

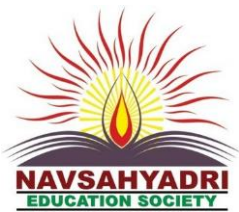


3.3.1

**Number of Research Paper
Published per Teacher in the
Journal notified by UGC
care list during the last five
years**

**3.3 Research Publication and Awards****3.3.1 Number of research papers published per teacher in the Journals notified on UGC care list during the last five years****INDEX**

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1.	Link landing to the Research Paper
2.	Link landing to the Journal's Website
3.	URL of the Content Page for Print Journal
4.	Screenshots of Research Articles clearly showing the Title of the article, Affiliation, Name of the Journal, Year and Authors name



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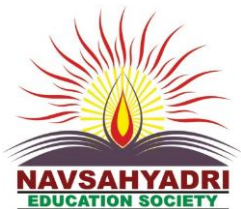
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1. Link landing to the Research Paper

3.3 Research Publication and Awards

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

Sr. No.	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 article / paper / abstract of the article	Is it listed in UGC Care list
1	Optimization of Spray drying process for Anthocephelus Cadamba (Roxb.) leaves aquoues extract by using malto dextrin as spray dryingg agent nad evaluation of spray dried extract by HPTLC method	Dr. Sachin Kumar Dnyaneshwar Gunjal, Dr. Gauri Dhondibhau Ghangale, Dr. Vivek Subhash Tarate, Ms. Poonam Dashrath Dighe, Dr. Nitin G Sutar	Pharmacy	Neuroqa ntology	2022	1303-5150	https://tinyurl.com/yjtxr2zk	Scopus
2	Quantitative Analysis of bulk samle Ibuprofen by Using Hydrotropic Solubilization Techniques	Dr. Preeti Mehta	Pharmacy	IJBPAS	2022	2277-4998	https://tinyurl.com/wamc7wyb	Web of Science
3	A Study on Drug-Induced Disease (DID'S) and Teratogenicity	Dr. Vivek Subhash Tarate, Miss. Poonam N Chougule, Dr. Shubhangi Bhaskarrao Sutar Mr. Prakash Ishwar Nargatti Mr. Sunl Sudhir Patil Dr. Ravindra B. kumbhar Mr. Trishul Vilas Chavan Mr. Swapnil Shivaji Harale Nitin G Sutar Rishikesh K jagtap	Pharmacy	Jundishapur Journal of Microbiology	2022	2008-4161	https://tinyurl.com/39ntvzaj	Scopus
4	Seasonal environmental variations on physicochemical properties of Justicia adhatoda- An Indian Medicinal Plant	Gautam Sadashiv Palshikhar Vivek Subhash Tarate Kishor Vasant Otari P. Shanmuga Pandiyan	Pharmacy	Neuroqa ntology	2022	1303-5150	https://tinyurl.com/u7shjr83	Scopus
5	In Silico molecular	Gaurav Kumar	Pharmacy	Current	2023	1927-	https://tinyurl.com/wrkjaasw	Scopus



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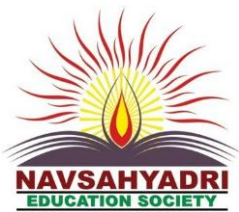
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	docking study and protective effect of Piper attenuatum on aspirin induced gastric ulcer in rats	Soni Shikha Sharma Neha Dangi		Chemistry Letters		7296		
6	Formulation and evaluation of Nanoparticles	Dr. Vivek S. Tarate Sachin Shivaji Sawant Mr. Sandeep Prabhu Gadhwe Mr. Kirankumar Dhawale	Pharmacy	Shodhasa mhita	2022	2277-7067	https://drive.google.com/file/d/1XxEpa6fOKClhe_uyWlv3jJEJZ4SFzSm-/view?usp=sharing	UGC
7	Improvement of Cognitive dysfunction by a novel phosphodiesterase type 5 inhibitor, Tadalafil	Kishor Vasant Otari Patil Chandra shekhar Devidas Upasani	Pharmacy	Fundamental & Clinical Pharmacology	2023	3620-3370	https://onlinelibrary.wiley.com/doi/10.1111/fcp.12840	Scopus
8	Seasonal environment variations on physicochemical properties of Syzygium Cumini L	Gautam Sadashiv Palshikhar Vivek Subhash Tarate Kishor Vasant Otari P. Shanmuga Pandiyan	Pharmacy	Neuroquatology	2022	1303-5150	https://tinyurl.com/4smu3pf9	Scopus



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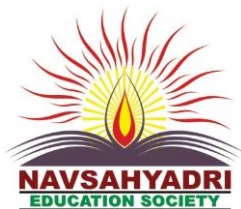
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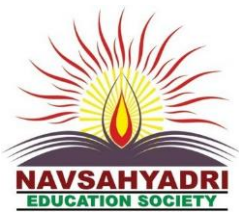
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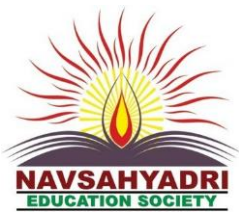
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3.3.1

3. URL of the Content Page for Print Journal

<https://drive.google.com/file/d/1XxEpa6fOKClheuyWIv3jJEJZ4SFzSm-/view>



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4. Screenshots of Research Articles clearly showing the Title of the article, Affiliation, Name of the Journal, Year and Authors name.



Optimization of spray drying process for Anthocephalus Cadamba (Roxb.) leaves aqueous extract by using maltodextrin as spray drying agent and evaluation of spray dried extract by HPTLC method

Dr. Sachinkumar Dnyaneshwar Gunjal^{1*}, Dr. Gauri Dhondibhau Ghangale¹, Dr. Vivek Subhash Tarate², Ms. Poonam Dashrath Dighe¹, Dr. Nitin G Sutar³

Abstract

The objective of this work was to optimize spray drying process parameters for Anthocephalus Cadamba leaves aqueous extract. Hygroscopicity of powder obtained and stickiness of extract are major problems associated with spray drying process. In present work, maltodextrin was used as spray drying agent. The inlet air temperatures, Feed flow rate and maltodextrin concentrations were treated as independent variables. Moisture content, % yield, bulk density, hygroscopicity, time required for solubilization were determined to evaluate the effects of various spray drying processing parameters on cadamba leaves aqueous extract powder properties. Increases in inlet air temperature caused an increase in % yield. Increases in inlet air temperature also caused decrease in moisture content, bulk density and hygroscopicity of the powder obtained. Increases in maltodextrin concentration caused an increase in yield and a decrease in moisture content, bulk density, hygroscopicity, time required for solubilization. HPTLC method was used for quantitative estimation of one of phyto-constituent i.e. rutin present in optimized spray dried Anthocephalus cadamba extract. This indicated presence of rutin in spray dried powder.

KeyWords: Anthocephalus Cadamba, Optimization, Spray drying, Aqueous extract, Maltodextrin

DOI Number: 10.14704/NQ.2022.20.15.NQ88301

NeuroQuantology2022;20(15):3086-3099

Introduction

Anthocephalus Cadamba (Roxb.) (Family: Rubiaceae) is known as "Kadamba" in Sanskrit in India 1. It is traditional ayurvedic plant widely used in the treatment of various ailments like diabetes mellitus, cough, vomiting, wounds, leprosy, ulcers, stomatitis, dyspepsia, diarrhoea, fever, inflammation, cancer and also used for its diuretic, anthelmintic, hepatoprotective and antimicrobial activity 1,2,3,4,5. The major constituents of the plant are triterpenes, triterpenoid glycosides, flavanoids,

saponins, indole alkaloids; cadambine, cadamine, isocadambine, isodihydrocadambine 1, 2.

A decoction of the leaves was consumed for the treatment of ulcers and wounds since long, and it is prescribed for the treatment of elephantiasis in Bangladesh since ancient times. The Charaka Samhita describes the use of leaves for curing pimples and wounds. The leaf juice is also used for relieving burning sensation of palms and feet. The extract of the leaf is used as gargle for throat infection due to its astringent properties. The Sushruta

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**QUANTITATIVE ANALYSIS OF BULK SAMPLE OF IBUPROFEN BY
USING HYDROTROPIC SOLUBILIZATION TECHNIQUE**

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*Corresponding Author: Dr. Preeti Mehta; E Mail: preetigandhi2007@gmail.comReceived 18th Jan. 2022; Revised 25th March 2022; Accepted 18th April 2022; Available online 1st Oct. 2022<https://doi.org/10.31032/IJBPAAS/2022/11.10.6518>**ABSTRACT**

Numerous drugs available in the market are poorly water soluble. Majority of the failures in new drug development are because of the poor aqueous solubility of the drug. The present study illustrates the application of hydrotropic solubilization technique to increase the solubility of poorly water-soluble non-steroidal antiinflammatory drug, ibuprofen. Sodium salicylate (2M) and sodium acetate (2M) solutions were employed as hydrotropic solubilizing agents to solubilize the ibuprofen to facilitate its titrimetric analysis, excluding the use of organic solvent. Solubility study exhibited enhancement of solubility of a drug in 2M sodium salicylate and sodium acetate solutions as compared to solubility in water. The drug was analyzed successfully. The results of analysis obtained by employing the proposed method involving the use of hydrotropic agents were found to be very close to the results of the standard Indian Pharmacopoeial method. The proposed method was validated statistically which proved the accuracy, precision, and reproducibility of the method.

Keywords: Hydrotrophy, Ibuprofen, Sodium salicylate, Sodium acetate, Titrimetric analysis**INTRODUCTION**

Most of the newly developed chemical entities or drug molecules are lipophilic in nature and one of the most difficult

problems of these drugs is their poor aqueous solubility. Aqueous solubility of drugs is the most important parameter

A Study on Drug-Induced Diseases (DIDs) and Teratogenicity

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Seasonal environmental variations on physicochemical properties of *Justicia adhatoda*- An Indian Medicinal Plant.

Gautam Sadashiv Palshikar^{1*}, Vivek Subhash Tarate², Kishor Vasant Otari³, P. Shanmuga Pandiyan⁴

Abstract

Plants live on a planet with days and seasons, and that affects their phytoconstituents. Challenge is, availability of active principles in medicinal plants change by seasonal fluctuations, so their dose pattern for therapeutic efficacy also gets influenced. Seasonal impact show changes in important constituents like polyphenol, flavonoids, glycosides, alkaloids, essential oil etc. Late summer is the best collection time for essential oil component. Winter and rainy are best season for other secondary metabolites. The selected plant i.e. *Justicia adhatoda*, belongs to alkaloidal antidiabetic category. It was evaluated for pharmacognostic study which includes macroscopic and microscopic evaluation, determination of physicochemical parameters in a systematic way. HPTLC fingerprinting for vasicine was done. Study was performed for plant material with three different seasons and best results were analysed. It showed correct taxonomy with specific morphological, microscopical and physico-chemical parameters which is helpful for the standardization of drugs. Extracts showed presence of alkaloids, terpenes, flavonoids, steroids, phenolics, saponin and carbohydrate. HPTLC fingerprinting confirmed the presence of vasicine in the plant extracts. Seasonal variations occur in plant constituent shows best collection period. Current research aims to focus on best possible season for the harvesting of some pharmaceutically important plant materials.

2284

Key Words: Secondary metabolites, Herbal medicines, alkaloids, antidiabetic, seasonal variations

DOI Number: 10.14704/nq.2022.20.8.NQ44249

NeuroQuantology 2022; 20(8):2284-2290

Introduction

Justicia adhatoda L. an Indian medicinal plants have been used in traditional treatments for numerous human diseases for thousands of years and they continue to be an important therapeutic aid for alleviating the ailments of human kind. In India, it is estimated that 80% of population depends on plants to therapy themselves, of those about 60% populace use medicinal plants habitually to battle certain ailments and almost 40% human use such plants in pharmaceutical industries¹. The World Health Organization (WHO) has outlined herbal medicine as culminated labelled medicinal products that incorporate lively ingredients as aerial or underground accessories of plants. Of the 2,50,000 higher plant species on earth, more than 80000

species are reported to have at least some medicinal value². Since ages, humans have relied on nature for their basic needs for the production of foodstuff, shelters, clothing, means of transportation, fertilizers, flavors, and fragrances, and medicines. Plants have formed the basis of sophisticated traditional systems of medicine that have been in existence for thousands of years and continue to provide humankind with new remedies³. The history of herbal medication is equally old as human history. Most of these plant-derived drugs were originally identified through the subject of traditional remedies and folk knowledge of indigenous people and some of these could not be substituted despite the tremendous progress in synthetic chemistry.

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In silico molecular docking study and Protective effect of *Piper attenuatum* on aspirin induced gastric ulcer in rats

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CHRONICLE

Article history:

Received December 25, 2022

Received in revised form

January 28, 2023

Accepted May 12, 2023

Available online

May 12, 2023

Keywords:

Anti-ulcer activity

Aspirin

Ranitidine

Piper attenuatum leaves

Molecular docking

Peptic ulcer

ABSTRACT

Steroid and painkiller abuse induced peptic ulcer disease, which causes abdominal pain, fullness, heartburn, and nausea. Medicinal plants have treated ulcers for centuries. We used *Piper attenuatum* ethanolic plant extracts for aspirin to induce ulcers in Wistar rats to test the leaf ethanolic extract's antiulcer properties. The control group is normal saline, the standard group is ranitidine (20 mg/kg), and the extract-treated groups are 100 mg/kg and 200 mg/kg ethanolic plant extracts. Ulcer Score, gastric juice volume, free and total acidity, ulcer index, ulcer protection, and pH were measured. The ulcer score was determined via rat stomach biopsies. Plant ethanolic extracts are gastroprotective. Only pH increased compared to the control group. *Piper attenuatum* ethanolic extract is the most gastroprotective at 200 mg/kg. Extracts were phytochemically and analytically assessed. Phytochemical screening demonstrates that plant extracts contain alkaloids, amides, glucose, proteins, glycosides, steroids, flavonoids, etc. This research suggests that phytoconstituents may have anti-ulcer potential, although structural elucidation of bioactive chemicals is needed. Molecular docking showed better binding affinity versus the 3D structure of pig gastric H⁺/K⁺ ATPase isoforms phytoconstituents Cephadrione A, Cephadrione B, Guineensine, Norcephadrione B, and Piperlonguminine. With these significant results, it may be a drug in the future.

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1. Introduction

Peptic ulcer is globally accepted chronic disease which affects millions of peoples worldwide having higher rate of morbidity and mortality.¹ Peptic ulcer is composed of both gastric and duodenal ulcer² which is the wound in mucosa of gastrointestinal tract that typically spread throughout the muscularis mucosa of stomach.³ According to the past study on peptic ulcer it was found that this disease is found in almost 10% of total population.² Peptic ulcer disease is commonly found in those peoples whose hydrochloric acid, and bicarbonate, prostaglandin, nitric oxide and growth factor become imbalanced respectively⁴. Despite these many other factors are also causes ulcer like long term use of steroidal and non-steroidal anti-inflammatory drugs, intake of excessive alcohol, bacterial infection.⁵ Increase gastric and pepsin secretion, decrease prostaglandin synthesis, gastric cell proliferation, gastric blood flow and mortality impart in ulcer pathogenesis. Aspirin and other non-steroidal anti-inflammatory drugs are used to treat inflammatory and associated disorders like arthritis and gout.⁶ Proton pump (H⁺/K⁺ATPase) located in the stomach is the key factor which makes acidify the stomach content and are responsible for acid production. Inhibition of proton pump plays a major role in management of gastrointestinal disorders like ulcer, dyspepsia and gastroesophageal reflux disease.⁷ In market there are many synthetic compounds which are used to treat gastrointestinal disorder including ulcer; they commonly include proton pump inhibitors, histamine (H₂) blockers, anticholinergics, prostaglandin analogue and antacids.⁸ Medicinal plants and herbal products are used by peoples from all over the world from ancient time to alleviate many diseases including ulcer. These herbals are easily available, affordable, and have minimum adverse effects so these products are used by nearly 80% of peoples in South Africa.⁹ Piper

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FORMULATION AND EVALUATION OF NANOPARTICLES

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Abstract

Nanotechnology has evolved into an important research field in a variety of fields, including medicinal chemistry. According to reports, the size, orientation, and physical properties of nanoparticles can alter the performance of any material. One of the most innovative fields of research in pharmaceutical sciences is the development of new delivery systems for controlled drug release. Nanoparticles that are specifically designed to release the drug near target sites. Nanoparticles are the most basic type of structure, with sizes in the nanometer range. A nanoparticle is defined as any collection of atoms bonded together with a structural radius of 100 nm or less. Because of their good solubility, small size, and superior penetrability, nanoparticles are now widely used in a variety of dosage forms. Emulsion-Solvent Evaporation Method, Double Emulsion and Evaporation Method, Salting Out Method, Emulsions Diffusion Method, Solvent Displacement/Precipitation Method, Polymerization Method, and Coacervation or Ionic Gelation Method can all be used to make nanoparticles. Cell specific, internalisation, vaccine delivery, and gene delivery are all applications of nanoparticles in micro wiring. Nanoparticles are used in medicine for a variety of purposes, including cancer treatment and orthopaedic implants. Because of their high solubility and rapid penetration, nanoparticles are now used in almost every formulation.

Keyword: Nano, Nanoparticle, NP, Nanotechnology, Nanomaterials

Introduction

Nanotechnology is being developed at multiple levels, including materials, systems, and devices. Nanomaterials are currently the most innovative level in commercial applications and scientific information. A particle is a minor object that acts as a complete unit in terms of its properties and transport in nanotechnology. It is classified as fine particle or ultrafine particle based on its size. It is classified as fine particle or ultrafine particle based on its size. Fine particles have diameters ranging from 100 to 2500 nanometers, while ultrafine

Improvement of cognitive dysfunction by a novel phosphodiesterase type 5 inhibitor, Tadalafil

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Funding information

The authors declare that the research was conducted in the absence of any commercial or financial relationships and was self-funded.

Abstract

There is substantial evidence for the modulatory role of cyclic guanosine monophosphate (cGMP)-specific phosphodiesterases (PDEs) in memory and synaptic plasticity, and an increase in intracellular cGMP facilitates these processes. The present study was aimed at the neuropharmacological investigations of tadalafil (TAD 5, 10, and 20 mg/kg, p.o.) and further involvement of nitric oxide (NO)-cGMP in its effects. The effects of tadalafil and its combination with N^G-nitro-L-arginine methyl ester (L-NAME) were investigated in scopolamine- and diabetes-induced cognitive dysfunction using elevated plus maze (EPM) and object recognition (ORT) tests. The results of EPM revealed that the scopolamine- and diabetes-induced learning and memory deficit was dose dependently attenuated after administration of TAD (TAD 10 and 20 mg/kg, p.o.) in both paradigms studied. Administration of L-NAME (20 mg/kg) aggravated scopolamine- and diabetes-induced learning and memory deficit. Co-administration of L-NAME (20 mg/kg) after TAD (20 mg/kg) produced significant increase in cognitive performance as compared to scopolamine- and diabetic- control group. This showed that L-NAME (20 mg/kg) aggravated scopolamine- and diabetes-induced learning and memory deficit was significantly reversed by TAD (20 mg/kg). The results of the present study revealed that tadalafil by inhibiting PDE5 possibly elevated the cGMP level that through a diversity of its substrates produced neuropharmacological effects in cognitive dysfunction.

KEYWORDS

cognition, learning, memory, nitric oxide, phosphodiesterase, tadalafil



Seasonal Environmental variations on physicochemical properties of *Syzygium Cumini* L.

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Abstract-

Plants live on a planet with days and seasons, and that affects their phytoconstituents. Traditional uses of Indian raw materials of plant, animal and mineral origin have specific interest to the rural areas. The selected plant i.e. *Syzygium cumini* L., belongs to alkaloidal antidiabetic category. Plant was evaluated for pharmacognostic study which includes macroscopic and microscopic evaluation, determination of physicochemical parameters in a systematic way. HPTLC fingerprinting for stigmaterol was done. Study was performed for plant material with different months, time and places and best results were analyzed. It showed correct taxonomy with specific morphological, microscopical and physico-chemical parameters which is helpful for the standardization of drugs. Extracts showed presence of alkaloids, terpenes, flavonoids, steroids, phenolics, saponin and carbohydrate. HPTLC fingerprinting confirmed the presence of stigmaterol in the plant extracts results are significantly variable at sample collected in Jun - Sept. (rainy season) at morning time with high altitude place. Seasonal variations occur in plant constituent shows best collection period. This will enable India to protect Indian Traditional Knowledge at the global level more effectively. Current research aims to focus on best possible season for the harvesting of some pharmaceutically important plant materials.

Keywords: Secondary metabolites, Herbal medicines, Alkaloids, Antidiabetic, Seasonal variations.

DOI Number: 10.14704/nq.2022.20.7.NQ33328

NeuroQuantology 2022; 20(7):2539-2547

1. Introduction-

In India, it is estimated that 80% of population depends on plants to therapy themselves, of those about 60% populace use medicinal plants habitually to battle certain ailments and almost 40% human use such plants in pharmaceutical industries Hiren BS et al. (2013). The World Health Organization (WHO) has outlined herbal medicine as culminated labelled medicinal products that incorporate lively

ingredients as aerial or underground accessories of plants. Of the 2,50,000 higher plant species on earth, more than 80000 species are reported to have at least some medicinal value (Marinelli J 2005). Since ages, humans have relied on nature for their basic needs for the production of foodstuff, shelters, clothing, means of transportation, fertilizers, flavors, and fragrances, and medicines. Plants have formed the basis of sophisticated traditional systems of medicine that

