

ISSN: 1816-1820 (Print version)
1816-1839 (Online version)

The Dhaka University Journal of Pharmaceutical Sciences

(*Dhaka Univ. J. Pharm. Sci.*)

Vol. 17, No. 2

December, 2018

This publication is covered by SCOPUS, CAS, HINARI, EmbaseTM, Embase-Elsevier, SCIENCE, ROAD, CROSSREF, MEDIA, SCIMAGO, ADAT, Directory of Research Journals Indexing, ResearchGate, JournalTOCs, Internetchemistry, Scopus and several other abstracting systems.

In addition all papers of each issue are available in
<www.dujps.com> <www.pharmadu.net>
<www.banglajol.info/index.php>

EDITORIAL BOARD

Editor

Emeritus Prof. Dr. A. K. Azad Chowdhury

Department of Clinical Pharmacy and Pharmacology
University of Dhaka

Associate Editor

Prof. Dr. Md. Abdur Rashid

Department of Pharmaceutical Chemistry
University of Dhaka

Members

Prof. Dr. S. M. Abdur Rahman

Dean, Faculty of Pharmacy
University of Dhaka

Professor Dr. Monira Ahsan

Department of Pharmaceutical Chemistry
University of Dhaka

Professor Dr. Abu Shara Shamsur Rouf

Department of Pharmaceutical Technology
University of Dhaka

Prof. Dr. Sitesh Chandra Bachar

Chairman, Department of Pharmacy
University of Dhaka

Professor Dr. Syed Shabbir Haider

Chairman, Department of Pharmaceutical
Technology , University of Dhaka

Professor Dr. Choudhury Mahmood Hasan

Department of Pharmaceutical Chemistry
University of Dhaka

Professor Dr. Md. Saiful Islam

Department of Clinical Pharmacy and Pharmacology
University of Dhaka

Prof. Dr. Md. Selim Reza

Department of Pharmaceutical Technology
University of Dhaka

Professor Dr. Mohammad Shawkat Ali

Chairman, Department of Clinical Pharmacy and
Pharmacology, University of Dhaka

Professor Dr. Md. Khalid Hossain

Chairman, Department of Pharmaceutical Chemistry
University of Dhaka

Published by: Emeritus Prof. Dr. A. K. Azad Chowdhury, Editor, *The Dhaka University Journal of Pharmaceutical Sciences*, Faculty of Pharmacy, University of Dhaka, Dhaka-1000, Bangladesh on behalf of the Editorial Board.

Impact Factor: GIF = 0.835 (2015); RG = 0.52 (2015); CiteSchore = 0.38 (2017)

All communications regarding the journal should be addressed to: Emeritus Prof. Dr. A. K. Azad Chowdhury, Editor, *The Dhaka University Journal of Pharmaceutical Sciences*, Faculty of Pharmacy, University of Dhaka, Dhaka-1000, Bangladesh. Phone: 9661920-73/8157, 8137; Fax: 880-2-9667222, E-mail: dujps_du@yahoo.com, editor.dujps@du.ac.bd, r.pchem@yahoo.com, Web: www.dujps.com; www.pharmadu.net

Printed by: Hasib Computers & Printing, 62/1, Purana Paltan, Dhaka-1000, Bangladesh
Phone: 01552-388130, 9016429 (Res.), E-mail: hasibprinting@gmail.com

The Dhaka University Journal of Pharmaceutical Sciences

(*Dhaka Univ. J. Pharm. Sci.*)

Vol. 17

No. 2

December, 2018

CONTENTS

Nur Herlina, Sugeng Riyanto, Sudibyo Martono and Abdul Rohman - Antioxidant Activities, Phenolic and Flavonoid Contents of Methanolic Extract of <i>Stelechocarpus burahol</i> Fruit and its Fractions	153
DOI: http://dx.doi.org/10.3329/dujps.v17i2.39170	
Sri Wahdaningsih, Subagus Wahyuono, Sugeng Riyanto and Retno Murwanti - <i>In vitro</i> Test of Macrophage Phagocytic Activity of Extracts and Fractions of Red Dragon Fruit Peel [<i>Hylocereus polyrhizus</i> (F.A.C.Weber) Britton and Rose]	161
DOI: http://dx.doi.org/10.3329/dujps.v17i2.39171	
Md. Mokaram Hossain, Reza-Ul Jalil and Mohammad A. Rashid - Studies of Degradation Kinetics of a 5-HT ₃ Antagonist, Ramosetron Hydrochloride: Effects of Temperature	167
DOI: http://dx.doi.org/10.3329/dujps.v17i2.39172	
Joy Chandra Rajbangshi, Md. Mahbubul Alam, Md. Shahadat Hossain, Md. Samiul Islam and Abu Shara Shamsur Rouf - Development and Validation of a RP-HPLC Method for Quantitative Analysis of Linagliptin in Bulk and Dosage Forms	175
DOI: http://dx.doi.org/10.3329/dujps.v17i2.39173	
Sonia Ferdousy, B.K. Sajeeb, Shahida Yeasmin and A.B.M. Faroque - Impact Assessment of Different Polymers on Physicochemical Properties of Ibuprofen Loaded Solid Dispersions	183
DOI: http://dx.doi.org/10.3329/dujps.v17i2.39174	
Mahendra Kumar Chouhan, Pramod Jayadevappa Hurakadle and Harsha Vasudev Hegde - <i>Clerodendrum inerme</i> (L.) Gaertn. Extract Exerts Anticancer Activity on Lung Cancer Cells	191
DOI: http://dx.doi.org/10.3329/dujps.v17i2.39175	
Tina Rostinawati, Ami Tjitraresmi and Myra Vania Wisnuputri - <i>In vitro</i> Activity of Rambutan Binjai (<i>Nephelium lappaceum</i>) Peel Extract from Indonesia to Methicillin-Resistant <i>Staphylococcus aureus</i> (MRSA)	197
DOI: http://dx.doi.org/10.3329/dujps.v17i2.39176	
Biswajit Biswas, Mimi Golder, Tannami Islam and Samir Kumar Sadhu - Comparative Antioxidative and Antihyperglycemic Profiles of Pneumatophores of Two Mangrove Species <i>Avicennia alba</i> and <i>Sonneratia apetala</i>	205
DOI: http://dx.doi.org/10.3329/dujps.v17i2.39177	
Margaret O Ilomuanya, Thomas Akhimien, Chinelo Aghaizu, Oluwatobiloba Adeyinka and Tolulope Ajayi - Polyherbal Antioxidant Topical Preparation Comprising Ethanol Extract of <i>Tetracarpidium conophorum</i> and <i>Ocimum gratissimum</i> : Formulation and Evaluation	213
DOI: http://dx.doi.org/10.3329/dujps.v17i2.39178	
B.C. Revanasiddappa, M.S. Jisha, M. Vijay Kumar and Hemanth Kumar - Synthesis, Antibacterial and Antifungal Evaluation of Novel Pyrazoline Derivatives	221

DOI: <http://dx.doi.org/10.3329/dujps.v17i2.39179>

- Godwin C. Ugwu, Chinagorom L. Okanya, Jude V. Egbuji, Jude I. Okwo, Emmanuel I. Nnamonu and Joseph E. Eyo** - Comparative Nephroprotective Effects of Extracts of *Buchholzia coriacea* on some Biochemical Parameters in Carbon Tetrachloride-induced Toxicity in *Rattus norvegicus* 227
DOI: <http://dx.doi.org/10.3329/dujps.v17i2.39180>
- Muhammad Abdullah Al-Mansur, M. Mahboob Ali Siddiqi and Koushik Saha** - Thrombolytic, Membrane Stabilizing and Hypoglycemic Activities of *Anethum sowa* Linn. 237
DOI: <http://dx.doi.org/10.3329/dujps.v17i2.39181>
- Kartini Hasballah, Murniana Sarong, Renzavaldy Rusly, Karina Tantri and Vera Dewi Mulia** - Acute Toxicity and Hepatotoxicity Evaluation of Methanol Extract of Root Bark of *Calotropis gigantea* in Rats 243
DOI: <http://dx.doi.org/10.3329/dujps.v17i2.39182>
- Sushanta Halder, Nazmus Saqueeb and Nazmul Qais** - Antinociceptive and Anthelmintic Activities of Leaves of *Leea aequata* 251
DOI: <http://dx.doi.org/10.3329/dujps.v17i2.39183>
- Md. Moniruzzaman, Md. Ruhul Kuddus, Mohammad Rashedul Haque, A.M. Sarwaruddin Chowdhury and Mohammad A. Rashid** - *Stereospermum suaveolens* (Roxb.) DC. Shows Potential *in vivo* and *in vitro* Bioactivities 257
DOI: <http://dx.doi.org/10.3329/dujps.v17i2.39184>
- Short communication**
Parisa Tamannur Rashid, Muniruddin Ahmed, Md. Mizanur Rahaman and Md. Abdul Muhit - 14-Deoxyandrographolide Isolated from *Andrographis paniculata* (Burm. f) Nees Growing in Bangladesh and its Antimicrobial Properties 265
DOI: <http://dx.doi.org/10.3329/dujps.v17i2.39185>

The Dhaka University

Journal of Pharmaceutical Sciences

(Dhaka Univ. J. Pharm. Sci.)

Vol. 17

No. 1

June, 2018

CONTENTS

A.R. Puspaningtyas, S. Riyanto, E.N. Solikhah and P. Astuti - Bioactivity Screening of <i>Erechites valerianifolia</i> (Link Ex Wolf.) Less. Extracts as Antiplasmodium, Antibacterial, Antifungal and Cytotoxic Agents	1
Md. Mokaram Hossain, Reza-ul Jalil and Mohammad A. Rashid - Studies of Stress Degradation of Ramosetron Hydrochloride, A 5-HT ₃ Antagonist	9
Philip F. Uzor, Charles O. Nnadi, Joshua E. Ahiajuike and Helen N. Ani - Antidiabetic Studies and Dereplication of the Bioactive Constituents of <i>Anthocleista nobilis</i> G. Don by UHPLC/ESI-QTOF-MS	19
Mohammad Shahriar, Mohiuddin Ahmed Bhuiyan and Md. Sohel Rana - Characterization of Phytoconstituents and Exploration of Antioxidant and Free Radical Scavenging Activities of <i>Citrus assamensis</i> Leaf	29
Priyanka Chakraborty, Nripendra Nath Bala and Sudipta Das - Analgesic Activity of Methanolic Extract of Tubers of <i>Arisaema tortuosum</i> (Wall.) Schott. in Swiss Albino Mice	37
Sherejad Sanam, Sharmin Nahar, Nazmus Saqueeb and S.M. Abdur Rahman - A Validated RP-HPLC Method and Force Degradation Studies of Fexofenadine Hydrochloride in Pharmaceutical Dosage Form	43
Sayee V. Aher and Yogesh V. Pore - Physicochemical Characterization of Febuxostat Microcomplexes with Parent and Modified Cyclodextrins	51
Uwakwe S. Onoja, Cynthia C. Ugwu, Philip F. Uzor, Innocent E. Nweze, Edwin O. Omeje, Petra O. Nnamani, Ekere Nwachukwu, Ivoke Njoku and Eyo J. Effiong - Effect of <i>Anogeissus leiocarpus</i> Guill and Perr Leaf on Hyperglycaemia and Associated Dyslipidaemia in Alloxan-induced Diabetic Rats	65
Mohammed Ibrahim, Md. Aslam Hossain, Md. Shafiullah Shajib and Mohammad A. Rashid - Preliminary Phytochemical and Pharmacological Screenings of <i>Plumbago indica</i> L. and <i>Alpinia conchigera</i> Griff.	73
Md. Rajdoula Rafe, Rayhanus Salam, Md. Monir Hossain and Mohammad Mehedi Masud - Phytochemical Screening and Acetylcholinesterase and Butyrylcholinesterase Inhibitory and Thrombolytic Activities of <i>Grewia abutilifolia</i> Vent. & Juss. Leaf	81
Sidi Mohammed Ammar Selles, Mokhtaria Koudri, Yuva Bellik, Amar Ait Amrane, Belkacem Tahar Belhamiti, Ahmed Redha Benia Si Mohamed Hammoudi and Laid Boukraa - Chemical Composition, Antioxidant and <i>In vitro</i> Antibacterial Activities of Essential Oils of <i>Mentha spicata</i> Leaf from Tiaret Area (Algeria)	87
Nur Faezah Syahirah, L., Muhammad Umar Lutfi, M.Y., Atika, A., Muhammad Hafiz, R., Muhammad Zulhelmi, O.A., Mohd Ariff Adzhan, O. and Khor P.Y. - A Comparative	

Analysis of <i>Clitoria ternatea</i> Linn. (Butterfly Pea) Flower Extract as Natural Liquid pH Indicator and Natural pH Paper	97
Nasim Rahmani Kukia, Ardeshir Abbasi and Seyyed Maysam Abtahi Froushani - Copper Oxide Nanoparticles Stimulate Cytotoxicity and Apoptosis in Glial Cancer Cell Line	105
Zahir Uddin Babar, Abul Kalam Azad, Wan Mohd Azizi Wan Sulaiman, Jalal Uddin and Zubair Khalid Labu - Neuroprotective Properties of <i>Nigella sativa</i> (L.) Seeds Extract in Sprague Dawley Rats models	113
Sharifa Sultana, Md. Shahadat Hossain, Md. Samiul Islam and Abu Shara Shamsur Rouf - Quantitation of Sitagliptin in Drug Product by Validated Reversed Phase Liquid Chromatographic Technique	123
A K Lutful Kabir, Mst. Marium Begum and Tahiya Islam - Study of Bioactivities of <i>Holarrhena pubescence</i> Growing in Bangladesh	131
Review paper	
Nazmul Qais, Sadia Jahan and Md. Shafiullah Shajib - A Review on Anti-Diabetic Plants	139