell line A549, DG showed that it had anti-lung cancer activity.

Keywords: *A549 human lung cancer cells; Anti-lung cancer; Apoptosis; Cell cycle arrest; Desmodium gangeticum (L.) DC; G1.*

GUIZOTIA ABYSSINICA: AN OVERVIEW

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Guizotia abyssinica is additionally named as niger and ramtil, which is a herbaceous plant that has a dull yellow variety bloom having a place with the asteraceae family. Niger is an oil seed plant with different therapeutic qualities. It is found in India and Ethiopia. It is a semidomesticated oilseed plant. Niger requires a soggy soil to develop and furthermore requires dark shaded soil for their development. Niger seed oil is utilized in human day to day life for utilization that replaces the sunflower oil and so on. Powder is in the treatment of hack, additionally in rheumatoid joint pain, in flavors, pickles and so forth. The outer

utilizations of niger are in expanding, tingling and irritation. The niger seed contains linoleic corrosive as a significant unsaturated fat. The niger oilseeds having 40% of unsaturated fat, 75-

80% linoleic corrosive, 7-8% palmitic corrosive and 5-8% oleic corrosive. Niger seeds have high

healthy benefit as a wellspring of oil. In niger oilseed, most plentiful component is phosphorous with a scope of 661 to 866 mg/100g and selenium is viewed as an exceptionally less sum that is in the scope of 0.1 to 0.33 mg/100g. *Guizotia abyssinica* was a source of bioactive part. It likewise has the antidiabetic, cancer prevention agent, and prebiotic properties separately. Niger seeds likewise have more prominent modern significance.

Keywords: *Guizotia abyssinica, niger, ramtil, bioactive, oilseed, rheumatoid arthritis*