3.3.1 Number of research papers per teachers in the Journals notified on UGC / SCOPUS / WEB OF SCIENCE website during the Year 2018-19

ISSN 0974-3618 (Print)
0974-360X (Online)

www.rjptonline.org

RJPT

RESEARCH ARTICLE

Design and *In-vitro* Evaluation of Cefuroxime axetil floating Microbeads for Treatment of acute Bacterial caused Chronic Bronchitis

Harekrishna Roy[1*], S Balaiah[2], Vinay Kumar T[2]

[1]Department of Pharmaceutics, Nirmala College of Pharmacy, Atmakur, Mangalagiri, Guntur (Dist)-522503, Andhra Pradesh, India

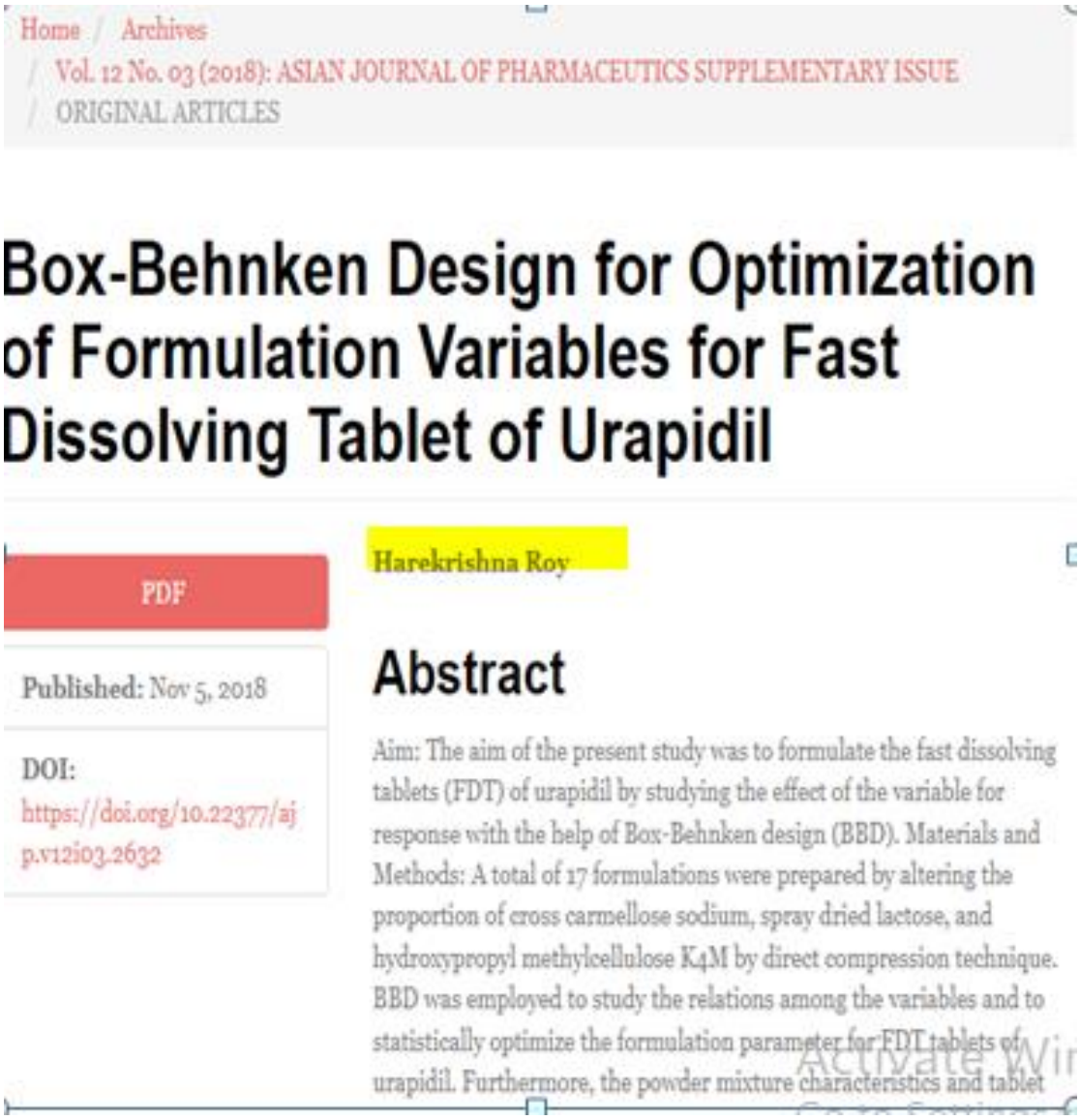
[2]Department of Pharmacology and Pharmacy Practice, Nirmala College of Pharmacy, Atmakur, Mangalagiri, Guntur (Dist)-522503, Andhra Pradesh, India

*Corresponding Author E-mail: **hareroy@gmail.com**

ABSTRACT:

Aim: The point of the this work is to get ready floating microbeads of cefuroxime axetil as model medication to accomplish an expanded maintenance in upper GIT which brings about upgraded ingestion, in this manner enhances bioavailability and dodging various dosing for interminable bronchitis. **Methods:** In the present examination microbeads were set up by particle gelation technique utilizing polymers like sodium alginate, Hydroxy propyl methyl cellulose (HPMC K4M, 100M), citrus extract, gas shaping specialist like sodium bicarbonate. Calcium chloride and Barium chloride arranged as gas curing operators. Arranged microbeads were assessed for Micromeritic property, molecule size and morphology, in-vitro buoyancy study, drug loading and encapsulation efficiency, in-vitro medicate discharge dynamic examinations. **Results:** The microbeads exhibit free-flowing and good-packing properties and have irregular surface with pores which is confirmed by scanning electron microscope. The mean particle sizes as well as the drug content of the floating micro beads were found to be increased by increasing the amount of sodium bicarbonate concentration. The prepared microbeads exhibited prolonged drug release for 12 hrs and remained floatened up to 8 hrs. Barium chloride connected microbeads demonstrated better drug release of 99.48 rate and drug content of 99.39 rates when contrasted with

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P



Home / Archives
/ Vol. 12 No. 03 (2018): ASIAN JOURNAL OF PHARMACEUTICS SUPPLEMENTARY ISSUE
/ ORIGINAL ARTICLES

Box-Behnken Design for Optimization of Formulation Variables for Fast Dissolving Tablet of Urapidil

PDF

Published: Nov 5, 2018

DOI: https://doi.org/10.22377/ajp.v12i03.2632

Harekrishna Roy

Abstract

Aim: The aim of the present study was to formulate the fast dissolving tablets (FDT) of urapidil by studying the effect of the variable for response with the help of Box-Behnken design (BBD). Materials and Methods: A total of 17 formulations were prepared by altering the proportion of cross carmellose sodium, spray dried lactose, and hydroxypropyl methylcellulose K4M by direct compression technique. BBD was employed to study the relations among the variables and to statistically optimize the formulation parameter for FDT tablets of urapidil. Furthermore, the powder mixture characteristics and tablet

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

3.3.1 Number of research papers per teachers in the Journals notified on UGC / SCOPUS / WEB OF SCIENCE website during the Year 2018-19

INTERNATIONAL RESEARCH JOURNAL OF PHARMACY
www.irjponline.com
ISSN 2230 – 8407

Research Article

DESIGN AND DEVELOPMENT OF RIZATRIPTAN BENZOATE ORAL DISPERSIBLE FILMS

M. Deepthi *[1], T.E.G.K. Murthy [2], S. Swati [1]
[1]Assistant professor, Department of Pharmaceutics, Nirmala College of Pharmacy, Atmakur (V), Guntur, Andhra Pradesh, India
[2]Department of Pharmaceutics, Principal, Bapatla College of Pharmacy, Bapatla, Guntur, Andhra Pradesh, India
*Corresponding Author Email: mathangi130@gmail.com

Article Received on: 03/09/18 Approved for publication: 07/12/18

DOI: 10.7897/2230-8407.100248

ABSTRACT

Aim: The present work was to formulate and evaluate the Rizatriptan benzoate oral dispersible films by using solvent casting method. Materials and methods: The formula was optimised with different polymers like sodium CMC, HPMC and sodium alginate by using different plasticizers like propylene glycol, N-dibutyl phthalate, PEG400 and PEG 200 by using different concentrations of optimised plasticizer i.e PEG 200 like 15%, 20%, 25%, 30% and 35% at different temperatures like 55˚c, 60˚c, 65˚c, 70˚c and finally by different base levels of film casting machine i.e 0.5, 1, 1.5, 2 mm by solvent casting method. The formulations were characterized for weight variation, thickness, folding endurance, disintegration time, content uniformity and in vitro drug release studies and drug polymer interactions were studied by using Fourier transform infrared spectroscopy. Results: The films prepared with 8% sodium alginate with plasticizer PEG 200 at 30% at 60˚c with 0.5mm base level dispersion shown the best results compared to different polymers and conditions by obtaining 97% of drug release. Conclusion: Based on the evaluation of different parameters it was concluded that formulation of Rizatriptan benzoate oral dispersible films was successfully done and F12 shows 97.5% drug release at 60˚c temperature.

Keywords: Rizatriptan benzoate, oral dispersible films, N-dibutyl phthalate, PEG200, PEG 400, Propylene Glycol.

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

3.3.1 Number of research papers per teachers in the Journals notified on UGC / SCOPUS / WEB OF SCIENCE website during the Year 2018-19

Ct o

INTERNATIONAL RESEARCH JOURNAL OF PHARMACY
www.irjponline.com
ISSN 2230 – 8407

Research Article

EFFECT OF SOLID DISPERSIONS, HP-β & γ- CYCLODEXTRIN INCLUSION COMPLEXES ON THE DISSOLUTION RATE OF SIMVASTATIN AND FORMULATION DEVELOPMENT & EVALUATION OF SIMVASTATIN ODTs

Sr. Nirmala Jyothi. G *, A.Rajendra prasad, S. Swati, Pratyusha Gandrapu
Department of Pharmaceutics, Nirmala College of Pharmacy, Atmakur (V), Guntur, Andhra Pradesh, India
*Corresponding Author Email: srjocsa@gmail.com

Article Received on: 13/02/18 Approved for publication: 17/03/18

DOI: 10.7897/2230-8407.09341

ABSTRACT

The objective of the present work was to study the effect of solid dispersions prepared Hydroxy Propyl - β (HP-β) & γ- cyclodextrin (CD) inclusion complexes and poly ethylene glycols(PEG) 3550 and 6000 on the dissolution rate of simvastatin and formulation & evaluation of simvastatin orally disintegrating tablets (ODTs). Simvastatin, a hypolipidemic drug is widely used in the treatment of hyperlipidemia. Simvastatin is a BCS Class II drug having low solubility (1.45µg/mL) and therefore low oral bioavailability. In the present study, Solid dispersions were prepared with drug and PEG 3350 & 6000. These two polymers are used in 1:2 ratio (drug: polymer) and in combinations (Drug :PEG 3350:PEG 6000) in the ratio 1:2:1 & 1:1:2 respectively solid dispersions of simvastatin with HP-β , (1:1,1:2,1:3) & γ cyclodextrins (1:1,1:2) with different drug : carrier ratios were prepared by kneading technique . And finally the ODTs were prepared with drug: γ CD solid dispersion in the ratio 1:2 along with the super disintegrating agents such as crospovidone, sodium starch glycolate and croscarmellose sodium in different amounts were used for different formulations F1-F9. Formulations were evaluated for physical appearance, weight variation, thickness, hardness, friability, content uniformity test, disintegration test and *in vitro* release studies. From the prepared formulations, it was observed that F3 shows Disintegration rate 48.16sec±0.75 and Dissolution rate 99.89±0.31 for 20 minutes (min). So that Formulation F3 was found to be quicker in disintegration and faster in drug releasing, so this was optimized for its enhanced dissolution profile and bioavailability.

Keywords: Simvastatin ODTs, PEG 3550, PEG 6000 HP-β and γ cyclodextrins Crospovidone, Sodium Starch Glycolate and Croscarmellose sodium.

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

ASIAN JOURNAL OF PHARMACEUTICAL AND CLINICAL RESEARCH

INNOVARE ACADEMIC SCIENCES
Knowledge to Innovation

Vol 11, Issue 11, 2018

Online - 2455-3891
Print - 0974-2441

Research Article

ANTI-INFLAMMATORY ACTIVITY OF METHANOLIC EXTRACT OF *HIBISCUS PLANTIFOLIUS*

SOWJANYA K[1], SWATI S[2], SUPRIYANKA K[3], RAJIYA SK[3], MEENA B[3], POOJITHA P[3]

[1]Department of Pharmaceutical Chemistry, Nirmala College of Pharmacy, Atmakur, Mangalagiri, Andhra Pradesh, India. [2]Department of Pharmaceutics, Nirmala College of Pharmacy, Atmakur, Mangalagiri, Andhra Pradesh, India. [3]Department of Pharmacy, Nirmala College of Pharmacy, Atmakur, Mangalagiri, Andhra Pradesh, India. Email: ksowjanya.1504@gmail.com

Received: 12 July 2018, Revised and Accepted: 10 September 2018

ABSTRACT

Objective: The objective of the present study was to carry out anti-inflammatory activity of methanolic extract of *Hibiscus plantifolius* (MEHP) belonging to the family Malvaceae.

Methods: The shade dried stem part of *H. plantifolius* (1 kg) was powdered and extracted with methanol using soxhletion. The extract was concentrated using rotary evaporator under reduced pressure at 40°C, till free from the solvents and thereby providing crude methanol extract which was subsequently employed for further studies. Anti-inflammatory effect was studied by carrageenan-induced paw edema model in rats at dose level of 50, 150, and 300 mg/kg. Acute oral toxicity study was also studied.

Results: The results indicate that MEHP, 300 mg/kg, exhibited significant inhibition ($p<0.001$) of increase in paw edema at 4th h.

Conclusion: The results of the experimental study confirmed that MEHP possesses significant anti-inflammatory activity.

NIRMALA COLLEGE OF PHARMACY ATMAKURU MANGALAGIRI GUNTUR Dt.

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

A Phyto Pharmacological Review on *Cotoneaster microphyllus* Species

S.Swati*[1],R.R. Manjula[2],K.Sowjanya[3],Y.Vennela[4],K.Tanuja[5]

[1]*Assistant Professor,Department of Pharmaceutics,Nirmala college of Pharmacy,Atmakur,Guntur,A.P,India*

[2,3]*Associate Professor, Department of Pharmaceutical and Phytochemistry,,Nirmala college of Pharmacy,Atmakur,Guntur,A.P,India*

[4,5] *Bachelor of Pharmacy, Nirmala college of Pharmacy,Atmakur,Guntur,A.P,India*

Abstract:

Rockspray *Cotoneaster* is a prostrate, mat-forming shrub which will climb over rocks. It is a strong contender for the plant found at highest altitudes.In this review a brief discussion of *cotoneaster microphyllus* species were discussed and compared its habit and habitats of various species . It has wide uses and benefits along with toxic effects as well as phytochemical and pharmacological activity responsible for anti diabetic activity and anti diarrhoearial activity.

Keywords : *cotoneaster microphyllus*, toxic effects, phytochemical and pharmacological activity.

INTRODUCTION:

Cotoneaster microphyllus is a evergreen unpopular plant mostly found in the hill station areas *Cotoneaster microphyllus* is a medicinal plant belonging to the family rosaceae and is a rich source of flavonoids and glycosides which are distributed in the parts leaves,berries,flowers of the plant. These flavonoids have found extensive application in the treatment of dysmennrohea and dermatitis.The cyanoglycosides are found in the part of the fruit, leaf, and bark,stolons which has potential as astringent property . It is important to mention that the part of the cotoneaster microphyllus plant that berries were poisonous causing gastro enteritis if consumed.Cotoneaster microphyllus is well suited for use as an ornamental because of its graceful white flowers in spring and brilliant red fruit in autumn.[1]And the Leaves cotoneaster microphyllus plants are used for Dermatitis.[2]These shrubs with height-50 to 100cm and width 1 to 1.5cm.[3] And River valley, Tibet. The fruit has important ornamental value due to its persistent brilliant color.[9] Common name is cotoneaster conspicuous Decorus.[10]And these are native to south east Tibet.It grows to 1to 1.5 meters height with white five stellate flowers followed by fruit.[11]

- ***Cotoneaster microphyllus var . glacialis***

  Very rarely offered,this wild collected seed was found at an altitude of 4,000 meters in Nepal where it cover rocks and ground with total creeping carpets smotheres in white flowers in spring.Later comes impressive display of dazzling red berries.[12]These are shrubs reach heights of 50 to 70 cm.And bluish green simple alternate leaves.They are elliptic.These plants are native to Himalayas.[13]

- ***Cotoneaster microphyllus var. cochleatus***

  This type with revolute leaves, and occurs in Yunnan and Sichuan.[14] The species is native in Himalayas Nepal Sikkim

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

Original Article

Formulation and Characterization of Fast Dissolving Films Containing Aceclofenac

M Sudhir [1,*], Buchi N Nalluri [2], M V Basaveswara Rao [3]

[1] Department of Pharmaceutics, Nirmala College of Pharmacy, Atmakur (V), Guntur, Andhra Pradesh, India.

[2] Director, Siddhartha Innovation & Incubation Centre, Siddhartha College of Pharmaceutical Sciences, Vijayawada.

[3] Dean, Faculty of Sciences, Krishna University, Machilipatnam.

ARTICLE INFO

Received:09 Dec 2018
Accepted:24 Dec 2018

ABSTRACT

The present work was aimed with the objective of formulating fast dissolving films of aceclofenac to enhance the convenience and compliance by the elderly and pediatric patients. The films were prepared by incorporating the prepared aceclofenac physical mixtures so as to achieve the aimed percent drug release (using cyclodextrins, sucrose and polaxomer 188) in different film forming agents (hydroxyl propyl methyl cellulose E5 &E15). Particular attention was given to the selection of the suitable taste masking agents. The large dose of the drug offered the greatest challenge in optimization of film formula leading to the thickness of the film and further altering the drug release from the film. The films were characterized in term of aceclofenac content, mechanical properties, and disintegration time and dissolution test. The promising film F2 having the optimal formula showing the greatest dissolution and satisfactory in in-vitro disintegration time and physico-mechanical properties compared with a reference marketed product (aceclan tablets). FT-IR studies revealed that there is no interaction between the drug and the polymers used in the study. Statistical analysis revealed significant difference between the test films and the reference product, indicated that the test formulations F1, F3, F4, andF5 exhibited enhanced percentage T90 profiles, F2 and F6 showed comparable profiles with reference.

Key words: Aceclofenac, physical mixtures, cyclodextrins, polaxomer, fast dissolving films

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

Indo Global Journal of Pharmaceutical Sciences, 2018; 8(3): 88-91

INDO GLOBAL JOURNAL OF PHARMACEUTICAL SCIENCES
ISSN 2249- 1023

Development and Validation of New Analytical Method for the Estimation of Beclomethasone Dipropionate, Clotrimazole and Neomycin Sulphate in Bulk and Pharmaceutical Dosage Forms

M. Sathwik, P. Vijay Sai Raghav, A. Shanta Kumari *, Sk. Abdul Rahaman

Department of Pharmaceutical Analysis, Nirmala College of Pharmacy, Mangalagiri, Guntur, Andhra Pradesh, India

Address for Correspondance
A. Shanta Kumari,
Skatakam9@gmail.com

Received:
20.03.2018
Accepted:
21.05.2018

ABSTRACT: A new simple, precise, accurate, economic and selective HPLC method has been developed and validated for the estimation of Beclomethasone dipropionate, Clotrimazole, and Neomycin sulphate in bulk and Pharmaceutical dosage form. Column is Zorbax C18 150×4.6 mm, 5 µm, wave length 239 nm, injection volume 20 µL, column temperature is ambient and flow rate 1.0 mL/min. Retension time of clotrimazole, neomycin sulphate, beclomethasone dipropionate is about 2.209, 4.7 and 8.4 min respectively and also estimated by uv-visible spectrophotometry the solvent is 0.1 N NaoH, wave length is 421 nm, linearity is 2-10 µg/mL. The developed methods have been validated statistically as per ICH guidelines. The method showed good reproducibility and recovery with %RSD less than 2. So, the proposed methods were found to be simple, specific, precise, accurate and linear. Hence it can be applied for routine analysis of Beclomethasone dipropionate, Clotrimazole, Neomycin sulphate in bulk drug and Pharmaceutical preparations.

NIRMALA COLLEGE OF PHARMACY ATMAKUR MANGALAGIRI GUNTUR Dt.

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

3.3.1 Number of research papers per teachers in the Journals notified on UGC / SCOPUS / WEB OF SCIENCE website during the Year 2018-19

Pharmacogn J. 2018; 10(3):439-446.
A Multifaceted Journal in the field of Natural Products and Pharmacognosy
www.phcogj.com | www.journalonweb.com/pj | www.phcog.net

Original Article

Detection and Quantification of Major Phytochemical Markers for Standardization of *Talinum portulacifolium, Gomphrena serrata, Alternanthera sessilis* and *Euphorbia heterophylla* by HPLC

Mamillapalli Vani[1*], Shaik Abdul Rahaman[2], Avula Prameela Rani[3]

ABSTRACT

Back ground: High-performance Liquid Chromatography is one of the major analytical techniques used in the quality control of phytochemicals. **Objective:** This research article presents the development of HPLC method to detect and quantify the major marker components, kaempferol, and quercetin from four plant species. **Materials and Methods:** HPLC method was developed for the qualitative and quantitative analysis of plant extracts by using orthophosphoric acid and methanol (95:5) at 370 nm for kaempferol, methanol and orthophosphoric acid (60:40) at 262nm for quercetin. **Results:** Kaempferol was detected from the hydro alcoholic extracts of *Talinum portulacifolium* leaves (RT 13.720, concentration 1.08 mg/ml) and flowers of *Gomphrena serrata* (RT 13.758, concentration 2.13mg/ml). Kaempferol was reported for the first time from *Gomphrena serrata*. Quercetin was separated and identified from the hydro alcoholic extracts *Alternanthera sessilis* stems (RT 6.503, concentration 0.01mg/ml). The hydroalcoholic extract of *Euphorbia heterophylla* stems (RT 6.588, concentration 0.01mg/ml) was also evaluated for the presence of quercetin. **Conclusion:** The method developed is very useful tool for qualifying and quantifying the plant specimens as well as their extracts.

Key words: Marker, Kaempferol, Quercetin, HPLC, Quality control, Plant specimens, Extracts.

Mamillapalli Vani[1*], Shaik Abdul Rahaman[2], Avula Prameela Rani[3]

[1]Department of Pharmacy, Jawaharlal Nehru Technological University, Kakinada, East Godavari (Dt.), Andhra Pradesh, INDIA, [1]Department of Pharmacognosy and Phytochemistry, Vijaya Institute of Pharmaceutical Sciences for Women, Enikepadu, Vijayawada, Krishna, Andhra Pradesh, INDIA. [2]Department of Medicinal Chemistry, Principal, Nirmala College of Pharmacy, Atmakur, Mangalagiri, Guntur, Andhra

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

Impact of Patient Counselling and Drug Utilization Pattern on Asthma Patients at Tertiary Care Hospital

V.Sathish Kumar*, N.D.Phani Kumar[1], Undrakonda Ajay[1], P. Divya Jyothi[2], SK.Abdul Rahaman[3]

*[1]Pharm.D, 2- Assist. Professor, 3-Professor, Department of Pharmacy Practice, Nirmala College of Pharmacy, Mangalagiri, Guntur, Andhra Pradesh, India.

ABSTRACT

An open access journal

Supporting Information:

Received: 15 May 2018
Accepted: 21 May 2018

Aim & Objectives: Impact Of Patient Counselling And Drug Utilization Pattern On Asthma Patients At Tertiary Care Hospital To ascertain the knowledge of the patients regarding their disease and the therapy, To provide pharmaceutical care pertaining to disease and use of inhalational devices to the study group, which is to be compared with the control group. **Methodology:** A Prospective, observational study was conducted in the Department of General Medicine in Manipal super specialty Hospital, Vijayawada, India. for a period of 6 months. Patients were also distinguished between an intervention and control group. **Results:** the

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

3.3.1 Number of research papers per teachers in the Journals notified on UGC / SCOPUS / WEB OF SCIENCE website during the Year 2018-19

Box-Behnken Design for Optimization of Formulation Variables for Fast Dissolving Tablet of Urapidil

November 2018 · Asian Journal of Pharmaceutics 12(3):946 · Follow journal

DOI: 10.22377/ajp.v12i03.2632

Project: Formulation and Development of Programmable Device for Anti-Retroviral agent

Harekrishna Roy · Dr. Abdul Rahaman Shaik

Overview | Stats | Comments | Citations (6) | References (18)

Abstract and figures

Aim: The aim of the present study was to formulate the fast dissolving tablets (FDT) of urapidil by studying the effect of the variable for response with the help of Box-Behnken design (BBD). Materials and Methods: A total of 17 formulations were prepared by altering the proportion of cross carmellose sodium, spray dried lactose, and hydroxypropyl methylcellulose K4M by direct compression technique. BBD was employed to study the relations among the variables and to statistically optimize the formulation parameter for FDT tablets of urapidil. Furthermore, the powder mixture characteristics and tablet physiochemical properties such as hardness, friability, drug content, disintegration time (DT), and dissolution test were performed using 900 ml of 0.1N HCl (pH-1.2) at 37 ± 0.5°C. Results: BBD successfully provided the significant value for the quadratic model and second order polynomial equation was plotted.

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

Research Article

OPEN ACCESS | Freely available online

Novel series of 1, 5 Benzothiazepine skeleton based compounds as anti-cancer agents – *In silico* and MTT assay based study

CH.M.M.Prasada Rao[1], Rajendra Prasad Yejella[2], Rehman S.A[3], ch.Rajeswari [1], Syed Hussain Basha[4*]

[1]Department of Pharmaceutical Chemistry, QIS College of Pharmacy, Ongole - 523272, Andhra Pradesh, India. [2]Department of Pharmaceutical Chemistry, University College of Pharmaceutical Sciences, Andhra University, Visakhapatnam, Andhra Pradesh - 530003, Andhra Pradesh, India. [3] Department of Pharmaceutical Chemistry, Nirmala College of Pharmacy, Mangalagiri, Atmakur Rural, Andhra Pradesh - 522 503, Andhra Pradesh, India. [4]Innovative Informatica Technologies, Telangana, Hyderabad - 500049, India.

Abstract: A novel series of Benzothiazepine derivatives were designed and evaluated for epidermal growth factor receptor (EFGR) inhibitory potential by using various computational tools along with MTT assay based cell line studies towards anti-cancer activity. Our docking studies evidenced that all the present investigated twenty compounds have the potential to dock inside the active binding pocket of the EGFR Kinase domain with a binding energy in a range of -7.94 to -9.71 Kcal/mol. On the other hand, MTT assay based studies against DU145, MCF7 and HT29 cell lines showed good correlating results to our In-silico predictions. Moreover, all the designed compounds were predicted to be having promising ADMET parameters and found to be well in compliance with Lipinski's rule of five along with no toxicology profile expect compound 7 based on Osiris property explorer predictions. Among all the twenty compounds tested, compound 9 is the best lead like molecule with -9.71 kcal/mol of binding energy with predicted IC50 value of 76.70 nano molar along with experimental IC50 values of 16±1, 27±1 and 28±1 in µg/ml for DU145, MCF7 and HT29 cell lines respectively. Molecular dynamic simulation studies for this compound 9 in complex with EGFR kinase domain has elucidated several interesting molecular level protein-ligand interactions with some of the important amino acid residues present at the active binding site of EGFR Kinase domain. Conclusively, novel designed compound 9 of the present study have shown promising anti- cancer potential worth considering for further evaluations.

Keywords: EGFR kinase, MTT assay, docking, ADMET, QSAR, MD simulations, Benzothiazepine, anti-cancer.

Citation: CH.M.M.Prasada Rao et.al. (2018) Novel series of 1, 5 Benzothiazepine skeleton based compounds as anti-cancer agents – In silico and MTT assay based study. Journal of PeerScientist 1(2): e1000008.

Received October 12, 2018; **Accepted** December 18, 2018; **Published** December 30, 2018.

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

Pharmacogn J. 2018; 10(3):439-446.
A Multifaceted Journal in the field of Natural Products and Pharmacognosy
www.phcogj.com | www.journalonweb.com/pj | www.phcog.net

Original Article

Detection and Quantification of Major Phytochemical Markers for Standardization of *Talinum portulacifolium, Gomphrena serrata, Alternanthera sessilis* and *Euphorbia heterophylla* by HPLC

Mamillapalli Vani[1*], Shaik Abdul Rahaman[2], Avula Prameela Rani[3]

ABSTRACT

Back ground: High-performance Liquid Chromatography is one of the major analytical techniques used in the quality control of phytochemicals. **Objective:** This research article presents the development of HPLC method to detect and quantify the major marker components, kaempferol, and quercetin from four plant species. **Materials and Methods:** HPLC method was developed for the qualitative and quantitative analysis of plant extracts by using orthophosphoric acid and methanol (95:5) at 370 nm for kaempferol, methanol and orthophosphoric acid (60:40) at 262nm for quercetin. **Results:** Kaempferol was detected from the hydro alcoholic extracts of *Talinum portulacifolium* leaves (RT 13.720, concentration 1.08 mg/ml) and flowers of *Gomphrena serrata* (RT 13.758, concentration 2.13mg/ml). Kaempferol was reported for the first time from *Gomphrena serrata*. Quercetin was separated and identified from the hydro alcoholic extracts *Alternanthera sessilis* stems (RT 6.503, concentration 0.01mg/ml). The hydroalcoholic extract of *Euphorbia heterophylla* stems (RT 6.588, concentration 0.01mg/ml) was also evaluated for the presence of quercetin. **Conclusion:** The method developed is very useful tool for qualifying and quantifying the plant specimens as well as their extracts.

Key words: Marker, Kaempferol, Quercetin, HPLC, Quality control, Plant specimens, Extracts.

Mamillapalli Vani[1*],
Shaik Abdul Rahaman[2],
Avula Prameela Rani[3]

[1]Department of Pharmacy, Jawaharlal Nehru Technological University, Kakinada, East Godavari (Dt.), Andhra Pradesh, INDIA, [1]Department of Pharmacognosy and Phytochemistry, Vijaya Institute of Pharmaceutical Sciences for Women, Enikepadu, Vijayawada, Krishna, Andhra Pradesh, INDIA. [2]Department of Medicinal Chemistry, Principal, Nirmala College of Pharmacy, Atmakur, Mangalagiri, Guntur, Andhra Pradesh, INDIA.

NIRMALA COLLEGE OF PHARMACY ATMAKURU, MANGALAGIRI GUNTUR Dt.

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

3.3.1 Number of research papers per teachers in the Journals notified on UGC / SCOPUS / WEB OF SCIENCE website during the Year 2018-19

Indo Global Journal of Pharmaceutical Sciences, 2018; 8(3): 88-91

INDO GLOBAL JOURNAL OF PHARMACEUTICAL SCIENCES
ISSN 2249- 1023

Development and Validation of New Analytical Method for the Estimation of Beclomethasone Dipropionate, Clotrimazole and Neomycin Sulphate in Bulk and Pharmaceutical Dosage Forms

M. Sathwik, P. Vijay Sai Raghav, A. Shanta Kumari *, Sk. Abdul Rahaman

Department of Pharmaceutical Analysis, Nirmala College of Pharmacy, Mangalagiri, Guntur, Andhra Pradesh, India

Address for Correspondance
A. Shanta Kumari,
Skatakam9@gmail.com

Received:
20.03.2018
Accepted:
21.05.2018

ABSTRACT: A new simple, precise, accurate, economic and selective HPLC method has been developed and validated for the estimation of Beclomethasone dipropionate, Clotrimazole, and Neomycin sulphate in bulk and Pharmaceutical dosage form. Column is Zorbax C18 150×4.6 mm, 5 µm, wave length 239 nm, injection volume 20 µL, column temperature is ambient and flow rate 1.0 mL/min. Retension time of clotrimazole, neomycin sulphate, beclomethasone dipropionate is about 2.209, 4.7 and 8.4 min respectively and also estimated by uv-visible spectrophotometry the solvent is 0.1 N NaoH, wave length is 421 nm, linearity is 2-10 µg/mL. The developed methods have been validated statistically as per ICH guidelines. The method showed good reproducibility and recovery with %RSD less than 2. So, the proposed methods were found to be simple, specific, precise, accurate and linear. Hence it can be applied for routine analysis of

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

ASIAN JOURNAL OF PHARMACEUTICAL AND CLINICAL RESEARCH

INNOVARE ACADEMIC SCIENCES
Knowledge to Innovation

Online - 2455-3891
Print - 0974-2441

Vol 11, Issue 5, 2018

Research Article

DEVELOPMENT OF A NEW STABILITY INDICATING RP-HPLC METHOD FOR SIMULTANEOUS ESTIMATION OF EPALRESTAT AND PREGABALIN AND ITS VALIDATION AS PER INTERNATIONAL CONFERENCE ON HARMONIZATION GUIDELINES

SWAPNA GODAY[1]*, ABDUL RAHAMAN SK[2], PRAMEELARANI A[3]

[1]Department of Pharmacy, Nirmala College of Pharmacy and Research Scholar, JNTUK, Kakinada, Andhra Pradesh, India. [2]Department of Pharmaceutical Analysis, Nirmala College of pharmacy, Atmakur, Mangalagiri, Andhra Pradesh, India. [3]Department of pharmaceutics, University College of Pharmaceutical Sciences, Acharya Nagarjuna University, Guntur, Andhra Pradesh, India. Email: swapna.goday.gs@gmail.com

Received: 26 August 2017, Revised and Accepted: 07 February 2018

ABSTRACT

Objective: The present study was aimed to develop a novel, simple, rapid, accurate, stability-indicating reversed-phase high-performance liquid chromatography method, and validate for the simultaneous estimation of epalrestat and pregabalin in bulk and dosage form.

Methods: The chromatographic separation was performed on c_{18} column discovery (250 mm × 4.6 mm, 5 µ particle size) the optimized mobile phase consists of 0.01 m potassium dihydrogen phosphate buffer: Methanol (25:75% v/v) with a flow rate of 1.0 ml/min and ultraviolet (UV) detection at 226 nm.

Results: The chromatographic condition, retention time was 2.2 min (pregabalin), 2.8 min (epalrestat). Stress testing was performed in accordance

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

3.3.1 Number of research papers per teachers in the Journals notified on UGC / SCOPUS / WEB OF SCIENCE website during the Year 2018-19

Research Article

Development and Validation of a LC-ESI-MS/MS Based Bioanalytical Method for Dapagliflozin and Saxagliptin in Human Plasma

Swapna Goday[1]*, Abdul Rahaman Shaik[1], Prameelarani Avula[2]

[1]Department of Pharmaceutical Analysis, Nirmala College of Pharmacy and Research Scholar JNTUK, Kakinada, Andhra Pradesh, INDIA.
[2]Department of Pharmaceutics, University College of Pharmaceutical Sciences, Acharya Nagarjuna University Guntur, Andhra Pradesh, INDIA.

ABSTRACT

Objective: To develop a new, rapid and sensitive LC-ESI –MS/MS method for the simultaneous estimation of Dapagliflozin and saxagliptin in human K_2EDTA plasma by Liquid –liquid Extraction method (LLE) using deutereated dapagliflozin (DGd2) and saxagliptin (SGd5). **Method:** Chromatographic separation was carried out on a reverse phase hypersil Gold C_{18} (50mmx3.0mm, 5μm) column using mixture of 10 mM Ammonium acetate and methanol (20:80, v/v) at a flow rate of 0.5ml/min in isocratic mode. Quantification was achieved using an electro spray ion interface operating in positive mode, under multiple reaction monitoring (MRM) conditions. **Results:** The method showed excellent linearity over the concentration range of 50.00-10000.00 pg/mL for both the analytes. The intra-batch and inter batch precision (%CV) was ≤4.5% and Matrix effect (%CV) was1.27%, 1.20% for both the analytes. **Conclusion:** The simplicity of the method allows for application in laboratories, presents a valuable tool for bioavailability, bioequivalence, pharmacokinetic studies.

Key words: Application to pk profile studies, Method development, Validation, Dapagliflozin, Saxagliptin, LC-ESI-MS/MS.

NIRMALA COLLEGE OF PHARMACY ATMAKUR (V) MANGALAGIRI GUNTUR Dt.

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

ISSN 0974-3618 (Print)
0974-360X (Online)

www.rjptonline.org

RJPT

RESEARCH ARTICLE

Stability Indicating UPLC Method Development and Validation for the Determination of Reserpine in Pharmaceutical Dosage Forms

V. Padmaja*, G. Swapna, M. Prasanthi

Department of Pharmaceutical Analysis, Nirmala College of Pharmacy, Atmakuru, Guntur District, Andhra Pradesh-522503

*Corresponding Author E-mail: **vellaturipadmaja@gmail.com**

ABSTRACT:

A stability indicating method was developed for the estimation of Reserpine in pharmaceutical dosage form by using Ultra performance Liquid chromatography (UPLC). The separation was done on gradient mode with Hibra C18 (100mm × 2.1mm, 5 µ) column and mobile phase consisting of Acetonitrile and buffer 70:30 (v/v) were used and flow rate was maintained at 1ml/min at room temperature. The detection was done at a wave length of 240nm. A good linearity was observed with a correlation coefficient of 0.999. The method was validated according to the ICH guidelines . The developed method was found to be accurate and precise , with %recovery 99.95-100.18% and % relative standard deviation . The drug was found to be stable at forced degradation conditions and the net degradation was found to be within the limits. The developed method can be used for the quality control of Reserpine in pharmaceutical dosage form.

KEYWORDS: ICH guidelines ,Reserpine, stability indicating, UPLC, Validation.

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

ASIAN JOURNAL OF PHARMACEUTICAL AND CLINICAL RESEARCH

INNOVARE ACADEMIC SCIENCES
Knowledge to Innovation

Vol 11, Issue 12, 2018

Online - 2455-3891
Print - 0974-2441

Research Article

STABILITY-INDICATING REVERSED-PHASE HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY METHOD FOR SIMULTANEOUS ESTIMATION OF METHYLCOBALAMIN, ALPHA-LIPOIC ACID, PYRIDOXINE HCL, AND FOLIC ACID IN BULK AND COMBINED DOSAGE FORM

PADMAJA V[1]*, PRASANTHI M[1], MAYURI P[2]

[1]Department of Pharmaceutical Analysis, Nirmala College of Pharmacy, Atmakuru, Mangalagiri, Guntur, Andhra Pradesh, India, [2]Departmen of Pharmaceutics, Nirmala College of Pharmacy, Atmakuru, Mangalagiri, Guntur, Andhra Pradesh, India. Email: vellaturipadmaja@gmail.com

Received: 16 April 2018, Revised and Accepted: 02 August 2018

ABSTRACT

Objectives: The purpose of the research is to develop a simple, precise, economical, accurate, reproducible, and sensitive method for the estimation of methylcobalamin, alpha-lipoic acid, pyridoxine hydrochloride, and folic acid drug product by reversed-phase high-performance liquid chromatography (RP-HPLC) method.

Methods: New analytical method was developed for the estimation of methylcobalamin, alpha-lipoic acid, pyridoxine hydrochloride, and folic acid in drug product by RP-HPLC. The chromatographic separation was achieved on the Inertsil C18, 250 mm × 4.6 mm, 5 µm at ambient temperature. The separation achieved employing a mobile phase consists of buffer (added 5.05 g hexane-1-sulfonic acid is dissolved into 1000 mL of distilled

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

3.3.1 Number of research papers per teachers in the Journals notified on UGC / SCOPUS / WEB OF SCIENCE website during the Year 2018-19

Indo Global Journal of Pharmaceutical Sciences, 2018; 8(3): 104-107

INDO GLOBAL JOURNAL OF PHARMACEUTICAL SCIENCES
ISSN 2249- 1023

Ultraviolet Spectrophotometric Method Development and Validation for Estimation of Pesticide Dimethoate in *Brassica oleracea*

M. Sudha Rani, A. Shanta Kumari *, K. Praveen

Department of Pharmaceutical Analysis, Nirmala College of Pharmacy, Mangalagiri, Guntur, Andhra Pradesh, India

Address for Correspondance
A. Shanta Kumari, Skatakam9@gmail.com

Received: 26.04.2018
Accepted: 15.06.2018

ABSTRACT: Indiscriminate use of pesticides in agriculture is concerned with the health of humans. Accumulation of residues in food and agricultural environment is risking ecological balance. Residues of dimethoate present in locally available variety *Brassica oleracea* commonly called as cauliflower were determined. A simple, sensitive, accurate and economical spectroscopic method has been developed for the estimation dimethoate in *Brassica oleracea*. An absorption maximum was found to be at 240nm with the solvent methanol. Results of the analysis were validated for accuracy, precision, LOD, LOQ and were found to be satisfactory. The proposed method is simple, rapid and suitable for the routine quality control analysis.

Cite this article as: Sudha Rani, M.; Kumari, A.S.; Praveen, K. Ultra Violet Spectrophotometric Method Development and Validation for Estimation of Pesticide Dimethoate in *Brassica oleracea*. Indo Global Journal of Pharmaceutical Sciences, 2018; 8(3): 104-107.

NIRMALA COLLEGE OF PHARMACY GUNTUR Dt.

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

3.3.1 Number of research papers per teachers in the Journals notified on UGC / SCOPUS / WEB OF SCIENCE website during the Year 2018-19

Indo Global Journal of Pharmaceutical Sciences, 2018; 8(3): 88-91

INDO GLOBAL JOURNAL OF PHARMACEUTICAL SCIENCES
ISSN 2249- 1023

Development and Validation of New Analytical Method for the Estimation of Beclomethasone Dipropionate, Clotrimazole and Neomycin Sulphate in Bulk and Pharmaceutical Dosage Forms

M. Sathwik, P. Vijay Sai Raghav, A. Shanta Kumari *, Sk. Abdul Rahaman

Department of Pharmaceutical Analysis, Nirmala College of Pharmacy, Mangalagiri, Guntur, Andhra Pradesh, India

Address for Correspondance
A. Shanta Kumari,
Skatakam9@gmail.com

Received:
20.03.2018
Accepted:
21.05.2018

ABSTRACT: A new simple, precise, accurate, economic and selective HPLC method has been developed and validated for the estimation of Beclomethasone dipropionate, Clotrimazole, and Neomycin sulphate in bulk and Pharmaceutical dosage form. Column is Zorbax C18 150×4.6 mm, 5 µm, wave length 239 nm, injection volume 20 µL, column temperature is ambient and flow rate 1.0 mL/min. Retension time of clotrimazole, neomycin sulphate, beclomethasone dipropionate is about 2.209, 4.7 and 8.4 min respectively and also estimated by uv-visible spectrophotometry the solvent is 0.1 N NaoH, wave length is 421 nm, linearity is 2-10 µg/mL. The developed methods have been validated statistically as per ICH guidelines. The method showed good reproducibility and recovery with %RSD less than 2. So, the proposed methods were found to be simple, specific, precise, accurate and linear. Hence it can be applied for routine analysis of Beclomethasone dipropionate, Clotrimazole, Neomycin sulphate in bulk drug and Pharmaceutical preparations.

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

3.3.1 Number of research papers per teachers in the Journals notified on UGC / SCOPUS / WEB OF SCIENCE website during the Year 2018-19

PBPK Modeling - A Predictive, Eco-Friendly, Bio-Waiver Tool for Drug Research

Buy Article:
$68.00 + tax
(Refund Policy)
ADD TO CART
BUY NOW

Authors: De, Baishakhi; Bhandari, Koushik; Mukherjee, Ranjan; Katakam, Prakash; Adiki, Shanta K.; Gundamaraju, Rohit; Mitra, Analava

Source: Current Drug Discovery Technologies, Volume 14, Number 3, 2017, pp. 142-155(14)
Publisher: Bentham Science Publishers
DOI: https://doi.org/10.2174/1570163814666170202094922

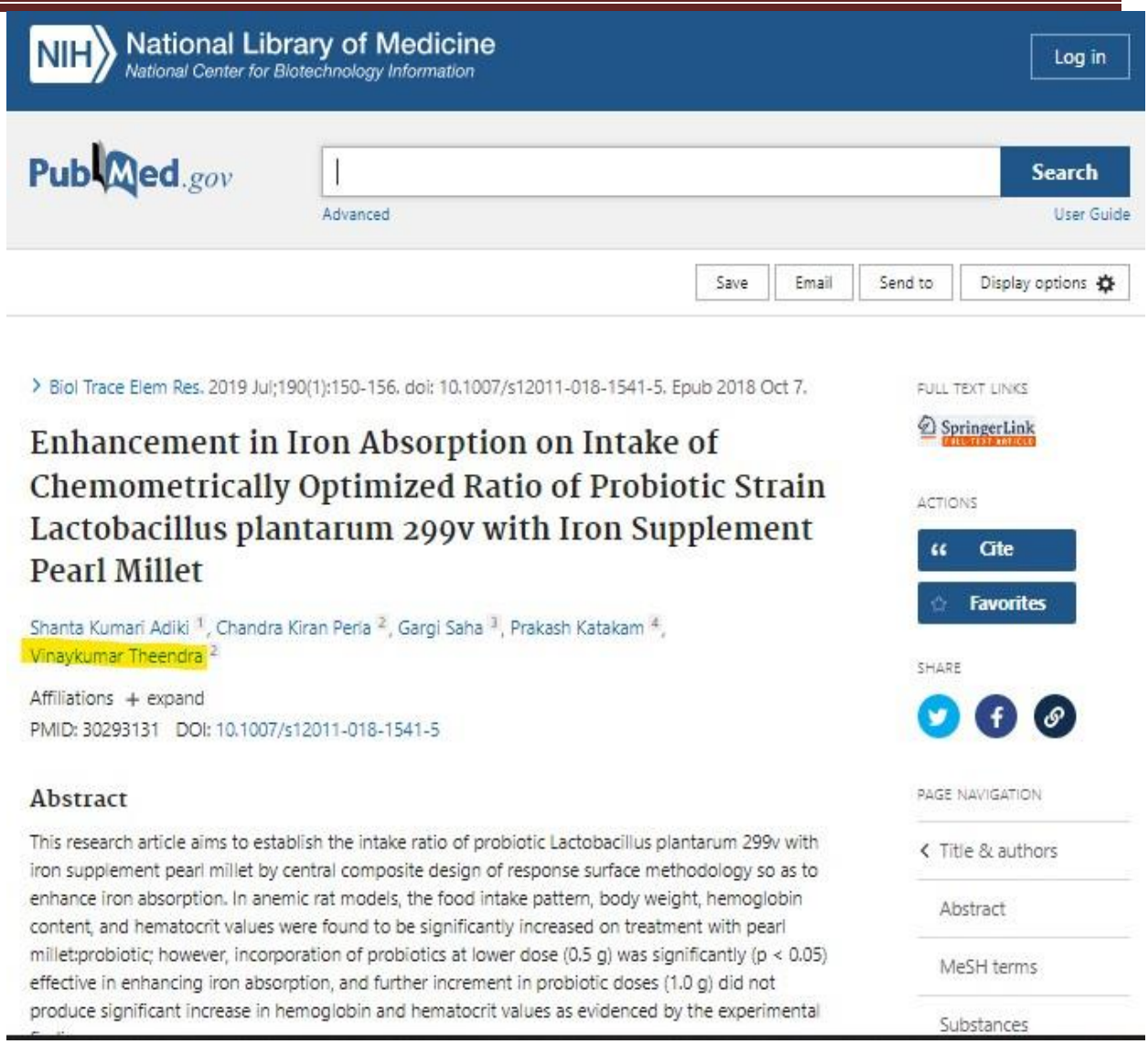
< previous article | view table of contents | next article > | ADD TO FAVOURITES

Abstract | References | Citations | Supplementary Data

Background: The world has witnessed growing complexities in disease scenario influenced by the drastic changes in host-pathogen- environment triadic relation. Pharmaceutical R are in constant search of novel therapeutic entities to hasten transition of drug molecules from lab bench to patient bedside. Extensive animal studies and human pharmacokinetics are still the "gold standard" in investigational new drug research and bio-equivalency studies. Apart from cost, time and ethical issues on animal experimentation, burning questions arise relating to ecological disturbances, environmental hazards and biodiversity issues. Grave concerns arises when the adverse outcomes of continued studies on one particular disease on environment gives rise to several other pathogenic agents finally complicating the total scenario. Thus Pharma R face a challenge to develop bio-waiver protocols. Lead optimization, drug candidate selection with favorable pharmacokinetics and pharmacodynamics, toxicity assessment are vital steps in drug development.

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

3.3.1 Number of research papers per teachers in the Journals notified on UGC / SCOPUS / WEB OF SCIENCE website during the Year 2018-19



NIH National Library of Medicine
National Center for Biotechnology Information

Log in

PubMed.gov

Search

Advanced

User Guide

Save | Email | Send to | Display options

Biol Trace Elem Res. 2019 Jul;190(1):150-156. doi: 10.1007/s12011-018-1541-5. Epub 2018 Oct 7.

Enhancement in Iron Absorption on Intake of Chemometrically Optimized Ratio of Probiotic Strain Lactobacillus plantarum 299v with Iron Supplement Pearl Millet

Shanta Kumari Adiki [1], Chandra Kiran Perla [2], Gargi Saha [3], Prakash Katakam [4], Vinaykumar Theendra [2]

Affiliations + expand

PMID: 30293131 DOI: 10.1007/s12011-018-1541-5

Abstract

This research article aims to establish the intake ratio of probiotic Lactobacillus plantarum 299v with iron supplement pearl millet by central composite design of response surface methodology so as to enhance iron absorption. In anemic rat models, the food intake pattern, body weight, hemoglobin content, and hematocrit values were found to be significantly increased on treatment with pearl millet:probiotic; however, incorporation of probiotics at lower dose (0.5 g) was significantly ($p < 0.05$) effective in enhancing iron absorption, and further increment in probiotic doses (1.0 g) did not produce significant increase in hemoglobin and hematocrit values as evidenced by the experimental

FULL TEXT LINKS

SpringerLink

ACTIONS

Cite

Favorites

SHARE

PAGE NAVIGATION

Title & authors

Abstract

MeSH terms

Substances

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

Research J. Pharm. and Tech. 11(6): June 2018

ISSN 0974-3618 (Print)
0974-360X (Online)

www.rjptonline.org

RJPT

RESEARCH ARTICLE

Design and *In-vitro* Evaluation of Cefuroxime axetil floating Microbeads for Treatment of acute Bacterial caused Chronic Bronchitis

Harekrishna Roy[1*], S Balaiah[2], Vinay Kumar T[2]

[1]Department of Pharmaceutics, Nirmala College of Pharmacy, Atmakur, Mangalagiri, Guntur (Dist)-522503, Andhra Pradesh, India

[2]Department of Pharmacology and Pharmacy Practice, Nirmala College of Pharmacy, Atmakur, Mangalagiri, Guntur (Dist)-522503, Andhra Pradesh, India

*Corresponding Author E-mail: **hareroy@gmail.com**

ABSTRACT:

Aim: The point of the this work is to get ready floating microbeads of cefuroxime axetil as model medication to accomplish an expanded maintenance in upper GIT which brings about upgraded ingestion, in this manner enhances bioavailability and dodging various dosing for interminable bronchitis. **Methods:** In the present examination microbeads were set up by particle gelation technique utilizing polymers like sodium alginate, Hydroxy propyl methyl cellulose (HPMC K4M, 100M), citrus extract, gas shaping specialist like sodium bicarbonate. Calcium chloride and Barium chloride arranged as gas curing operators. Arranged microbeads were assessed for Micromeritic property, molecule size and morphology, in-vitro buoyancy study, drug loading and encapsulation efficiency, in-vitro medicate discharge dynamic examinations. **Results:** The microbeads exhibit free-flowing and good-packing properties and have irregular surface with pores which is confirmed by scanning electron microscope. The mean particle sizes as well as the drug content of the floating micro beads were found to be increased by increasing the amount of sodium bicarbonate concentration. The prepared microbeads exhibited prolonged drug release for 12 hrs and remained floatened up to 8 hrs. Barium chloride connected microbeads demonstrated better drug release of 99.48 rate and drug content of 99.39 rates when contrasted with calcium chloride connected. *In-vitro* discharge contemplates exhibited non-Fickian dispersion of medication from the microbeads. **Conclusion:** It is observed that antibiotics like cefuroxime axetil can be designed and formulated as optimized floating microbeads which are effectively used to cure chronic bronchitis

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

3.3.1 Number of research papers per teachers in the Journals notified on UGC / SCOPUS / WEB OF SCIENCE website during the Year 2018-19

March 15, 2018

Journal article | Open Access

FORMULATION AND IN VITRO EVALUATION OF NIFEDIPINE FLOATING MATRIX TABLETS BY USING NATURAL POLYMERS

Shaik Asha Begum*, Ramya Sri Sura , Bandlamudi.Vineela, Tirumalasetti. V. Siva Naga Sai Bhanu Sree, Moghal. Rafiya Begum, Abdul. Kareemunnisa

In the present research work gastro retentive floating matrix formulation of Nifedipine by using Natural polymers were developed. Initially analytical method development was done for the drug molecule. Absorption maxima was determined based on that calibration curve was developed by using different concentrations. Gas generating agent sodium bicarbonate concentration was optimised. Then the formulation was developed by using different concentrations of polymers Xanthan gum, guar gum and Karaya Gum as polymeric substances. The formulation blend was subjected to various preformualation studies, flow properties and all the formulations were found to be good indicating that the powder blend has good flow properties. Among all the formulations the formulations Karaya Gum as polymer were retarded the drug release more than12 hours. whereas in low concentrations the polymer was unable to produce the desired action. The formulations prepared with guar gum were also retarded the drug release up to 12 hours (F6=96.32%). The optimised formulation dissolution data was subjected to release kinetics, from the release kinetics data it was evident that the formulation followed zero order mechanism of drug release. Keywords: Nifedipine, Xanthan gum, guar gum and Karaya Gum, Floating Tablets

NIRMALA COLLEGE OF PHARMACY GUNTUR Dt. ATMAKURU MANGALAGIRI

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

Prescribing Pattern and Pharmacoeconomic Evaluation of Antihypertensive Drugs at a Tertiary Care Hospital

Prasanth CH Pharm D[1*], Sathish Kumar V Pharm D[1], Akhila M Pharm D[1] and Swathi V[2]

[1] Department of Pharmacy Practice, Nirmala College of Pharmacy, Mangalagiri, Guntur, AP, India

[2] Assist.Professor, Department of Pharmacology, Nirmala College of Pharmacy, Mangalagiri, Guntur, AP, India

[*]**Correspondence:** Prasanth CH, Pharm D, Department of Pharmacy Practice, Nirmala College of Pharmacy, Mangalagiri, Guntur, AP, India, **Email:** prasanth.ch93@gmail.com

Citation: Prasanth CH, Sathish Kumar V, Akhila M, Swathi V. Prescribing Pattern and Pharmacoeconomic Evaluation of Antihypertensive Drugs at a Tertiary Care Hospital. J Basic Clin Pharma 2018;9:308-310

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

www.ijapbc.com IJAPBC – Vol. 7(1), Jan – Mar, 2018 ISSN: 2277 - 4688

INTERNATIONAL JOURNAL OF ADVANCES IN PHARMACY, BIOLOGY AND CHEMISTRY

Review Article

A Scientific review on Crateva religiosa

V.Srinivas *[1], G.Surendra[1], M.Anjana[2], A.Sai Kiran[2], D.Subba reddy[2], V.Swathi[2]

[1] K.C.Reddy college of pharmacy, Satenapalli, Medikonduru, Guntur Dist, A.P, India.

[2] Nirmala college of pharmacy, Atmakuru, Mangalagiri, Guntur Dist, A.P, India.

ABSTRACT

Sacred garlic pear is the common name for Crateva Religiosa belongs to crateva genus and Capparaceae family. Traditionally it is used to treat many disorders but very few abstracts are proving its scientific evidence. Hence an attempt has been made to collect the information regarding its cultivation requirements, folklore usages pharmacological action with its phytochemical isolates. With this review it was found that even though many folklore usage are present for this divine fruit but very little research was conducted on this species of Capparaceae family, hence this review will be helpful for plant researchers to work on this species.

Keywords : Crateva religiosa , Capparaceae , phytochemical and pharmacological activity.

Introduction

Herbal medicine has been around since the beginning of recorded history. Currently, there is an increasing interest in the use of plant for treatment of illness. The easy accessibility and cheapness of medicinal religiosa species which belongs to the capparaceae family. Out of all the species of crateva religiosa was found to have very few scientific evidence in its treatment towards alleviating diseases/ disorders.

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

3.3.1 Number of research papers per teachers in the Journals notified on UGC / SCOPUS / WEB OF SCIENCE website during the Year 2018-19

Review Article

Drug interactions: A review with protein displacement drug-drug interaction

Sreya Kosanam

Department of clinical Pharmacy,

ASN Pharmacy College, Tenali, Guntur dist., Andhra Pradesh. India

Received: 20 April 2018 Revised: 20 May 2018 Accepted: 23 May2018

Abstract

Drug interactions are an important segment of drug related problems. Evaluation of Drug interactions is necessary along with patient management, especially in children and elderly patients who often receive multiple medications. Severity of drug-drug interactions is one of the problems which are poorly understood within the clinical medicine. It is increasingly necessary to become acquainted with the workings of protein bound metabolism and associated drug interaction which leads to increased free concentrations of drug in the body. In this manuscript drug interactions with emphasis on their relevance and mechanism are reviewed. Additionally, as an example of protein displacement drug-drug interaction between valporate and aspirin is discussed.

Keywords: Drug interactions, mechanisms, protein bound, valporate, aspirin

Introduction

A drug interaction is a situation in which a substance (usually another drug) affects the activity of a drug when both are administered together. This action can be synergistic (when the drug's effect is increased) or antagonistic (when the drug's effect is decreased) or a new effect can be produced that neither produces on its own. These interactions may occur out of accidental misuse or due to lack of knowledge about the active administration of a receptor antagonist and an agonist for the same receptor.

Synergy and antagonism

When the interaction causes an increase in the effects of one or both of the drugs the interaction is called a synergistic effect. An "additive synergy" occurs when the final effect is equal to the sum of the effects of the two drugs. When the final effect is much greater than the sum of the two effects this

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

3.3.1 Number of research papers per teachers in the Journals notified on UGC / SCOPUS / WEB OF SCIENCE website during the Year 2018-19

The Journal of Phytopharmacology 2018; 7(4): 373-375
Online at: www.phytopharmajournal.com

Research Article

ISSN 2320-480X
JPHYTO 2018; 7(4): 373-375
July- August
Received: 21-04-2018
Accepted: 12-07-2018

Joji Babu V
Department of Pharmacology, Nirmala College of Pharmacy, Atmakuru (v), Mangalagiri(M), Guntur-522503, Andhra Pradesh, India

Sireesha TSM
Department of Pharmacology, Nirmala College of Pharmacy, Atmakuru (v), Mangalagiri(M), Guntur-522503, Andhra Pradesh, India

Anjana Male Ch. KVLSN
Department of Pharmacology, Nirmala College of Pharmacy, Atmakuru (v),

Evaluation of anticonvulsant activity of ethanolic extract of *Gomphrena serrata* by using Swiss albino mice

Joji Babu V, Sireesha TSM, Anjana Male Ch. KVLSN, Swathi V, Balaiah S, Subba Reddy D*

ABSTRACT

Epilepsy is characterised by abnormal behaviour which is leading to tonic flexon, tonic extension, clonus and stupor. Many novel therapeutic regimens were used to treat these disorders through different ways including altering neurotransmission, but so far there is no specific treatment approach which is satisfactory to the patients in terms of complete cure. Our approach is to make understand the herbal medicines usage towards epilepsy. The ethanolic plant extract of *Gomphrena Serrata* at 400mg/kg, 600mg/kg and 800mg/kg were given to albino mice which were treated with maximum electric shock of 30mA current and pentelene tetrazolium in two different techniques. The results with these extract doses showed significant results which indicated decrease in clonic extension and stupor. Whereas there is no decrease in the tonic flexon observed with all doses. All these results were compared with the standard drug Phenytoin at 25mg/kg I.P. However, the ethanolic plant extract of *Gomphrena Serrata* at 600mg/kg showed marked increase in the therapeutic activity which is equivalent to Phenytoin and can be compared. Apart from these the ethanolic plant extract of *Gomphrena Serrata* at 400mg/kg, 600mg/kg and 800mg/kg showed significant decrease in the recovery times when compared to control group.

NIRMALA COLLEGE OF PHARMACY ATMAKURU MANGALAGIRI GUNTUR Dt.

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

3.3.1 Number of research papers per teachers in the Journals notified on UGC / SCOPUS / WEB OF SCIENCE website during the Year 2018-19

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

International Journal of Pharmaceutical and Phytopharmacological Research (eIJPPR) | October 2019| Volume 9| Issue 5 | Page 136-141
K.Sowjanya, Invitro anti-oxidant Activity of *Hordeumvulgare* Leaf

Invitro anti-oxidant Activity of *Hordeumvulgare* Leaf

K.Sowjanya[1*], B.Pravallika[2], J.Poojitha[2], K.Ashok Kumar[2]

[1]*Associate Professor, Department of Pharmaceutical Chemistry, Nirmala College of Pharmacy, Atmakur, Mangalagiri, India.*

[2]*Master of Pharmacy, Nirmala College of Pharmacy, Atmakur, Mangalagiri, India.*

ABSTRACT

Objective: The present study aimed to evaluate the in-vitro antioxidant activity of *Hordeum vulgare* belonging to family Poaceae. **Methods:** The shade-dried stem part of *H. vulgare* (1kg) was powdered and extracted by chloroform, petroleum ether, ethanol, and aqueous extraction methods using soxhlation. The extracts were concentrated using a rotary evaporator under decreased pressure at 40 °C until they were free of solvents. Thereby crude extracts were provided and employed for further studies. The antioxidant activity of *Hordeum vulgare* leaf using DPPH* radical scavenging model and to assess the antioxidant activity of *Hordeum vulgare* leaf and stem using Nitric oxide free radical (NO*) scavenging model and to assess the antioxidant activity of *Hordeum vulgare* leaf using superoxide free radical (SO*) scavenging model and to assess the antioxidant activity of *Hordeum vulgare* leafusing hydroxide free radical (OH*) scavenging model.**Results:** The graph was extrapolated between different concentrations of the plant extracts and the inhibition percentage to find out the half-maximal inhibition concentration. The extracts exhibited dose-dependent neutralization of DPPH*, NO*, SO*, and OH* free radicals and their activity was compared with standard curcumin. The IC50 was calculated for 310 µg, 620 µg, and more than 640 µg/ml of the ethanolic extract of *Hordeum vulgare* stem against DPPH*, NO*, SO*, and OH* free radicals, respectively. This indicated that the ethanolic extract of *Hordeum vulgare* leaf exhibited antioxidant activity.**Conclusion:**The antioxidant activity was exhibited due to the presence of tannins, flavonoids, and phenolic compounds, which were present in the methanolic extract of Hordeum vulgare.

Key Words: *Hordeum vulgare, antioxidant, flavonoids, tannins.*

eIJPPR 2019: 9(5):136-141

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

3.3.1 Number of research papers per teachers in the Journals notified on UGC / SCOPUS / WEB OF SCIENCE website during the Year 2018-19

www.ijapbc.com IJAPBC – Vol. 7(1), Jan – Mar, 2018 ISSN: 2277 - 4688

INTERNATIONAL JOURNAL OF ADVANCES IN PHARMACY, BIOLOGY AND CHEMISTRY

Review Article

A Scientific review on Crateva religiosa

V.Srinivas *[1], G.Surendra[1], M.Anjana[2], A.Sai Kiran[2], D.Subba reddy[2], V.Swathi[2]

[1] K.C.Reddy college of pharmacy, Satenapalli, Medikonduru, Guntur Dist, A.P, India.

[2] Nirmala college of pharmacy, Atmakuru, Mangalagiri, Guntur Dist, A.P, India.

ABSTRACT

Sacred garlic pear is the common name for Crateva Religiosa belongs to crateva genus and Capparaceae family. Traditionally it is used to treat many disorders but very few abstracts are proving its scientific evidence. Hence an attempt has been made to collect the information regarding its cultivation requirements, folklore usages pharmacological action with its phytochemical isolates. With this review it was found that even though many folklore usage are present for this divine fruit but very little research was conducted on this species of Capparaceae family, hence this review will be helpful for plant researchers to work on this species.

Keywords : Crateva religiosa , Capparaceae , phytochemical and pharmacological activity.

Introduction

Herbal medicine has been around since the beginning of recorded history. Currently, there is an increasing interest in the use of plant for treatment of illness. The easy accessibility and cheapness of medicinal plants encourage their use but most of the uses are not validated. According to WHO more than 80% of world's population, are thought to depend chiefly on

religiosa species which belongs to the capparaceae family. Out of all the species of crateva religiosa was found to have very few scientific evidence in its treatment towards alleviating diseases/ disorders. Hence this review will be helpful for the researchers to carry out further work on this plant.

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

3.3.1 Number of research papers per teachers in the Journals notified on UGC / SCOPUS / WEB OF SCIENCE website during the Year 2018-19

IJPSR (2018), Volume 9, Issue 12 (Research Article)

INTERNATIONAL JOURNAL OF PHARMACEUTICAL SCIENCES AND RESEARCH

Received on 13 April, 2018; received in revised form, 04 June, 2018; accepted, 14 June, 2018; published 01 December, 2018

IN-VITRO ANTI OXIDANT POTENTIAL SCREENING OF DIFFERENT LEAF EXTRACTS OF *ABELMOSCHUS ESCULENTUS* LINN.

Srinivas Rao Vandavasi * [1], Grandhi Surendra [2], Anjana Male [3], A. Saikiran [3], I. Sundar Raj [3] and A. Reshma Naidu [3]

Acharya Nagarjuna Unviersity College of Pharmaceutical Sciences [1], Nagarjuna Nagar, Guntur - 522510, Andhra Pradesh, India.
Vijaya Institute of Pharmaceutical Sciences [2], Enikepadu, Vijayawada, Krishna - 521108, Andhra Pradesh, India.
Nirmala College of Pharmacy [3], Atmakuru, Mangalagiri, Guntur - 522503, Andhra Pradesh, India.

Keywords:

Abelmoschus esculentus, Antioxidant activity, DPPH, Nitric oxide, Super oxide radical

Correspondence to Author:
V. Srinivas Rao

Research Scholar,
Acharya Nagarjuna Unviersity College of Pharmaceutical Sciences,
Nagarjuna Nagar, Guntur - 522510,
Andhra Pradesh, India.

E-mail: srinivas.vandavasi@gmail.com

ABSTRACT: Free radicals are toxic by products of natural cell metabolism and are responsible for causing a wide number of health problems. Okra is a one of the traditional plant scientifically known as *Abelmoschus esculentus* Linn. belong to the family Mallow, having rich nutritional value and proved to have many therapeutic uses, various parts of this plant is used in different types of treatment, preparation of pharmaceutical products and also used in preparation of fibers. Scientifically leaf extract of *Abelmoschus esculentus* proved to have antipyretic, antispasmodic, anti-cancer, immuno modulatory activity. In this study petroleum ether extract, chloroform, Ethanolic extracts of *Abelmoschus esculentus* Linn. leaves were evaluated *in-vitro* by experimental parameters such as DPPH scavenging activity, Nitric oxide radical, Hydroxyl radical scavenging, superoxide dismutase scavenging capacity. *Abelmoschus esculentus* Linn. is used as an antioxidant, antidiabetics, hepatoprotective, cytotoxic activity, genetoxicity, antitumour activity, antilice agent. It is related to contain alkaloids, carbohydrates, fixed oils, tannins and phenolic.

INTRODUCTION: According to the WHO For most of the disease, plant materials are used as

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

3.3.1 Number of research papers per teachers in the Journals notified on UGC / SCOPUS / WEB OF SCIENCE website during the Year 2018-19

International Journal of Current Advanced Research
ISSN: O: 2319-6475, ISSN: P: 2319-6505, Impact Factor: 6.614
Available Online at www.journalijcar.org
Volume 7; Issue 12(C); December 2018; Page No. 16532-16544
DOI: http://dx.doi.org/10.24327/ijcar.2018.16544.3060

Review Article

A COMPREHENSIVE REVIEW ON ANTIOXIDANTS

Rayi Ratna Manjula., Annam Saikiran., AnanthaReshma Naidu., Injety Sundar Raj and Uppuluri Spandana*

Nirmala College of Pharmacy, Atmakur, Mangalagiri, Guntur-522503

ARTICLE INFO

Article History:
Received 06th September, 2018
Received in revised form 14th October, 2018
Accepted 23rd November, 2018
Published online 28th December, 2018

Key words:
Antioxidants, types of antioxidants, Reactive oxygen species, oxidative stress and Reperfusion injury.

ABSTRACT

This present review mainly focused on providing a brief and latest information on antioxidants its classification, antioxidants role in human body, pharmacology of antioxidants, benefits, list of foods which contain high antioxidant content and effects that causes due to overdose of antioxidants. All living organisms utilize oxygen to metabolize various substances and use the dietary nutrients in order to produce energy for survival. Oxygen thus is a vital component for all living aerobic organisms. Antioxidants are man-made or natural substances that may prevent or delay some types of cell damage, such as that caused by free radicals. Each of the living organisms thus have a complex network of antioxidant metabolites and enzymes that act together to prevent oxidative damage to cellular components such as DNA, proteins and lipids. These systems of antioxidants prevent these reactive oxygen species (ROS) species from being formed or remove them before they can damage vital components of the cell.

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

3.3.1 Number of research papers per teachers in the Journals notified on UGC / SCOPUS / WEB OF SCIENCE website during the Year 2018-19

ASIAN JOURNAL OF PHARMACEUTICAL AND CLINICAL RESEARCH

INNOVARE ACADEMIC SCIENCES
Knowledge to Innovation

Vol 12, Issue 3, 2019

Online - 2455-3891
Print - 0974-2441

Review Article

THE MULTI-ACTIVITY HERBACEOUS VINE - *TINOSPORA CORDIFOLIA*

SOWJANYA KATTUPALLI, VAISHNAVI VESTA, SANDHYA VANGARA, UPPULURI SPANDANA*

Department of Pharmaceutical Chemistry, Nirmala College of Pharmacy, Guntur, Andhra Pradesh, India. Email: spuppuluri@gmail.com

Received: 25 September 2018, Revised and Accepted: 15 November 2018

ABSTRACT

Tinospora cordifolia (Willd.) Miers ex Hook. F. and Thoms is a large deciduous, climbing shrub found throughout India, especially in the tropical parts ascending to an altitude of 300 m and also in certain parts of China (Anonymous). It belongs to the family Menispermaceae. It is known as heart-leaved Moonseed plant in English, Guduchi in Sanskrit, and Giloy in Hindi. It is known for its immense application in the treatment of various diseases in the traditional ayurvedic literature. *T. cordifolia*, also named as "heavenly elixir," is used in various ayurvedic decoctions as panacea to treat several body ailments. (Mishra R,) Its root stems, and leaves are used in Ayurvedic medicine. *T. cordifolia* is used for diabetes, high cholesterol, allergic rhinitis (hay fever), upset stomach, gout, lymphoma and other cancers, rheumatoid arthritis, hepatitis, peptic ulcer disease, fever, gonorrhea, syphilis, and to boost the immune system (WebMD).

Keywords: *Tinospora cordifolia*, Heavenly elixir, Guduchi, Tippa-Teega, Tinosporic acid.

 DOI: http://dx.doi.org/10.22159/ajpcr.2019.v12i3.29949

INTRODUCTION

Tinospora cordifolia, commonly called as "GUDUCHI," Amrta, and Cinnodbhava in Sanskrit; Gllow in Punjabi; Tippa-Teega in Telugu; Shindilakodi in Tamil; Amruthu and Chittamruthu in Malayalam; Amruthaballi in Kannada; Bândaul pich in Khmer; Rasakinda in Sinhala; Boraphêt in Thai; Guduchi and Gulvel in Marathi; Gurch and Guluncha in Urdu; Ningthou khongli in Manipuri; Theisawntlung in Mizo; Gulancha in Bengali; Guluchi in Odia; Gujro in Nepali; Galac and Garo in Gujarati; Geloy, Guruc and Gurcha in Hindi; Amritvel in Konkani; Hogunilot in Assamese; and Gurjo in Sikkhim, belongs to the family Memispermaceace. It is genetically large, diverse climbing shrub with flowers of greenish-yellow color and the flowering season expands over summer and winter. It is indigenous but mainly in warm and rainy climate. It does not tolerate high rainfall and waterlogged conditions.

As *Tinospora* is a climber, it requires support for its growth (fast-growing species such as neem, jatropa, and moringa). For example, *T. cordifolia* growing with neem (*Azadirachta indica*) is called as NEEM GILOY.

CHEMICAL CONSTITUENTS

Columbin, tinosporaside, jatrorhizine, palmatine, berberine, tembeterine, tinocordifolioside, phenylpropene disaccharides, choline, tinosporic acid, tinosporal, tinosporon, tinosporine, sitosterol (beta form), tinocordiside, magniflorine are the therapeutically active

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

3.3.1 Number of research papers per teachers in the Journals notified on UGC / SCOPUS / WEB OF SCIENCE website during the Year 2018-19

IJRPC 2018, 8(3), 437-441 Spandana et al ISSN: 2231–2781

INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND CHEMISTRY

Available online at www.ijrpc.com

Review Article

BEST WEIGHT LOSS: BOTTLE GOURD

Pallepati Lakshmaiah[1], M. NagaJyothi[2], V. Tulasi Ram[3],

T. Srilakshmi[4] and Uppuluri Spandana[5*]

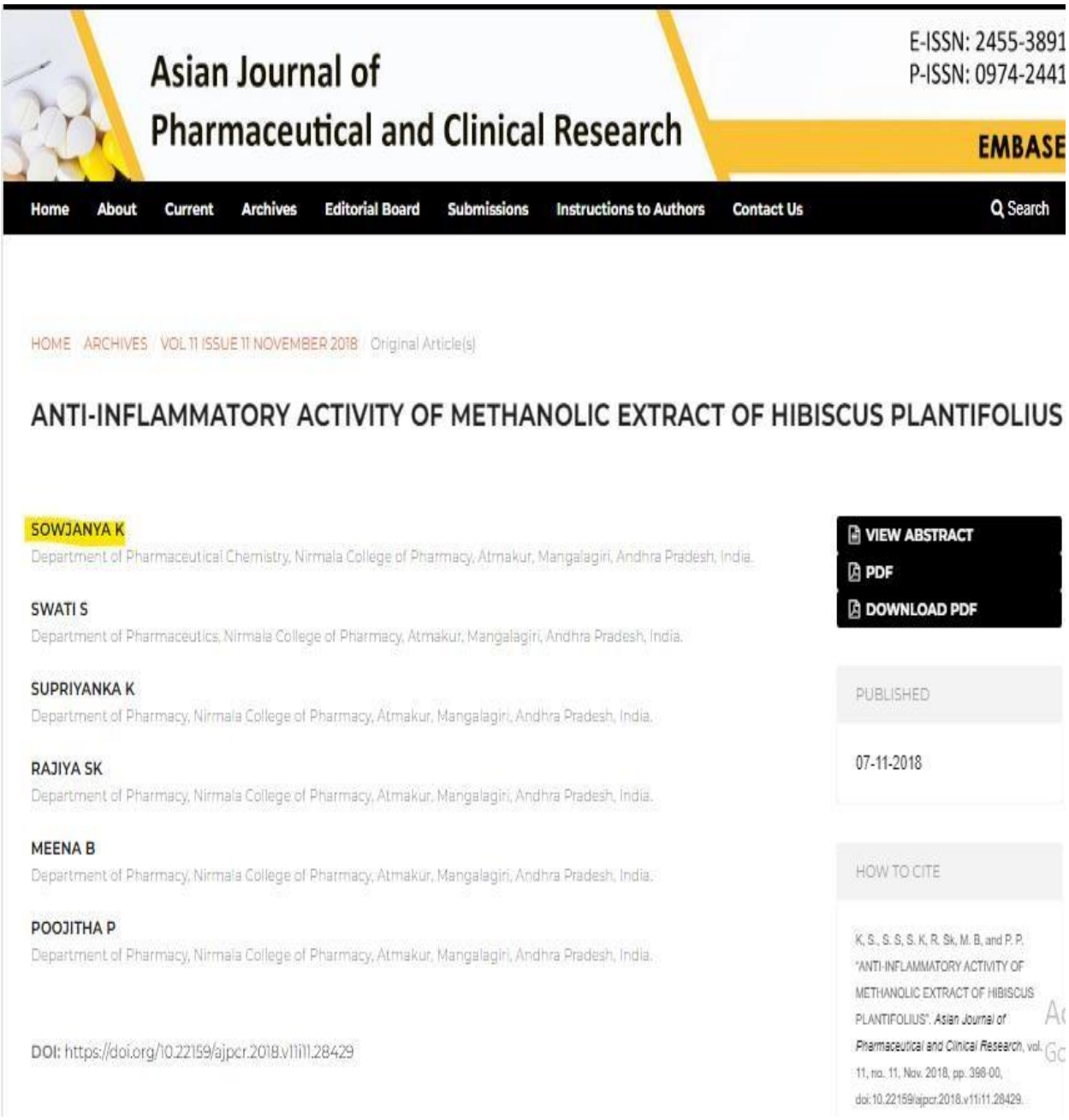
[1]Viswabharathi college of Pharmacy, N. R .T. Road,
Perecherla, Medikonduru MD, Guntur District- 522 009,Andhra Pradesh, India.
[2,3,4,5]Nirmala college of pharmacy, Atmakur, Mangalagiri, Guntur district,
Andhra Pradesh, India.

ABSTRACT

Bottle gourd *(Lagenariasiceraria)* is a green colour, longitudinal vegetable synonym calabash gourd belongs to the family cucurbitaceae. Bottle gourd most probably originated in tropical Africa, and occupies first place in India. It is only the crop known to have been cultivated in pre- columbian times in both the world and new world. Bottle gourd extracts of the plant shows antibiotic activity rich in vit-C, and thiamine. The fruit pulp is used as emetic, purgative, diuretic. Bottle gourd is also considered of the best weight loss. Bottle gourd reported activities are free radical scavenging activity, antioxidant activity, lipase inhibitory activity, diuretic activity, cardio protective activity, antimicrobial activity,

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

3.3.1 Number of research papers per teachers in the Journals notified on UGC / SCOPUS / WEB OF SCIENCE website during the Year 2018-19



Asian Journal of Pharmaceutical and Clinical Research

E-ISSN: 2455-3891
P-ISSN: 0974-2441

EMBASE

ANTI-INFLAMMATORY ACTIVITY OF METHANOLIC EXTRACT OF HIBISCUS PLANTIFOLIUS

SOWJANYA K
Department of Pharmaceutical Chemistry, Nirmala College of Pharmacy, Atmakur, Mangalagiri, Andhra Pradesh, India.

SWATI S
Department of Pharmaceutics, Nirmala College of Pharmacy, Atmakur, Mangalagiri, Andhra Pradesh, India.

SUPRIYANKA K
Department of Pharmacy, Nirmala College of Pharmacy, Atmakur, Mangalagiri, Andhra Pradesh, India.

RAJIYA SK
Department of Pharmacy, Nirmala College of Pharmacy, Atmakur, Mangalagiri, Andhra Pradesh, India.

MEENA B
Department of Pharmacy, Nirmala College of Pharmacy, Atmakur, Mangalagiri, Andhra Pradesh, India.

POOJITHA P
Department of Pharmacy, Nirmala College of Pharmacy, Atmakur, Mangalagiri, Andhra Pradesh, India.

DOI: https://doi.org/10.22159/ajpcr.2018.v11i11.28429

VIEW ABSTRACT
PDF
DOWNLOAD PDF

PUBLISHED
07-11-2018

HOW TO CITE

K, S., S. S, S. K, R. Sk, M. B, and P. P. "ANTI-INFLAMMATORY ACTIVITY OF METHANOLIC EXTRACT OF HIBISCUS PLANTIFOLIUS". *Asian Journal of Pharmaceutical and Clinical Research*, vol. 11, no. 11, Nov. 2018, pp. 398-00, doi:10.22159/ajpcr.2018.v11i11.28429.

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

S.Swati et al /J. Pharm. Sci. & Res. Vol. 10(9), 2018, 2166-2168

ISSN:0975-1459
Journal of Pharmaceutical Sciences and Research
www.jpsrpharmainfo.in

A Phyto Pharmacological Review on Cotoneaster microphyllus Species

S.Swati*[1],R.R. Manjula[2],K.Sowjanya[3],Y.Vennela[4],K.Tanuja[5]
[1]Assistant Professor,Department of Pharmaceutics,Nirmala college of Pharmacy,Atmakur,Guntur,A.P,India
[2,3]Associate Professor, Department of Pharmaceutical and Phytochemistry,,Nirmala college of Pharmacy,Atmakur,Guntur,A.P,India
[4,5] Bachelor of Pharmacy, Nirmala college of Pharmacy,Atmakur,Guntur,A.P,India

Abstract:
Rockspray Cotoneaster is a prostrate, mat-forming shrub which will climb over rocks. It is a strong contender for the plant found at highest altitudes.In this review a brief discussion of cotoneaster microphyllus species were discussed and compared its habit and habitats of various species . It has wide uses and benefits along with toxic effects as well as phytochemical and pharmacological activity responsible for anti diabetic activity and anti diarrhoearial activity.

Keywords : cotoneaster microphyllus, toxic effects, phytochemical and pharmacological activity.

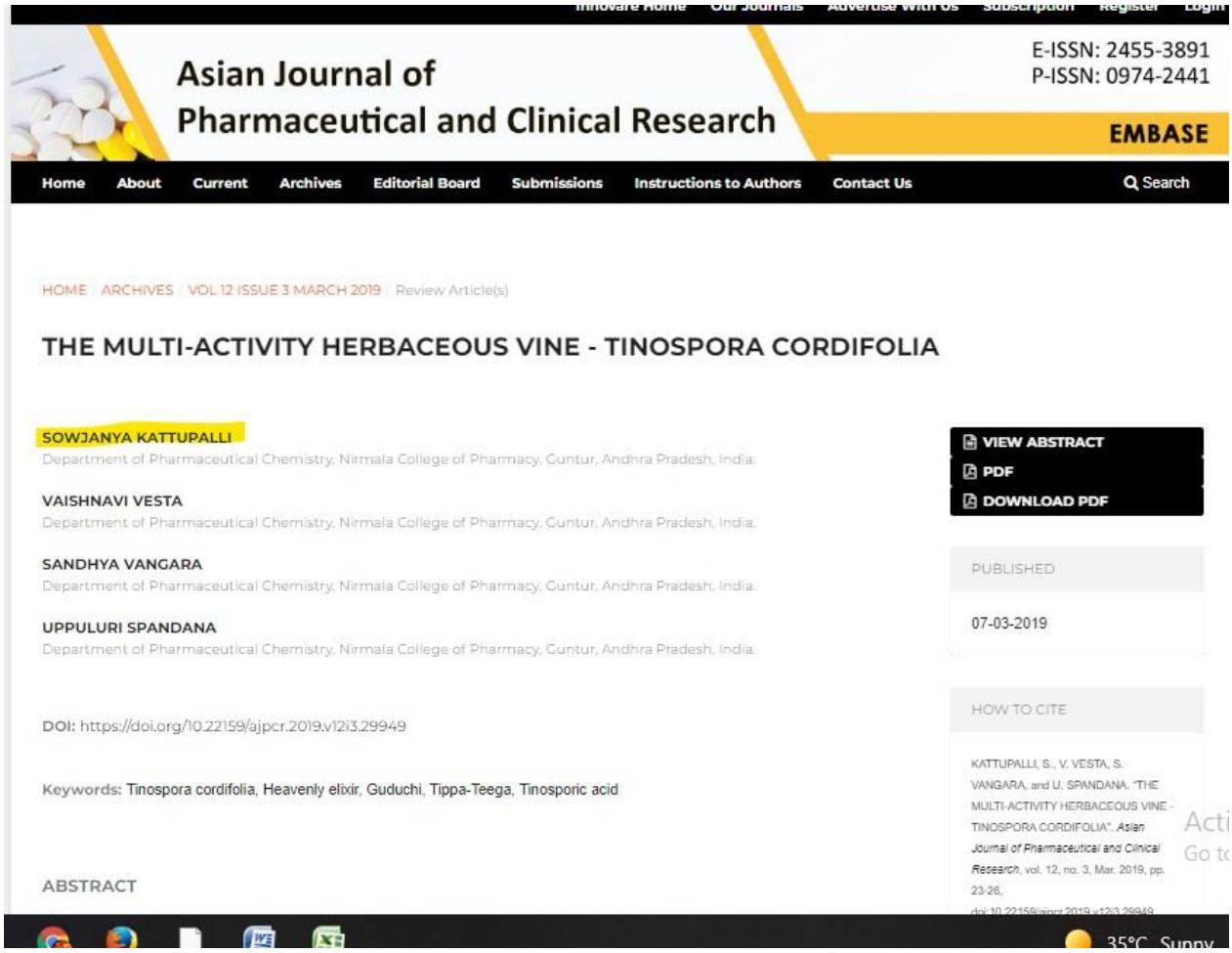
INTRODUCTION:

Cotoneaster microphyllus is a evergreen unpopular plant mostly found in the hill station areas Cotoneaster microphyllus is a medicinal plant belonging to the family rosaceae and is a rich source of flavonoids and glycosides which are distributed in the parts leaves,berries,flowers of the plant. These flavonoids have found extensive application in the treatment of dysmenorrohea and dermatitis.The cyanoglycosides are found in the part of the fruit, leaf, and bark,stolons which has potential as astringent property . It is important to mention that the part of the cotoneaster microphyllus plant that berries were poisonous causing gastro enteritis if consumed.Cotoneaster microphyllus is well suited for use as an ornamental because of its graceful white flowers in spring and brilliant red fruit in autumn.[1]And the Leaves cotoneaster microphyllus plants are used for Dermatitis.[2]These shrubs with height-50 to 100cm and width 1 to 1.5cm.[3] And these plants are trailing on rocks on grassy hillsides about 1200-5400mt and river valleys at elevations of 2000-4200mt.[4] These are low growing , spreading shrubs and mostly grown in hill and cold place. [5] And the favourable soil type for this plant is clay,sandy,and heavy soils.This can cultivated on all type of pH like acidic,basic,neautral.The required heat zones of this plants are light shade and it require moderate water for growth.The life type of this plants are evergreen and the life cycle is perennial.[6]. It prefers good soil but also grown in poor soils.Most of these are slow growing hybridization easily with other genus.Cotoneaster will tolerate range of soil types-from the poor dry soils to moist fertile loams.For best results plant in full sun,this shrub will happily grown under partial shade.Prune to shape in spring-removing wood if necessary. It is important it protect from wild River valley, Tibet. The fruit has important ornamental value due to its persistent brilliant color.[8] Common name is cotoneaster conspicuous Decorus.[10]And these are native to south east Tibet.It grows to 1 to 1.5 meters height with white five stellate flowers followed by fruit.[11]

- **Cotoneaster microphyllus var . glacialis**
  Very rarely offered,this wild collected seed was found at an altitude of 4,000 meters in Nepal where it cover rocks and ground with total creeping carpets smotheres in white flowers in spring.Later comes impressive display of dazzling red berries.[12]These are shrubs reach heights of 50 to 70 cm.And bluish green simple alternate leaves.They are elliptic.These plants are native to Himalayas.[13]
- **Cotoneaster microphyllus var. cochleatus**
  This type with revolute leaves, and occurs in Yunnan and Sichuan.[14] The species is native in Himalayas,Nepal,Sikkim and in south western china.These are low dwarf shrubs.forming very dense and low dark green hummocks.The leaves are ever green,alternate,small,elliptic to obovate and margins are rolled downwards.It has white solitary flowers in may to june.The fruits are brilliant red and globose. [15]
- **Cotoneaster microphyllus var. Thymifollyus**
  It has relatively narrow, revolute leaves and bright red fruit, occurs at elevations of 3,000-4,000 m, in northwestern Yunn[16] It has tiny leaves with rolled edges.And first are in dark red colour.In early summer the it produces pink buds that open to white flowers.The main branches are horizontal but secondary branches are held more upright and arching especially when weighed with berries.It is a ever green shrub

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P

3.3.1 Number of research papers per teachers in the Journals notified on UGC / SCOPUS / WEB OF SCIENCE website during the Year 2018-19



Asian Journal of Pharmaceutical and Clinical Research

E-ISSN: 2455-3891
P-ISSN: 0974-2441

EMBASE

Home | About | Current | Archives | Editorial Board | Submissions | Instructions to Authors | Contact Us | Search

HOME / ARCHIVES / VOL 12 ISSUE 3 MARCH 2019 / Review Article(s)

THE MULTI-ACTIVITY HERBACEOUS VINE - TINOSPORA CORDIFOLIA

SOWJANYA KATTUPALLI
Department of Pharmaceutical Chemistry, Nirmala College of Pharmacy, Guntur, Andhra Pradesh, India.

VAISHNAVI VESTA
Department of Pharmaceutical Chemistry, Nirmala College of Pharmacy, Guntur, Andhra Pradesh, India.

SANDHYA VANGARA
Department of Pharmaceutical Chemistry, Nirmala College of Pharmacy, Guntur, Andhra Pradesh, India.

UPPULURI SPANDANA
Department of Pharmaceutical Chemistry, Nirmala College of Pharmacy, Guntur, Andhra Pradesh, India.

VIEW ABSTRACT
PDF
DOWNLOAD PDF

PUBLISHED
07-03-2019

DOI: https://doi.org/10.22159/ajpcr.2019.v12i3.29949

Keywords: Tinospora cordifolia, Heavenly elixir, Guduchi, Tippa-Teega, Tinosporic acid

HOW TO CITE

KATTUPALLI, S., V. VESTA, S. VANGARA, and U. SPANDANA. "THE MULTI-ACTIVITY HERBACEOUS VINE - TINOSPORA CORDIFOLIA". *Asian Journal of Pharmaceutical and Clinical Research*, vol. 12, no. 3, Mar. 2019, pp. 23-26, doi:10.22159/ajpcr.2019.v12i3.29949

ABSTRACT

PRINCIPAL
NIRMALA COLLEGE OF PHARMACY
ATMAKUR VILLAGE,
MANGALAGIRI, GUNTUR Dt., A.P