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3.4.3 Research Papers Published During Year 2021-22

Title of paper	Name of the author/s	Department of the teacher	Name of journal	ISSN number	Is it listed in UGC Care list
Diversity of Arbuscular Mycorrhizae Spores from Industrial Belts of MIDC, Dombivli, Thane District of Maharashtra for Winter Season	Mahavir Gosavi	Botany	The Journal of Plant Science Research	0976-3880	YES
Diversity of Arbuscular Mycorrhizae Spores from Industrial Belts of MIDC, Dombivli, Thane District of Maharashtra for Winter Season	Ashwini Deshpande	Botany	The Journal of Plant Science Research	0976-3880	YES

Jour Pl Sci Res **38 (1)** 159–163 2022

Diversity of Arbuscular Mycorrhizae Spores from Industrial Belts of MIDC, Dombivli, Thane District of Maharashtra for Winter Season

Ashwini Deshpande[1*] and Mahavir Gosavi[2]

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Arbuscular mycorrhizae (AM) are the obligate symbionts, forming natural, beneficial relationships with higher plants. About 80% of plants are colonized by AM fungi which belong to Glomeromycota (Family Endogonaceae). In soil microorganisms, AM fungi are commonly studied because of their capacity to ...rt plant tolerance under polluted and toxic conditions. The current study deals with the exclusive survey of fifteen industrial sites from MIDC, Dombivli (East). The sites were investigated to study diversity of AM fungi with respect to rhizosphere soil analysis for subsequent spore density and identification. Spores of *Glomus, Acaulospora,* and *Gigaspora* were observed. The observed species were also detected in root colonization analysis, using standard staining methods. The spore density was highest for *Glomus.* The species recorded and identified from genus *Glomus* are *G. aggregatum, G. albidum, G. australe, G. deserticola, G. fasciculatum, G. fulvus, G. geosporum, G. intraradices, G. microcarpum, G. multicaule* and *G. occultum* along with species of *Acaulospora* like *A. foveata, A. mellea, A. scrobiculata and Gigaspora margarita.*

Lipase as a green and sustainable material for production of levulinate compounds: State of the art	Kirtikumar C Badgujar	Chemistry	Materials Science for Energy Technologies	2589-2991	YES

Materials Science for Energy Technologies 5 (2022) 232–242

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Materials Science for Energy Technologies

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Lipase as a green and sustainable material for production of levulinate compounds: State of the art

Kirtikumar C. Badgujar [a,b], Vivek C. Badgujar [a,c], Bhalchandra M. Bhanage [a,*]

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ABSTRACT

Levulinate compounds are considered as a potential energy chemical and bio-lubricant of the present century due to extraordinary application in fuel blending which improves the performance and efficiency of fuel and engine. The traditional industrial synthesis of levulinate compounds involves the use of hazardous reagents/chemicals and harsh reaction temperature conditions which are considered as non-green methodologies that violate the green and sustainable chemistry principles. The recent literature survey suggested that enzyme (lipase) catalyzed synthesis of levulinate compounds may be a competent solution over the present traditional synthesis. However, there is need of extensive research efforts and reviewing of recent advances in this field to get the proficient synthesis of levulinates through enzyme catalysis. In view of this, the present review article highlights the current state of the art in this field along with major challenges for the proficient enzyme catalyzed scale-up production of levulinate compounds.

Phytochemical analysis, antioxidant and anti-inflammatory activity of leaves and bark of Ceropegia rollae Hemadri	Nitin A. Mirgane	Chemistry	Plant Science Today	2348-1900	YES

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RESEARCH COMMUNICATION

Phytochemical analysis, antioxidant and anti-inflammatory activity of leaves and bark of *Ceropegia rollae* Hemadri

Shubhada S Nayak[1], Nitin A Mirgane[2], K B Pathade[3], Vitthal S Shivankar[4] & Gurumeet C Wadhawa[*1]

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KEYWORDS
Ceropegia rollae
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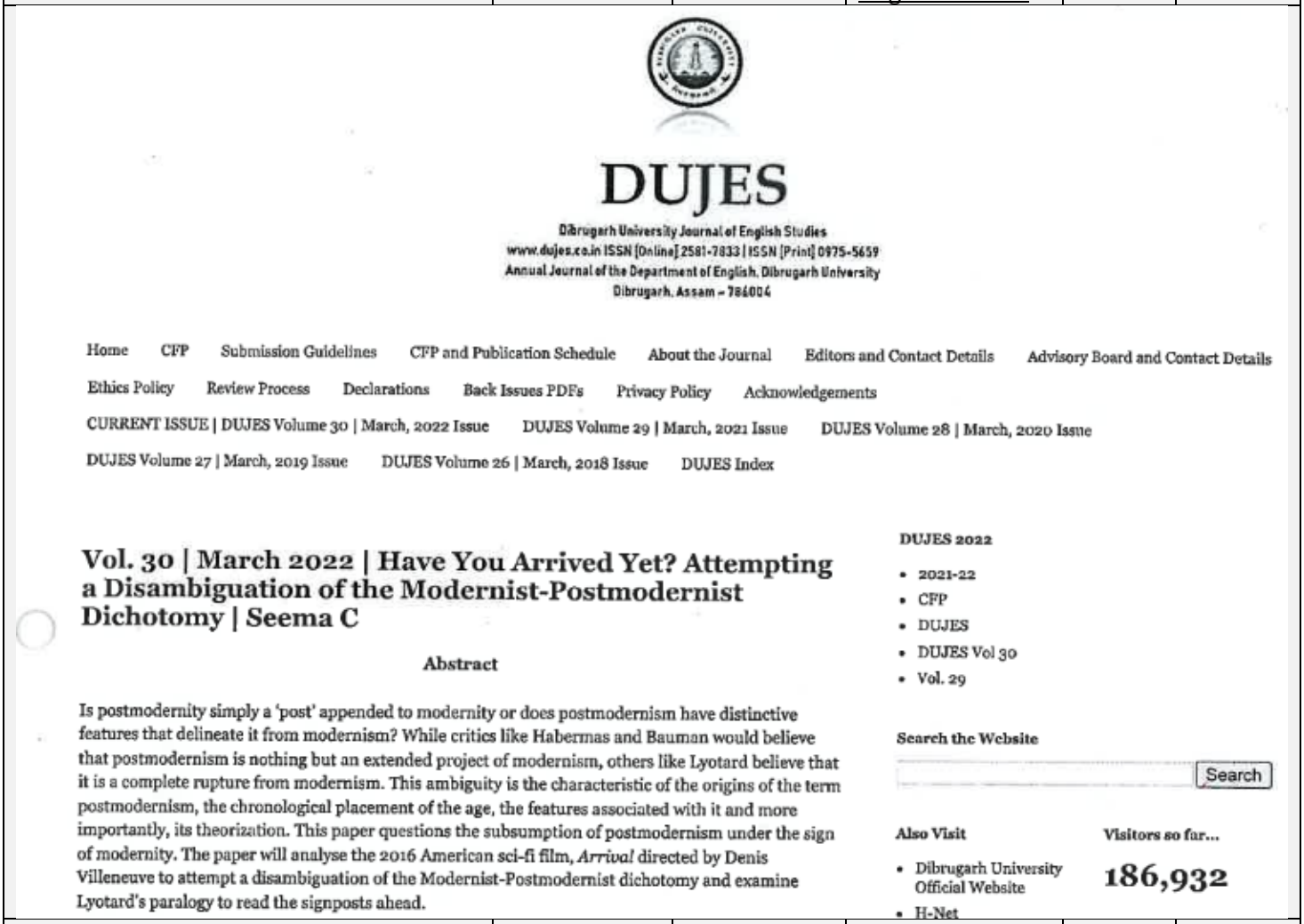
FRAP; DPPH

ABSTRACT

The purpose of the present study is to evaluate *in vitro* antioxidant activity and anti-inflammatory activity of methanolic extract of the leaves and the bark of the plant *Ceropegia rollae* Hemadri. The antioxidant activity of the both leaves and bark extract was studied using FRAP and DPPH method. The *in vitro* anti-inflammatory activity and phytochemical characterization were carried using known protocols. The various phytochemical components such as total phenolics and flavonoids were determined. The plant *Ceropegia rollae* also contains tannis and ascorbic acid. This is related to the antioxidant activity of the plant *Ceropegia rollae* extract. The leaves shows good antioxidant and anti-inflammatory activity as compared to the bark. These can be used as natural antioxidant and anti-inflammatory agents.

Have You Arrived Yet? Attempting a Disambiguation of the Modernist-Postmodernist Dichotomy	Seema C.	English	Dibrugarh University Journal of English Studies	0975-5659	YES



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Ethics Policy Review Process Declarations Back Issues PDFs Privacy Policy Acknowledgements
CURRENT ISSUE | DUJES Volume 30 | March, 2022 Issue DUJES Volume 29 | March, 2021 Issue DUJES Volume 28 | March, 2020 Issue
DUJES Volume 27 | March, 2019 Issue DUJES Volume 26 | March, 2018 Issue DUJES Index

Vol. 30 | March 2022 | Have You Arrived Yet? Attempting a Disambiguation of the Modernist-Postmodernist Dichotomy | Seema C

Abstract

Is postmodernity simply a 'post' appended to modernity or does postmodernism have distinctive features that delineate it from modernism? While critics like Habermas and Bauman would believe that postmodernism is nothing but an extended project of modernism, others like Lyotard believe that it is a complete rupture from modernism. This ambiguity is the characteristic of the origins of the term postmodernism, the chronological placement of the age, the features associated with it and more importantly, its theorization. This paper questions the subsumption of postmodernism under the sign of modernity. The paper will analyse the 2016 American sci-fi film, *Arrival* directed by Denis Villeneuve to attempt a disambiguation of the Modernist-Postmodernist dichotomy and examine Lyotard's paralogy to read the signposts ahead.

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मशीनी अनुवाद : प्रक्रिया, प्रयोग, समस्याएँ व समाधान

प्रा. दिनेश पाठक

अनुवाद के क्षेत्र में मशीनी अनुवाद पिछले कुछ दशकों में एक महत्वपूर्ण विकल्प के रूप में उभरा है। वैसे मशीनी अनुवाद के क्षेत्र में १९३३ से ही अनुसंधान व प्रयोग शुरू हो गये थे किंतु इसे गति ८० के दशक में मिली। जब कम्प्यूटर सस्ते व प्रचलित हो गये। मशीनों की सहायता से विशेषकर कम्प्यूटर की सहायता से किया जानेवाला अनुवाद मशीनी अनुवाद या मशीन आधारित अनुवाद कहा जाता है। इसमें स्रोत भाषा में दी। सामग्री को मशीन विशेष कर कम्प्यूटर की सहायता से लक्ष्य भाषा में अनूदित किया जाता है। सबसे पहले १९३३ में एक रूसी इंजीनियर पेत्र पेत्रोविच ने इस दिशा में पहल की और इस प्रकार की संकल्पना व यंत्र का पेटेंट करवाया। पेत्र पेत्रोविच का यह अनुवाद यंत्र कम्प्यूटर नहीं था। किंतु इसने आगे के आविष्कार व प्रयोग के रास्ते को खोल दिया। पेत्रोविच के आविष्कार के दस वर्ष बाद डॉ. ए. डी. बूथ ने इस दिशा में गंभीरता के साथ काम प्रारंभ किया और कम्प्यूटर आधारित अनुवाद की रूप-रेखा को प्रस्तुत किया। डॉ. बूथ की इस रूप-रेखा ने इग्लैंड में इसके पक्ष में वातावरण का निर्माण किया। कई संशोधक व तकनीकी जानकार इस दिशा में कार्य करने के लिए आगे बढ़े। मशीनी ट्रांसलेशन का सबसे पहले प्रयोग वारेन वीवर के मेमोरेंडम ऑन ट्रांसलेशन में १९४९ में किया गया। कालांतर में येहोशा-बार-हिलेल ने एम.आई.टी. में मशीनी अनुवाद को लेकर गंभीर अनुसंधान किए और इसे अंतरराष्ट्रीय स्तर पर अनुसंधान का विषय बना दिया। यह परंपरा अनेक प्रयोगों के माध्यम से यूरोप के विकसित देशों जैसे इग्लैंड, जर्मनी, फ्रांस के साथ-साथ जापान और चीन में सतत विकसित व परिमार्जित होती गयी। १९६२ में मशीनी अनुवाद के महत्व को समझते हुए संयुक्त राष्ट्र में एसोसिएशन फॉर मशीन ट्रांसलेशन एंड कम्प्युटेशनल लिंग्विस्टिक्स की स्थापना की गई। संयुक्त राष्ट्र में इस एसोसिएशन की स्थापना ने इस काम के महत्व को और भी बढ़ा दिया। इसके महत्व को देखते हुए नेशनल एकेडमी ऑफ साइंसेस ने इस क्षेत्र के विकास के लिए ऑटोमैटिक लैंग्वेज प्रोसेसिंग एडवाइजरी कमिटी को बनाया। इस कमिटी ने मशीनी अनुवाद के क्षेत्र में अनुसंधान को और तेज कर दिया। इस क्षेत्र से कई महत्वपूर्ण संस्थाएं व विशेषज्ञ जुड़ने लगे और व्यापक स्तर पर अनुसंधान, प्रयोग व सुधार के कार्य तेजी के साथ किए जाने लगे। पहले मशीनी अनुवाद का प्रयोग इंग्लिश, फ्रेंच, जर्मन, स्पेनिश भाषाओं के वाक्यों, साधारण सूचनाओं से जुड़े अनुच्छेदों तथा धार्मिक वाक्यों के अनुवाद के लिए किया गया। जब इन प्रारंभिक प्रयोगों में सफलता मिल गई तो बाद में इसका प्रयोग अन्य क्षेत्रों से जुड़ी सूचनाओं के अनुवाद के लिए भी किया जाने लगा।

A Short-Term Survey of Avian and Mammalian Diversity of Matheran: A Tourist Hub	Aditya Akerkar	Zoology	Journal of Scientific Research	0447-9483	YES

2021-22

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Journal of Scientific Research
Institute of Science,
Banaras Hindu University, Varanasi, India.

A Short-Term Survey of Avian and Mammalian Diversity of Matheran: A Tourist Hub

Aditya Akerkar [1], Anoushka Kumar[2], Kapil Sharma[3], Lucy Nadunkeri[4], Satyam Gupta[5], and Shivani Thevar[6]

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Undescribed C-Glycosylflavones from Corn Silk and Potential Anti-inflammatory Activity Evaluation of Isolates	Satish Sarfare	Zoology	Planta Medica	1439-0221	YES

2021-22

Planta Med 2022; 88(09/10): 745-752
DOI: 10.1055/a-1728-1347

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**Undescribed C-Glycosylflav
Evaluation of Isolates[#]**

Satish Sarfare , Shabana I. Khan , Fazila Zulfi
Zulfiqar Ali (http://orcid.org/0000-0003-3902

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Abstract

Phytochemical investigation of corn si
C-β-oliopyranosyl-7-*O*-β-D-glucopyra
O-β-D-glucopyranoside (**3**), and ax-4
epidioxyergosta-6,22-dien-3β-ol (**6**) a
stigmasterol. Compounds **1** and **2** we
attained using spectral data including
LPS-induced macrophages and decrea
respectively, at 50 µM. Compound **5** a
activity in chondrocytes by 1.80 ± 0.0
inhibition of iNOS or NF-κB but induce

Original Papers

Undescribed C-Glycosylflavones from Corn Silk and Potential Anti-inflammatory Activity Evaluation of Isolates[#]

Authors
Satish Sarfare[1,2], Shabana I. Khan[3,4], Fazila Zulfiqar[1], Srivedavyasasri Radhakrishnan[1], Zulfiqar Ali[1], Ikhlas A. Khan[1,3]

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Supplementary material is available under https://doi.org/10.1055/a-1728-1347

Key words
Zea mays, Corn silk, Poaceae, C-Glycosylflavones, anti-inflammatory

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ABSTRACT

Phytochemical investigation of corn silk resulted in isolation and characterization of four flavone C-glycosides, chrysoeriol 6-*C*-β-oliopyranosyl-7-*O*-β-D-glucopyranoside (1), 3'-methoxycassiaoccidentalin A (2), chrysoeriol 6-*C*-β-boivinopyranosyl-7-*O*-β-D-glucopyranoside (3), and ax-4''-OH-3'-methoxymaysin (4), a triterpenoid, friedelin (5), two sterols, (22*E*)-5α,8α-epidioxyergosta-6,22-dien-3β-ol (6) and 6β-hydroxystigmasta-4,22-diene-3-one (7), and a mixture of β-sitosterol and stigmasterol. Compounds 1 and 2 were previously undescribed. Structure elucidation of the isolated compounds was attained using spectral data including 1D and 2D NMR

UMA MAHESWARI SHANKAR

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