






SNB 19-20

 Menu
 
 3.3.1.I.A.pdf
 
 Create

All tools   Edit   Convert   E-Sign

Find text or tools         AI Assistant

IMPACT FACTOR - 6.399 ([www.sjifactor.com](http://www.sjifactor.com))

VOLUME - VIII ISSUE - 10 OCTOBER - DECEMBER 2019  
AJANTA - ISSN 2277 - 5730 - IMPACT FACTOR - 6.399 ([www.ajjfactor.com](http://www.ajjfactor.com))

२१. जागतिकीकरणाचा भारतीय कृषी अर्थव्यवस्थेवर परिणाम ✓

शाचार्य डा. एस. एन. कुटे

[illegible]

॥ निलेश अरुण दुर्ग ॥

अविवक्षितः । अथवा अविवक्षितः कालः न विज्ञातः महाविद्यालयः पटना-१ ।

महान् आर्थिक विकासोन्मुखी प्रयत्न चलायितव्यः । अन्तर्गतसुधारः, उद्योगोन्मुखः नैऋत्यवर्धनः ।  
 २. जनशक्ति प्रशिक्षण कार्यक्रमः आरम्भः । आरम्भः अन्तर्गतसुधारः समाजिक उत्थन आर्थिक विकास ।  
 ३. सामाजिक न आर्थिक सुधारः समर्थः कृषि न उद्योगोन्मुखः श्रमिक प्रशिक्षणः ।  
 ४. महान् विकासोन्मुखी प्रयत्नः कृषि उद्योगोन्मुखः नैऋत्यवर्धनः । अन्तर्गतसुधारः समाजिक उत्थन ।  
 ५. महान् विकासोन्मुखी प्रयत्नः कृषि उद्योगोन्मुखः नैऋत्यवर्धनः । अन्तर्गतसुधारः समाजिक उत्थन ।

**जागतिकीकरणाय अर्थ**

Activate Windows  
Go to Settings to activate Windows.

[illegible]

अथशान्ति - प्रज्ञानं पञ्चतन्त्रं तन्त्रम् २००५.

प्रतिपाद्यमानं व्यापकं भाग्यं व्यपन्नं प्रमाणं पञ्चाङ्गमन्त्रं मन्त्रादि ॥ १ ॥

मदभास्य सम्पदन प्रमाणिक (द्वितीय). २०१७

६. बा. कट्टा जगन्नाथ. अद्वैतव्याख्या "सर्वत्र प्रकाशितं कल्याणम्" (१०००)

येय प्रथमवर्षा 10 वी आवृत्ती MC Graw Hill Education India Private

**Title of the paper :- Effect of Globalization on Indian Agricultural economics**

  
Principal

Bhagwantrao Arts & Science  
College, Etapalli Dist. Gadchiroli

STB 19-20



Menu 3.3.11.A.pdf + Create

All tools Edit Convert E-Sign

Sign in

Find text or tools AI Assistant

9

ISSN NO : 2230-7850

IMPACT FACTOR : 5.1651 (UIF)

VOLUME : 9, ISSUE : 5, JUNE 2019

02-18  
Engineering  
08498-8  
Incorporated.

# INDIAN STREAMS RESEARCH JOURNAL



साठोत्तरी मराठी साहित्य ✓

प्रा.डॉ.सुषीर भगत  
सहयोगी प्राध्यापक, मराठी विभाग प्रमुख,  
भगवंतराव विज्ञान महाविद्यालय एटापल्ली जि.गडचिरोली.

मराठी साहित्याच्या संदर्भात १९२० हे वर्ष विशेष महत्वाचे आहे नव्या युगाला आरंभ होऊन साहित्याच्या इतिहासात एका नव्या कालखंडाची सुरुवात झाली. या कालखंडाची सुरुवात, आरंभबिंदु म्हणजे पहिल्या महायुद्धाचा शेवट (१९१४ - १९१८) मानला जातो. या महायुद्धानंतर महाराष्ट्रातील जीवनात राजकीय, सामाजिक, सांस्कृतिक, स्वरूपाचा बदल झाला. या युद्धाने सर्व जगाला होरपळून काढले. याचे परिणाम जागतिक स्तरावरही झाले. रशियात क्रांती झाली. मार्क्स व फ्रॉइड यांच्या विचारांचा प्रभाव साहित्यावर



Activate Windows  
Go to Settings to activate Windows.

Title of the paper :- Marathi Literature of Sixty's

Principal  
Bhagwantrao Arts & Sci  
Gadchiroli Dist. Gad



STB 19.20

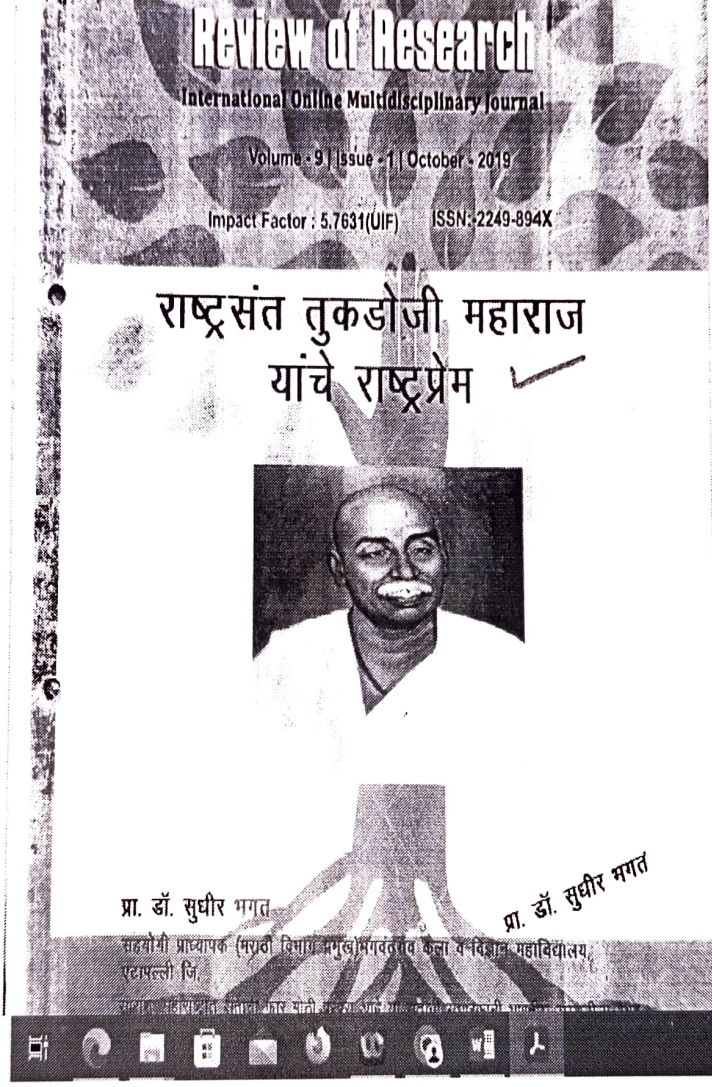


Menu 3.3.11A.pdf  
All tools Edit Convert E-Sign

+ Create

Find text or tools

Sign in AI Assistant

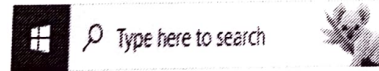


18

75%

97

Activate Windows  
Go to Settings to activate Windows



Title of the paper :- Patriotism Rashtrasant Tukdoji Maharaj

*[Signature]*

Principal  
Bhagwantrao Arts & Science  
College, Etapalli Dist. Gadchiroli

R.P.  
UGL

2019-20

B.D. Konde

## Studies in Indian Place Names

Current

Archives

About

Search



Home / Archives /

Vol. 40 No. 7 (2020): NAAC sponsored Two Day National Seminar on Role of HEIs in Tapping Local Resources for Sustenance and Quality Enhancement

### Vol. 40 No. 7 (2020): NAAC sponsored Two Day National Seminar on Role of HEIs in Tapping Local Resources for Quality Sustenance and Quality Enhancement

NAAC sponsored Two Day National Seminar on Role of HEIs in Tapping Local Resources for Quality Sustenance and Quality Enhancement

HELD on 14th & 15th February 2020.

Organized by: Bhiwapur Mahavidyalaya, Bhiwapur, Maharashtra 441201, India

Published: 2020-02-10

#### Articles

**HEIs as Centres of Excellence: Creating New Ethos through Innovations and Best Practices**

Dr. Prantik Banerjee

1-8

PDF

**Innovations and Best Practices in NAAC's Refurbished Revised Accreditation Framework (RRAF)**

Dr. Jyoti Patil

9-14

PDF

**ACADEMIC UNREST AND UNRESTRAINED EXODUS OF INTELLIGENCE: CAUSES AND REMEDIES**

Dr. Jobi George

15-21

PDF

*[Signature]*  
**Principal**  
Bhagwantrao Arts & Science  
College, Etapalli Dist. Gadchiroli





## ROLE OF IQAC IN ENSURING QUALITY IN HIGHER EDUCATION

Dr. Balkrishna D. Kongre

Assistant Professor, Department of English

Bhagawantarao Arts and Science college, Ettapalli, District - Gadchiroli

E-mail - [bkongre@gmail.com](mailto:bkongre@gmail.com)

### Abstract:

*In the modern age demand of quality education is rising high. Traditional education system failed to achieve the required demand. In globalization, foreign universities enter in India for spreading quality higher education network system. It can manipulate whole Indian system of higher education. If our HEI is unable to produce quality in higher education system soon it will be thrown out from the main stream. NAAC is formed to assess and accredit the HEI in India. So every HEI should establish IQAC to improve the internal quality of institute and impart advance knowledge and develop skill through various activities of education system. The role of IQAC is very important to ensure the quality of learner and reputation of institution. Every college establish IQAC after first cycle of NAAC for organization, supervision and improvement. This paper attempt to justify the role of IQAC in quality enhancement and sustainable development in rural and tribal areas.*

**Keyword:** NAAC, HEI, Globalization, IQAC, Manipulation, Justify.

### Introduction:

In modern age competition in every sphere is going high. It is said that competition does not produce quality. But quality can win the competition. So quality is become very important to all. Higher education is only mean to improve the quality of life as well as all necessary commodities of life. The prime aim of higher education is to make the learner knowledgeable, skillful and creates the sustainable development apart from to instill the ethical value of humanity. By the way in the era of globalization, science and technology are being used to enhance the quality and sustainable development. The objectives of higher education is to create quality education imparted to the students who can compete with foreign education. Our traditional system of higher education is unable to produce quality education. Without quality education we can't progress in all fields nation building procedure. As we know education is the constant changing process of acquiring knowledge. In past few decade our higher education did not achieve the goal which is very essential today for competitions and quality improvement as compared to foreign education.

Today many foreign universities are tie up with the private companies in India to spread network of foreign university of higher education for financial benefit. This situation can create division and conflict in the society that can push away poor classes from getting qualitative higher education. Moreover quality in IT, medical, business, technology and science education which is the important commodities for





## Role of HEIs in Tapping Local Resources in Agriculture and Co-Related Field for Quality Sustenance and Quality Enhancement

Dr. B. D. Kongre

Head & Asst. Prof. Dept. of English,  
Bhagwantrao Arts & Science College,  
Etapalli Dist. Gadchiroli

E-mail

### Abstract

Developing, sustaining and enhancing quality culture is the responsibility of any institution. NAAC is an external quality agency while IQAC is an internal quality agency. Both need to be balanced. First and foremost aim of HEI is to improve the quality of education and enhance sustainable development. HEI can play vital role in obtaining purpose of government policy regarding higher education through internal agency i.e. Internal Quality Assurance Cell. The plan of tapping local resources through proper training and education can change the perspective of students of new generation and divert them to run self-employment and business based on local resources.

Keywords: NAAC, IQAC, Tapping Local resources, HEI, Perspective, Self-employment

### 1. Introduction

Through HEI by many ways can improve the quality of the education as well as new plan can able the learner to find out different method to run self-employment or business. Nowadays the traditional method of teaching does not develop the ability of students to work in particular field. Besides, non-availability of job and vacancy in government sector to new learner has been creating critical condition which is main cause of frustration and violence spreading fast among educated young generation as they have assumption the degree or diploma is the only means for getting employment. The main purpose of HEI is to create sustainable development through quality education for establish ethical value of humanity and build-up strong and progressive nation along with knowledgeable and well skilled society which can enhance quality of life through proper education system. But present education system run in universities and colleges has entirely failed to accomplish the purpose that had been fixed by our national education policies. Higher education is a part and parcel of all communities which is one and only medium of achievement of targeted goal of life.





## Aayushi International Interdisciplinary Research Journal (AIIRJ)

VOL- VII	ISSUE- I	JANUARY	2020	PEER REVIEW e-JOURNAL	IMPACT FACTOR 6.293	ISSN 2349-638x
----------	----------	---------	------	--------------------------	------------------------	-------------------

## विदर्भातील शहरी व ग्रामीण भागातील महाविद्यालयीन कबड्डी खेळाडूंच्या क्रिडाविषयक

आर्थिक व सामाजिक समस्यांचा तुलनात्मक अभ्यास ✓

प्रा. संदीप दामोदरराव मैद

डा. सजयकुमार मिह

भगवतराव कला विज्ञान महाविद्यालय,

मनाप

एटापल्ली, जिल्हा- गडचिरोली

शहरात रावण कला व क्रीडा महाविद्यालय

गडनादर जिल्हा- गडनादर

## प्रस्तावना

भारतात कबड्डी हा खेळ अगदी पुरातन काळापासून खेळला जातो. विसाव्या शतकाच्या प्रारंभी म्हणजे पहिल्या दशकात श्री. दत्तात्रय आर. परांजपे आणि त्यांच्या सहकाऱ्यांनी 'गनिमी हुतूतू' या प्रकारचा खेळ खेळण्यास सुरवात केली. सन १९१९ मध्ये भारत स्वयंसेवक मंडळाने पूर्णे येथे के. के. बंद्रे यांचे नेतृत्वाखाली 'संजीवनी हुतूतू' हा खेळ प्रथमतः खेळविला. सन १९२३ मध्ये कलकत्ता येथे एका छात्र संघ नावाच्या विद्यार्थी संघटनेचे प्रमुख होते

सद्यस्थिती व पूर्वाग्या तीन वर्षांनी पहिले मर्यादनाद्वारे घेण्यात आली.

## संशोधन पद्धती

कोणतेही कार्य करतांना निश्चित मार्ग दिशा उद्देश ठरविणे अत्यंत आवश्यक आहे. दिशाहीन मार्गांना आभास घेतल्यास संशोधन करताना अनेक कठिण प्रमणना तोंड द्यावे लागते. म्हणून कार्यपद्धती समजून घेणे आवश्यक आहे. संशोधनासाठी विदर्भातील शहरी व ग्रामीण भागातील

Activate Windows  
Go to Settings to activate Windows

**Title of the paper :- Comparative studies on Rural & Urban region of Vidarbha with reference to social & economic status of Collegiate Kabaddi players.**

*(Signature)*

Principal

Bhagwantrao Arts & Science  
College, Etapalli Dist. Gadchiroli



  
**Principal**  
**Bhagwantrao Arts & Science**  
**College, Etapalli Dist. Gadchiroli**



# Morphology and anatomy of the angiosperm fruit *Baccatocarpon*, incertae sedis, from the Maastrichtian Deccan Intertrappean Beds of India

STEVEN R. MANCHESTER<sup>1\*</sup>, DASHRATH K. KAPGATE<sup>2</sup>, DEEPAK D. RAMTEKE<sup>3</sup>,  
SHARADKUMAR P. PATIL<sup>4</sup>, and SELINA Y. SMITH<sup>5</sup>

<sup>1</sup>Florida Museum of Natural History, University of Florida, Gainesville, FL, 32611-7800, USA;  
e-mail: steven@flmnh.ufl.edu

<sup>2</sup>Department of Botany, Jashbhai Maganbhai Patel College, Bhandara, 441902-M.S., India;  
e-mail: dkapgate@gmail.com

<sup>3</sup>Gondia Education Society High School and Junior College, Mohadi. Dist., Gondia, 4416014-M.S., India;  
e-mail: deeplifesc@gmail.com

<sup>4</sup>Department of Botany, Bhagwantrao Arts and Science College, Etapalli, M.S., India;  
e-mail: patilsharadkumar@gmail.com

<sup>5</sup>Department of Earth & Environmental Sciences and Museum of Paleontology, University of Michigan,  
Ann Arbor, MI, 48019, USA; e-mail: sysmith@umich.edu

Received 6 July 2019; accepted for publication 4 November 2019

**ABSTRACT.** Distinctive permineralized fruits of *Baccatocarpon mohgaoense* (Paradkar & Dixit) comb. nov. have been collected from several sites in the late Maastrichtian of the Deccan Intertrappean beds of Central India. We describe the peculiar fruits in detail, based on combined investigations by reflected light and X-ray CT scanning. Three-dimensional renderings and virtual slices confirm that the fruits have two lateral single-seeded locules and a central sterile chamber filled with parenchyma. The endocarp is thin-walled and opens apically longitudinal valves. Here we validate the generic name *Baccatocarpon* Bhowal & Sheikh ex Manchester, Ramteke, Kapgate & S.Y. Smith and recognize a single species, for which the name *Baccatocarpon mohgaoense* (Paradkar & Dixit) comb. nov. has priority. We document the occurrence of this species in cherts from the paleobotanical sites known as Bhutera, Keria, Mahurzari, Mohgoankalan, Paladaun, Marai Patan and Shibla. The systematic affinity of these fruits remains mysterious.

**KEYWORDS:** Deccan chert, Maastrichtian, Mohgaonkalan, X-ray micro-computed tomography

## INTRODUCTION

The Deccan Intertrappean Beds of India preserve a rich fossil record of plants which spans the Cretaceous/Paleogene boundary (Kapgate 2005, Srivastava 2012, Smith et al. 2015). Determining the species composition of the floras in pre- and post-boundary localities will help us to assess plant response to local and global environmental perturbations. India was an isolated island continent at the time of deposition, so these fossil floras also

contribute to testing hypotheses regarding the biogeographic affinities of this extinct Indian flora and in determining whether they were endemic plants or rather were allied to those of Africa, Asia or Gondwana.

In the continuing investigation of multiple localities of the Deccan Intertrappean beds of central India (Kapgate 2005, Smith et al. 2015), several plant taxa have been found to be shared among localities considered to represent the late Maastrichtian flora. These include the angiosperms *Enigmocarpon* (Sahni 1943),



Principal

Bhagwantrao Arts & Science  
College, Etapalli Dist. Gadchiroli





# Palynoflora from intertrappean localities in southeastern part of Deccan volcanic province: taxonomic composition, age and paleogeographic implications

Bandana Samant<sup>a,\*</sup>, Deepesh Kumar<sup>a</sup>, D.M. Mohabey<sup>a</sup>, D.K. Kapgate<sup>b</sup>, Steven R. Manchester<sup>c</sup>, Sharad Kumar Patil<sup>d</sup>

<sup>a</sup> Post Graduate Department of Geology, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur 440001, India

<sup>b</sup> Department of Botany, J. M. Patel College, Bhandara 441904, India

<sup>c</sup> Florida Museum of Natural History, Gainesville, FL, USA

<sup>d</sup> Bhagwantrao Arts and Science College, Gadchiroli 442704, India

Received 13 April 2018; received in revised form 24 December 2018; accepted 23 May 2019

Available online 1 June 2019

## Abstract

Understanding the flora preserved in the Late Cretaceous–Early Paleocene Deccan volcanic associated sediments is significant as it gives insight into the floral composition during Deccan volcanic activity. This time interval is also associated with extinction and evolution of many angiosperm families on the Indian subcontinent. The record of palynomorph bearing intertrappean beds of Shankar Lodhi in Chandrapur district and Shimbala in Yavatmal district of Maharashtra from southeastern part of Deccan volcanic province provides information on biodiversity, age and depositional environment of the Deccan province. These intertrappean beds are characterized by presence of Maastrichtian age marker taxa such as *Azolla cretacea*, *Jiangsupollis* and *Echitricolpites*. Aquatic palynoassemblage such as, *Azolla cretacea*, *Crybelosporites intertrappea*, *Gabonispors vigouroxii* and *Sparganiaceapollenites* are dominant in Shankar Lodhi intertrappean beds. Presence of taxa *Crybelosporites*, *Incrotonipollis* and *Periporopollenites* in the intertrappean beds of the study area and their global geological history suggest their Gondwanan origin. © 2019 Elsevier Ireland Ltd Elsevier B.V. and Nanjing Institute of Geology and Palaeontology, CAS. All rights reserved.

**Keywords:** Deccan volcanism; Intertrappean; Palynomorphs; Maastrichtian; Paleoenvironment; Paleogeography

## 1. Introduction

Thick lava piles of the Deccan large igneous province cover an area of about 500,000 km<sup>2</sup> in western, central and southern part of India. These voluminous volcanic flows of  $1.3 \times 10^6$  km<sup>3</sup> (Jay and Widdowson, 2008) in Late Cretaceous–Early Paleocene are believed to be one of the causes of mass extinction at the Cretaceous–Paleogene (K–Pg) boundary. Although the duration of this volcanic activity is still debated over short (1 My; Courtillot et al., 2000) or long (7 My; Sheth and Pande, 2014), recent studies by Renne et al. (2015) and Schoene et al.

(2015) suggest that the major volcanic eruption is post K–Pg boundary.

Geographically, the Deccan volcanic province is divided into three main subprovinces, namely, Malwa lobe, Mandla lobe and Central Deccan Province (Fig. 1A). Each province has its own sites and sources of eruptions though they may overlap to some extent. Sediments commonly known as intertrappean beds were deposited in small lakes and ponds in the fringe areas of the Deccan province. These intertrappean sediments are mostly 2–5 m thick (rarely up to 10–14 m) and lithologically composed of shales, porcellanitic shales, cherts, limestone and clays.

Record of megafloora from Deccan intertrappean beds dates back to 19<sup>th</sup> century when Coulthard (1829) reported fossil wood from Sagar area in central India. Hislop and Hunter (1855) described well preserved megafloora from central India and, during the last three decades, voluminous megaflooral data

\* Corresponding author.

E-mail address: bandanabhu@gmail.com (B. Samant).

<https://doi.org/10.1016/j.palwor.2019.05.010>

1871-174X/© 2019 Elsevier Ireland Ltd Elsevier B.V. and Nanjing Institute of Geology and Palaeontology, CAS. All rights reserved.

Principal  
Bhagwantrao Arts & Science  
College, Etapalli Dist. Gadchiroli



**EVALUATION OF PROXIMATE CONTENTS, PHYSICO-CHEMICAL AND MEDICINAL PROPERTIES OF OIL SEED OF SOME WILD MEDICINAL PLANTS OF GADCHIROLI DISTRICT OF MAHARASHTRA**

Rajiv B. Dange & Dr. Suresh B. Rewatkar Gondwana University, Gadchiroli

E-mail address of corresponding author: [dangerajiv@gmail.com](mailto:dangerajiv@gmail.com)

## 1.0 Introduction

One of the important and basic requirements for ensuring rapid growth of a country is to explore its natural resources in a controlled manner. Fortunately, India is endowed with a fair proportion of these resources. An important group of natural resources is of vegetative origin and includes agricultural raw materials, forest products and medicinal plants. Plants are the sources of a variety of classes of organic compounds such as terpenoids, alkaloids, saponins, and fats and oils etc. The crude extracts of some plants have exhibited remarkable physiological effects on biological systems which arises owing to the presence of some chemical constituents in plants often considered as the active principles. Amongst the various sources of food, seeds of plants occupy an important place both for animal as well as human consumption, especially, because they contain reserve food supplies and growth substances that influence seed germination, storage and longevity.

Seeds contain lipids (oils and fats), proteins and carbohydrates as reserve food material in addition to polyurenes, non-protein nitrogenous substances, etc. Their occurrence depends greatly upon the particular type of seed under consideration. Oilseeds are among the important cash crops of India. For plants, they are important as reserves of energy to support the germination of the seed; for human these are considered as an efficient food source of energy. Moreover, the chemical compositions of seeds of cultivated species are more thoroughly known and those that are not regularly used by man are relatively unexplored. Information on the seeds of such unexplored plant species offers a great opportunity to discover a valuable chemical source that can have multiple uses such as medicinal use in humans (Rao and Arora, 2004). In view of the above, this investigation was carried out to study the physicochemical and medicinal properties of oil seeds of some wild plants of Gadchiroli District of Maharashtra. Besides, major portion of the study area is covered with forest and the chief vegetation type is dry-deciduous.

## 2.0 Materials and Method

### 2.1 Selection of Plants and Collection of Seeds – Study Area Gadchiroli

The places from where these seeds are collected lies in Gadchiroli District of Maharashtra. The district is covered with hills and forests. The climatic conditions are extreme with temperature reaching 47.3°C in Summer & 9.4°C in winter. The District is blessed with huge forest and mineral resources. The forests are Predominantly in Etapalli, Aheri, Dhanora, Korchi, Kurkhead, Sironcha and Bhamragad blocks. Based on the reconnaissance survey of the study area and interaction with subject experts of Gadchiroli District; two wild plants such as *Celastrus paniculatus* wild and *Andrographis paniculata* were selected for the study.

- **Celastrus paniculatus** wild seeds: The seeds of *Celastrus paniculatus* wild collected from Gadchiroli District in the month of September 2019.
- **Andrographis paniculata** seeds: The fruits of *Andrographis paniculata* collected from Gadchiroli District in the month of February 2019.

Dried fruits collected in the polythene bags and brought to the laboratory. Seeds separated from the fruit pod and stored in airtight glass bottles and kept in a refrigerator prior to analysis. During the visit GPS data for the locations were recorded. The seeds were cleaned and washed with running water and dried in air. Powder of these seeds was made by grinding. This powder was stored under -20° C refrigerator. Oil of this powdered sample was extracted by using various solvents methods. Physicochemical and medicinal values of this extract oil was estimated by various techniques.



### 2.2 Proximate analysis of seeds

Proximate constituents of the seeds of *Celastrus paniculatus* wild and *Andrographis paniculata* were evaluated as described by the Association of Official Analytical Chemist (AOAC, 1990). Moisture, crude fat, crude fibre and carbohydrate were determined in accordance with the official methods of the Association of Official Analytical Chemists (1999), while nitrogen was determined by the micro-kjeldahl method (Pearson, 1976) and the percentage of nitrogen was converted to crude protein by multiplying by 6.25. The total ash was determined as described by Kirk and Sawyer (1991).

### 2.3 Physico-chemical properties of seed oil

The state of seed oils at room temperature and its colour was determined through visual inspection. The refractive Index (RI) of sample was checked at prescribed temperature, which maintained by stream of water circulated through the instrument. Instrument calibrated by distilled water, then a few drops of the sample taken on clean dry prism and reading noted down. To calculate specific gravity, empty weight of cleaned and dried pycnometer taken (W), then filled with water stoppered, wiped and again weighed (w1), the same procedure repeated with sample and weight taken (w2) again and then calculated the specific gravity as per equation.

Specific gravity  $gm/ml = w2 - W / w1 - W$

Acid value is the number of mg of potassium hydroxide required to neutralize free acids in 1 gm of the oil sample. For calculating the acid value, 1 gm of oil sample (S) is dissolved in a hot mixture of diethyl ether (25ml) and ethyl alcohol 95% (25ml) in a conical flask and few drops of indicator phenolphthalein added in solution and with 0.1N Potassium hydroxide titrated until pink color persist. Blank (B) titration was carried out by using same solvent mixture and calculated by difference of 0.1 N potassium hydroxide volume.

$$\text{Acid value} = \frac{\text{Vol. of KOH (B-S)} \times \text{No. of KOHXF} \times 100}{\text{Sample weight (g)}}$$

Iodine value indicates unsaturation of oil and it is the weight of Iodine absorbed by 100 parts by mass of oil or fat matter. 0.25 gm sample taken in a stoppered conical flask known as Iodine flask, 10 ml of cyclohexane and 20 ml Wj, s solution added, tightly stoppered. Flask kept in dark for 30 minutes, after which 20 ml of 10% potassium iodide solution is added and titrated with 0.1 M sodium thiosulphate, starch used as indicator, blank run under same conditions. Iodine value is calculated by difference of volume as per following formula.

$$\text{Iodine value} = (B-S) \times M \times 12.69 / \text{Sample weight (gm)}$$

Where, B = Blank titre value, S = Sample titre value

M = Molarity of sodium thiosulphate, Factor = 12.69

Unsaponifiable matter indicates impurities percentage in oil, which are not saponified by alkali and extracted by organic solvent. Unsaponifiable matter was calculated using following formula.

$$\text{Unsaponifiable matter \% w/w} = 100 \times W1 / W$$

Where, W1-residue in gm, W-sample weight (gm)

Saponification value gives the number of mg of potassium hydroxide required to neutralize free fatty acids, obtained from the hydrolysis of 1gm of oil or fat sample. Saponification value of the oil is calculated as under mentioned formula.

$$\text{Saponification value} = (S-B) \times M \times 56.1 / \text{sample weight (g)}$$

Where, S= Sample titre value, B= Blank titre value, M = Molarity of HCl,

Molecular weight of KOH = 56.1

### 2.4 Determination of antibacterial and antifungal activity

The agar-well diffusion assay as described by Vollekova *et al.* (2001) was used to determine the growth inhibition of bacteria as well as fungi by the seed oil. Nutrient agar was used for conducting experiment for antibacterial studies and fungal suspension in potato dextrose broth was used for assessing the antifungal activity. The bacterial and fungal strains used for testing the antimicrobial activity are as follows

## Range of Soil Moisture in Etapalli Taluka Dist. Gadchiroli.

Dange RB<sup>1</sup>, Sonkamble BC<sup>2</sup> and Kapse OK<sup>2</sup>

<sup>1</sup>Bhagwantrao Arts & Science College Etapalli Dist. Gadchiroli

<sup>2</sup>Matoshri Nanibai Gharphalkar Science College, Babhulgaon

Email: dangeraji@gmail.com

### Manuscript Details

Available online on <http://www.ijrse.in>  
ISSN: 2322-0015

### Cite this article as:

Dange RB, Sonkamble BC and Kapse OK. Range of Soil Moisture in Etapalli Taluka Dist. Gadchiroli. Int. Res. Journal of Science & Engineering, February, 2020, Special Issue A7 : 672-674.

### © The Author(s). 2020 Open Access

This article is distributed under the terms of the Creative Commons Attribution 4.0 International License

(<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made.

### ABSTRACT

Soil is a component of lithosphere and biosphere system. It is a basic resource for growing food, fibre, fodder and fuel wood for meeting the human needs. A scientific inventory of this valuable natural resource has assumed considerable importance. It provides a systematic basis for the study of rope and soil relationship, so vital for increasing production and for planning for irrigation, development, soil conservation and reclamation. Land Soil is a basis of life which has been created by nature for the subsistence of the living world. The agriculture of a region, to large extent depends upon not true trend potentialities of its soils and also on their climatic conditions of the region. The nature and characteristic of a soil is mainly dependent on geological formations, topography and climate of the region in which it occurs. Scientific agriculture aims at improving the soil productivity. The fundamental thing, necessary for the management of land resources, is the knowledge about the soil which is the basis to the development of scientific agriculture on a firm footing and it can be obtained from the detailed soil survey of the area.

**Keywords:** Soil Moisture, Soil PH.

### INTRODUCTION

It has long been known that the wilting coefficient, or wilting point, of a soil does not represent the lower limit of soil moisture available to plants but rather the approximate lower limit available for growth of some writers, however, have used the term rather loosely to refer to the percentage of non-available moisture.

Dange et al., 2020

possibly on the assumption that the amount of moisture available at moisture percentages below the wilting point is so small as to be of no practical significance. Always Batchelor and Red and others have reported finding soil under deep-rooted trees or shrubs at moisture percentages well below the wilting coefficient and in some cases at about the hygroscopic coefficient. These writers pointed out the significance of the moisture below the wilting coefficient in the maintenance of life in these plants during periods of prolonged through, and Batchelor and Reed proposed that, since the wilting coefficient does not represent the lower limit of available moisture, the hygroscopic coefficient be used as the reference value for expressing the relative wetness of a soil as related to plant behaviour. While the hygroscopic coefficient, in the sense in which this term was employed, is no longer in general use as a soil moisture constant, Batchelor and Reed's contention that a soil-moisture constant, approximately equivalent to the non-available soil-moisture percentage, is needed, is nevertheless a pertinent one. Since more general information was needed in connection with irrigation experiments, for soil present in Etapalli Taluka Dist. Gadchiroli. It seemed desirable to determine the wilting range of a large number of soil types varying widely in texture and other characteristics.

### METHODOLOGY

Put a 30-m measuring tape on an axis perpendicular to the slope of your sample point, with the 15 meter mark in the center of your plot. Starting at the 1 meter mark, and at distances of 4 meters (i.e., at the 1, 5, 9, 13, 17, 21, 25 and 29 meter marks), measure the soil moisture. 2. Before using the Keyway probe, the tester's plates must be totally free of contamination (wipe off remaining soil particles after each use) and chemically clean. The metals plates must be rubbed clean before use with the Kelway Conditioning film provided; place the dull side of the Conditioner Film around the plates, squeeze lightly and rotate a few times. This rubs the plates clean. Then wipe the plates with a clean rag or paper towel. Be sure not to touch the plates with your fingers. 3. Remove grass, leaves, pebbles and other debris in the spot to be tested, and soften the soil. Break up pieces if it is hardened. Now gently insert the tester vertically into the soil to a depth which will cover the tester's metal plates fully (8 cm or 3.25 inches). Press the soil tightly around the tester so that the metal plates are in close contact with the soil. 4. Press the button on the side of the tester and hold it for 2-3 minutes to read the moisture content on the lower scale. This time period is necessary for the meter to stabilize. The reading you obtain is percent relative saturation, and is NOT the percent moisture by weight. Soils - 3 each type of soil has its own field capacity (meaning its own ability to hold water) after it has been irrigated or rained on and then drained for 24 hours. This could be termed relative saturation. 5. After use, wipe the

depth which will cover the tester's metal plates fully (8 cm or 3.25 inches). Press the soil tightly around the tester so that the metal plates are in close contact with the soil. 4. Press the button on the side of the tester and hold it for 2-3 minutes to read the moisture content on the lower scale. This time period is necessary for the meter to stabilize. The reading you obtain is percent relative saturation, and is NOT the percent moisture by weight. Soils - 3 Each type of soil has its own field capacity (meaning its own ability to hold water) after it has been irrigated or rained on and then drained for 24 hours. This could be termed relative saturation. 5. After use, wipe the plates clean with a paper towel to remove all dirt particles. Remember to use the Conditioner Film before the next reading.

Choose a sample design: Put a 30-m measuring tape on an axis perpendicular to the slope of your sample point, with the 15 meter mark in the center of your plot. Starting at the 1 meter mark, and at distances of 4 meters (i.e., at the 1, 5, 9, 13, 17, 21, 25 and 29 meter marks), measure the soil moisture. 2. Before using the Kelway probe, the tester's plates must be totally free of contamination (wipe off remaining soil particles after each use) and chemically clean. The metals plates must be rubbed clean before use with the Kelway Conditioning film provided; place the dull side of the Conditioner Film around the plates, squeeze lightly and rotate a few times. This rubs the plates clean. Then wipe the plates with a clean rag or paper towel. Be sure not to touch the plates with your fingers. 3. Remove grass, leaves, pebbles and other debris in the spot to be tested, and soften the soil. Break up pieces if it is hardened. Now gently insert the tester vertically into the soil to a depth which will cover the tester's metal plates fully (8 cm or 3.25 inches). Press the soil tightly around the tester so that the metal plates are in close contact with the soil. 4. Press the button on the side of the tester and hold it for 2-3 minutes to read the moisture content on the lower scale. This time period is necessary for the meter to stabilize. The reading you obtain is percent relative saturation, and is NOT the percent moisture by weight. Soils - 3 each type of soil has its own field capacity (meaning its own ability to hold water) after it has been irrigated or rained on and then drained for 24 hours. This could be termed relative saturation. 5. After use, wipe the



## Biodiversity conservation and management: A Review.

Dr. Gubbawar SD

Bhagwanrao college of Arts and Science, Ettapali Dist-Godchiroli



### Manuscript Details

Available online on <http://www.irjse.in>  
ISSN: 2322-0015

### Cite this article as:

Gubbawar SD. Biodiversity conservation and management: A Review., *Int. Res. Journal of Science & Engineering*, February, 2020, Special Issue A7 : 869-873.

© The Author(s). 2020 Open Access

This article is distributed under the terms of the Creative Commons Attribution 4.0 International License

(<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made.

### ABSTRACT

Firstly, while the biological profile of India is shown or highlighted, the issues relating to biodiversity are there in the context globally. And after that, significance of forest management and the policies are shown and also the need for new strategy and plans so that there must be conservation and also for the management of the biodiversity with the help of integrative approach by taking all kinds of aspects into account. "In the wide field of biodiversity, the French Institute's research programmes have been focusing for about four decades on species diversity and ecosystem diversity at the local (i.e. stand and community), landscape and regional levels". The concentration of the institution is on the ecology of plant containing a great emphasis on trees and forests and more. "Geographically speaking, most of the studies are being carried out in the Western Ghats and some projects in the Eastern Ghats and mangroves. The biodiversity-related activities of the French Institute come under assessment of biodiversity and monitoring the dynamics of biodiversity".

**Keywords:** Biodiversity conservation, geographical information system.

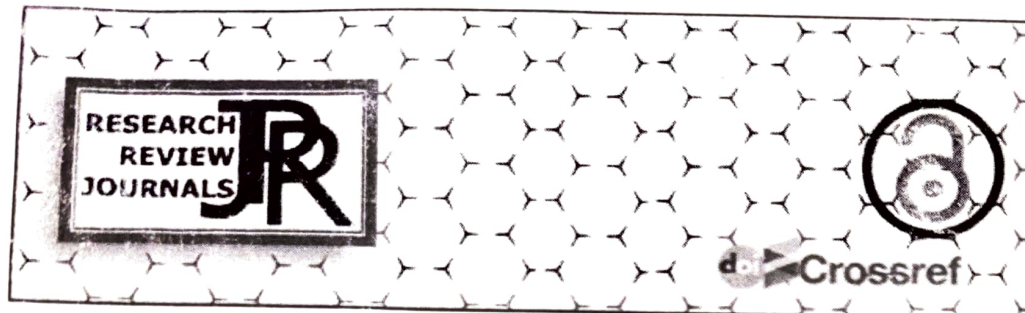
### INTRODUCTION

"Biodiversity refers to the variety and variability among living organisms, the ecological complexes in which they occur, and the ways in which they interact with each other and their environment". From the past of geography, it is an outcome of the string of turnover in the ratio in which they tell us about the evolution and extinction and it is a natural process. The record from geology shows us that due to the changing conditions many animal species and plants have lost their lives.

D8 S D. Gubhakar 2019-20

7/10/23, 8:52 PM

2019 - RESEARCH REVIEW International Journal of Multidisciplinary



## RESEARCH REVIEW International Journal of Multidisciplinary

ISSN 2455-3085 (Online)

Impact Factor 6.377 [SJIF]

Peer-reviewed Journal

Search...



HOME | ABOUT | CURRENT ISSUE | ARCHIVES | INDEXING | SUBMIT PAPER | AUTHOR GUIDE | CONTACT

### News & Updates

Call for Papers  
Oct-2021 Issue

Research      Review  
Journal is      Refereed  
monthly      online

### Archives: Volume 4 (Year-2019)

Issue 1	Issue 2	Issue 3	Issue 4
Issue 5	Issue 6	Issue 7	Issue 8
Issue 9	Issue 10	Issue 11	Issue 12

### Download


Books Download  
Paper Template  
Copyright Form  
Other Publication  
Services

HOME | FAQs | PLAGIARISM POLICY | OPEN ACCESS POLICY | DISCLAIMER POLICY | PRIVACY POLICY | SITE MAP | CONTACT US | © 2015-16 Copyright RRIJM

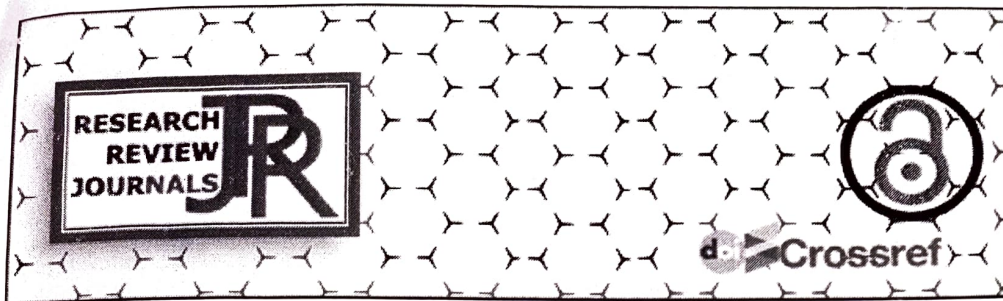


This work is licensed under a CREATIVE COMMONS ATTRIBUTION-NONCOMMERCIAL-NODERIVS 2.5 INDIA LICENSE.

Visitors: 649

  
**Principal**  
Bhagwantrao Arts & Science  
College, Etapalli Dist. Gadchiroli





**RESEARCH REVIEW  
International Journal  
of Multidisciplinary**

ISSN 2455-3085 (Online)

Impact Factor 6.377 [SJIF]

Peer-reviewed Journal

content page

[HOME](#) | [ABOUT](#) | [CURRENT ISSUE](#) | [ARCHIVES](#) | [INDEXING](#) | [SUBMIT PAPER](#) | [AUTHOR GUIDE](#) | [CONTACT](#)

## News & Updates

**Call for Papers  
Oct-2021 Issue**

Research Journal is Refereed

## Download

[Books Download](#)  
[Paper Template](#)  
[Copyright Form](#)  
[Other Publication Services](#)

## Study of Cell Surface Receptors: Types & Downstream Mechanisms

Vol-4 | Issue-5 | May 2019 | Published Online: 25 May 2019

Author(s)

Dr. S. D. Gubbawar <sup>1</sup>

<sup>1</sup>Assistant Professor, Bhagwantrao Arts and science College, Etapalli, Dist- Gadchiroli, Maharashtra

### Abstract

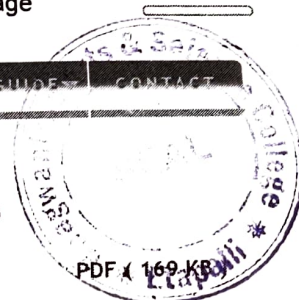
A receptor is a molecule that receives signals (chemical or hormonal) from outside the cell and is usually located on the cell surface. Receptors are proteins that undergo a conformational change upon attachment of their corresponding signaling molecule, which in turn induces a chain reaction (also known as signal transduction) within the cell leading to various cellular responses, including cell death.

### Keywords

Cell Surface Receptor

### Statistics

Article View: 115





## NOVEL GREEN AND CONVENTIONAL TACTIC IN THE ROUTE OF AMALGAMATION OF 1-PHENYL NAPHTHALENE LIGNAN

Twinkle Wankhade<sup>1\*</sup>, Neelam Jain<sup>1</sup>, Rajdip Utane<sup>2</sup>, Subodh K. Sakhare<sup>3</sup> and Atul Umaji<sup>4</sup>  
Barsagade

<sup>1\*</sup>&<sup>1</sup> Sri Satya Sai University of Technology and Medical Sciences Sehore, Bhopal (MP).

<sup>2</sup>Sant Gadge Maharaj Mahavidyalaya Hingana, affiliated to RTM Nagpur University Nagpur, MH, India-441110

<sup>3</sup>Shri Sadguru Saibaba Science & Comm. college Ashti affiliated to Gondwana univ. Gadchiroli(MH), India 442707

<sup>4</sup>Bhagwantrao arts and science college Etapalli affiliated to Gondwana University Gadchiroli (MH), India 442704

### Abstract

*In recent study Zeolite has remarkable uses for their applications in organic synthesis. Green approach towards synthesis of 1-phenyl naphthalene and their derivatives from  $\beta$  benzoyl propionic acid ( $\beta$ BPA) in few segments. Precursor  $\beta$ BPA prepared by Fridel craft reaction by using green reagent i.e. Zeolite. In initial segment, comparative study of synthesis of  $\alpha$ -arylidine  $\gamma$ -phenyl  $\delta,\beta$ - butenolide by perkin condensation reaction using Zeolite with different catalyst. Second segment synthesis of  $\alpha$ -arylidine,  $\beta$ -Benzoyl Propionic acid by cleavage using alcoholic sodium carbonate. In terminating segment 1-phenyl naphthalene has been already synthesized by cyclizations using PPA,  $H_2SO_4$ , sulphamic acid and nanozeolite has been introduced as a cyclizing reagent in place of foresaid. It has been observed that microwave method creates better yield, reduces reaction time and energy compared with conventional synthesis lignans.*

**Keywords:** 1-phenyl naphthalene,  $\alpha$ -arylidine  $\gamma$ -phenyl  $\delta,\beta$ - butenolide, nanozeolite.

## 1. Introductions

### 1.1 Green Chemistry

During the early 1990s the US Environmental Protection Agency (EPA) was coined the phrase 'Green Chemistry' by Prof. Anastas to promote innovative chemical technologies that reduce or eliminate the use of generation of hazardous substances in the assign manufacture and use of chemical products. It is widely acknowledged that there is a growing need for more environmentally acceptable processes in the chemical industry (1-4). This trend towards what has become known as Green Chemistry or sustainable technology necessitates a paradigm shift from traditional concept of process efficiency, that focus largely on chemical yield and to one that assigns economic value.