



**Sipna Shikshan Prasarak Mandal, Amravati's**  
**ARTS, SCIENCE AND COMMERCE COLLEGE**  
**CHIKHALDARA, DISTT. AMRAVATI (Maharashtra State)**  
**Accredited by NAAC with Grade B++ (CGPA 2.77)**



## **DVV Clarification For**

**3.1.1 Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)**

■ President  
**Shri. Jagdish M. Gupta**  
(Ex. Minister of State, Maharashtra)  
0721 (O)2522341 (R) 2572526



SIPNA SHIKSHAN PRASARAK MANDAL'S AMRAVATI  
**ARTS, SCIENCE &**

**COMMERCE COLLEGE, CHIKHALDARA**

■ Principal  
**Dr. Rajesh S. Jaipurkar**  
(Mob.) 9423126066

Distt. Amravati (Maharashtra) 444 807  
NAAC Reaccredited 3rd Cycle with CGPA 2.77 at grade B++ (2018-2023)

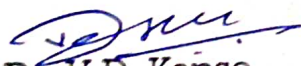
■ E-mail : [ascc163@sgbau.ac.in](mailto:ascc163@sgbau.ac.in) ■ Website : [www.sipnaascc.ac.in](http://www.sipnaascc.ac.in) ■ Tel. (O) 07220-230309

Outward No :

Date : 23/09/2023

## DECLARATION

This is to declare that the information, photos, reports, true copies, numerical data, etc. furnished in this file as supporting documents for DVV clarification is verified by IQAC and found correct.

  
Dr. V.D. Kapse  
IQAC Coordinator  
Co-ordinator  
IQAC  
Arts, Science & Commerce College,  
Chikhaldara  
Distt.: Amravati (M.S.)



ML  
Dr. R. S. Jaipurkar  
Dr. R.S. Jaipurkar  
Principal  
Arts Science & Commerce College,  
Chikhaldara, Dist - Amravati



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## INDEX


<b>Sr. No</b>	<b>Name of Document</b>	<b>Page No.</b>
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**Sipna Shikshan Prasarak Mandal, Amravati's  
Arts, Science and Commerce College  
Chikhaldara**

**List of grants for research projects received during the assessment years along with the nature of the award, and the awarding agency  
with amount**

Name of the research project/ endowment	Name of the Principal Investigator/Co- investigator	Department of Principal Investigator	Year of Award	Amount Sanctioned	Duration of the project	Name of the Funding Agency	Type (Government/non- Government)
In-house Research Project	Mr. A.F.Bobade	Industrial Chemistry	2019	0.075	1 Year	Sipna Shikshan Prasarak Mandal, Amravati	Non-Government
In-house Research Project	Mr. A.F.Bobade	Industrial Chemistry	2017	0.098	2 Year	Sipna Shikshan Prasarak Mandal, Amravati	Non-Government



  
**Dr. R. S. Jaipurkar**  
**Principal**  
**Arts Science & Commerce College,**  
**Chikhaldara, Dist - Amravati**

■ President  
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(Ex. Minister of State, Maharashtra)  
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■ E-mail : [ascc163@sgbau.ac.in](mailto:ascc163@sgbau.ac.in) ■ Website : [www.sipnaascc.ac.in](http://www.sipnaascc.ac.in) ■ Tel. (O) 07220-230309

Outward No :

Date : .....

Date: 01/04/2019

To,

**Mr. Anil F. Boabade**

**Assistant Professor and Head,**

**Department of Industrial Chemistry.**

**Subject: Approval to In-House Research Project.**

Dear Sir,

I am pleased to inform you that the amount of Rs. 10,000.00 (Indian Rupees Ten Thousand Only) has been approved for the in-house research project to be undertaken by you. The amount sanctioned will be paid out in accordance with the matching terms that you have proposed.

You are hereby informed to convey your acceptance up to 06/04/2019.

We look forward to receiving your progress report by at the end of academic year.

In the meantime, you have our very best wishes for continued success.



**Dr. R. S. Jaipurkar**  
Principal  
Arts Science & Commerce College,  
Chikhaldara, Dist - Amravati

■ President  
**Shri. Jagdish M. Gupta**  
(Ex. Minister of State, Maharashtra)  
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Outward No :

Date : .....

Date: 05/12/2017

To,

**Mr. Anil F. Boabade**

**Assistant Professor and Head,**

**Department of Industrial Chemistry.**

**Subject: Approval to In-House Research Project.**

Dear Sir,

I am pleased to inform you that the amount of Rs. 10,000.00 (Indian Rupees Ten Thousand only) has been approved for the in-house research project to be undertaken by you. The amount sanctioned will be paid out in accordance with the matching terms that you have proposed.

You are hereby informed to convey your acceptance up to 10/12/2017.

We look forward to receiving your progress report by at the end of academic year.

In the meantime, you have our very best wishes for continued success.



ML  
**Dr. R. S. Jaipurkar**  
Principal  
Arts Science & Commerce College,  
Chikhaldara, Dist - Amravati

**Arts, Science & Commerce College, Chikhaldara**

( Financial Year : 01/04/2019 To 31/03/2020 )

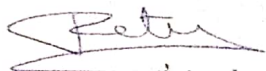
**LEDGER BOOK**

Research Expenses

Page No.: 1

Ref & VNo	Narration	Debit	Credit	Balance Cr/Dr
	<i>Opening Balance...</i>			
<u>10/03/2020</u>				
J-2	BILL SUBMITTED BY PROF. A.F. BOBADE/RESEARCH EXPENSES/IN-HOUSE PROJECT	7520.00		7520.00 Dr
	<i>Closing Balance .....</i>			<u>7,520.00 Dr</u>
	<b>Total Amount .....</b>	<b>7,520.00</b>		



  
Acting Principal  
Art, Science & Commerce College,  
Chikhaldara, Dist. Amravati

Arts, Science and Commerce College, Chikhaldara.

Report of In-House Research Project

(2019-2020)

Department of Industrial Chemistry

Name of In-House Research Project:- A Review On *Ruta Graveolens* As Traditional  
Medicine Cultivated In Melghat.

Objective :-

Students do actual research work to find Secondary metabolites represent a great interest.

1. To inculcate research aptitude among the students.
2. To promote the creative thinking of the students.
3. To avail platform for their creations.
4. To isolate identify the compound plant has.
5. To confirm medicinal values of plant, one has to undergo investigation of pharmacological activity.

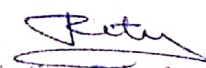
Brief summary of the In-House Research Project

A Review On *Ruta Graveolens* As Traditional Medicine Cultivated In Melghat.

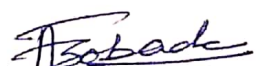
- The family of Rutaceae contains extremely wide variety of aromatic plants, mainly in tropical regions. Among them the rich is the genus *Ruta*.

Collection of plant material, Preparation of plant extract, GC-MS Analysis of *Ruta graveolens* Chemical Composition of *Ruta graveolens* leaves. The various phytochemicals which contribute to the medicinal activities like antimicrobial, antifungal, antiviral and antioxidants.. The mass spectra of all the phytochemicals identified in addition to biological activity reported to have antimicrobial, anti-inflammatory, anticancer.

Principal and Management of Arts, Science & Commerce College, Chikhaldara; Dist- Amravati(M.S.) for providing 7520/-Rs. financial assistance & laboratory facilities for the present investigation. In-house research project published by Anil Bobade, Ekta Kanase, Mayuri Charate. Completion of project was march 2020.

  
Anil Bobade  
Arts, Science & Commerce College,  
Chikhaldara, Dist. Amravati



  
A. P. Bobade  
Asst. Professor & H.O.D. [Industrial Chemistry]  
Arts, Science & Commerce College,  
Chikhaldara



In International Journal of Innovative Science and Research Technology (GC-MS Study of Methanolic and Ethanolic Extract of *Ruta graveolens* Leaves.

**Paper on In-House Research Project**

Volume 5, Issue 3, March – 2020 International Journal of Innovative Science and Research Technology ISSN No:-2456-2165

IJSRT20MAR758 www.ijisrt.com 2010

## GC-MS Study of Methanolic and Ethanolic Extract of *Ruta graveolens* Leaves

Anil Bobade<sup>1\*</sup>, Ekta Kanase<sup>1</sup>, Mayuri Charate<sup>2</sup>

Department of Industrial Chemistry

Arts, Science & Commerce College, Chikhaldara, Amravati, M.S. 444807 India

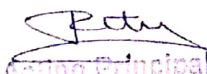
**Abstract:-** The family of Rutaceae content variety of aromatic compositions. The local use of *Ruta Graveolens* on treatment of joint pain, paralysis, nervous disorder. The drugs is useful in the disorder of kidney, urinary bladder and helps regulate the function of these organs. The herb and the oil act as stimulants, their influences being chiefly directed to the uterine and nervous system. Pharmacognestic study of crude plant leaves by methanolic and ethanolic extract of *Ruta Graveolens* carried out by GC-MS. Studies by GC-MS shows bioactive chemicals in methanolic and ethanolic extract azuleno[5,6]oxirenone; dMannose; Cyclopropanecarboxylic acid, nonylester; 2Undecanone; Stigmasta 5,24(28)dien 3ol, (3 $\alpha$ , 24Z). Ethanolic extract 9Octadecenoic acid (Z), L-Proline, tri(cyclopentadienyl cobalt)hexapropenylbenzene; dMannose; Cyclopropanecarboxylic acid, Molybdenum, bis

[(1,2,3,4,5 $\alpha$ ), 1,3bis(1,1dimethylethyl)24cyclopentadienyl], diacarbonyldiacarbonyldi, (momo)

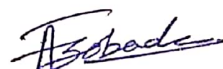
**Keywords:-** GC-MS, Soxhlet, Chemical Composition, Phytochemical, Methanolic & Ethanolic

### I. INTRODUCTION

The *Rutaceae* are family, commonly known as rue, genus *Ruta*, family of flowering plant contain aromatic constituents. It is cultivated and grows on waste stony ground. The *Rutaceae* is one of the largest plant families with approximately 150 genera and 1,500 species distributed largely in tropical and subtropical parts of the world. A variety of plants of the family *Rutaceae* are used in traditional system of medicine world-wide. The most common

  
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( Financial Year : 01/04/2017 To 31/03/2018 )

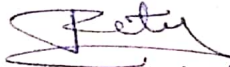
**LEDGER BOOK**

**Research Activities**

Page No.: 1

Ref & VNo	Narration	Debit	Credit	Balance Cr/Dr
	<i>Opening Balance...</i>			
<u>31/03/2018</u>				
C-1	TO PROF A.F. BOBADE PAYMENT AGAINST RESEARCH ACTIVITIES IN COLLEGE IN HOUSE PROJECT LABORATORY CHEMICALS AND LAB TESTING SAMPLE FEE PAID BY CHQ.NO. 011825	9890.00		9890.00 Dr
	<i>Closing Balance .....</i>			<u>9,890.00 Dr</u>
	<b>Total Amount .....</b>	<b>9,890.00</b>		



  
**Acting Principal**  
Art, Science & Commerce College,  
Chikhaldara, Dist. Amravati

Name of In-House Research Project:- A Review On *Murraya Koenigii* For (Agriculture) Industrial

Purpose.

Objective :- Students do actual research work to find Secondary metabolites represent a great interest.

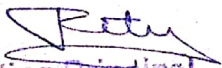
1. To inculcate research aptitude among the students.
2. To promote the creative thinking of the students.
3. To avail platform for their creations.
4. To isolate identify the compound plant has.
5. To confirm medicinal values of plant, one has to undergo investigation of pharmacological activity.

Brief summary of the In-House Research Project

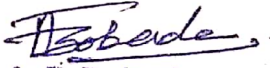
A Review On *Murraya Koenigii* For (Agriculture) Industrial Purpose

The curry tree *Murraya Koenigii* is a tropical and sub-tropical in the family *Rutaceae*. "Medicine is food and food is medicine" is the best way to describe on how the ailments were cured by using the plants during the ancient period of time. The leaves of plant are use as tonic, stomachic, carminative, internally in dysentery, vomiting. Used as anti-helminthil, analgesic, cures piles, allays heat of the body, thirst, inflammation and itching. *Murrayakoenigii*, commonly known as curry leaf or karipatta in Indian dialects, belonging to Family *Rutaceae* which represent more than 150 genera and 1600 species<sup>1</sup>. *Murraya Koenigii* is a highly values plant for its characteristic aroma and medicinal value. It is an important export commodity from India as it fetches good foreign revenue. A number of chemical constituents from every part of the plant have been extracted. The basic medicinal property of these plants lies in some chemical substances.

Principal and Management of Arts, Science & Commerce College, Chikhaldara; Dist-Amravati(M.S.)for providing 10,000/-Rs. financial assistance & laboratory facilities for the present investigation. In-house research project published by Anil Bobade, Gathe Nilesh, Wankhade R, Bobade A.F, Dr.Wasnik U.S., Kadu S.R. In International Research Journal of Science and Engineering, 2018; Vol. 6 (2): 77-84 <http://www.irjse.in> ISSN: 2322-0015 UGC Approved Journal No. 63628

  
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A. F. Bobade  
Asst. Professor & M.C.D. [Industrial Chemistry]  
Arts, Science & Commerce College,  
Chikhaldara

RESEARCH ARTICLE

# Phytochemical analysis of inevitably important plant *Murraya Koenigii* from upper platue of Chikhaldara (Melghat) India

Gathe NS<sup>1</sup>, Wankhade RA<sup>2</sup>, Bobade AF<sup>3\*</sup>, Wasnik US<sup>3</sup>, Kadu SR<sup>3</sup>

<sup>1</sup>Department of Industrial chemistry, <sup>2</sup>Department of Botany, <sup>3</sup>Department of Chemistry, Arts, Science and Commerce College, Chikhaldara, MS, India.

\*Corresponding author Email [suruchika.edu745@gmail.com](mailto:suruchika.edu745@gmail.com)

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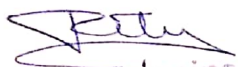
Editor: Dr. Arvind Chavhan

Cite this article as:


Gathe NS, Wankhade RA, Bobade AF, Wasnik US, Kadu SR. Phytochemical analysis of inevitably important plant *Murraya Koenigii* from upper platue of Chikhaldara (Melghat) India. *Int. Res. Journal of Science & Engineering*, 2018, 6 (2): 77-84.

ABSTRACT

The medicinal plants are almost the exclusive source of drugs for majority of world population today. People want to use herbal drugs because they are considered as safe, inexpensive and have no adverse effects. Plants are also very useful because they can self-generate and can produce a range of beneficial bioactive products. The leaves of *Murraya Koenigii* are use as tonic, stomachic, carminative, internally in dysentery, vomiting Used as anti-helminthil, analgesic, cures piles, allays heat of the body, thirst, inflammation and itching; A scrutiny of literature reveals some notable pharmacological activities of the plant such as activity on heart, anti diabetic and cholesterol reducing property, antimicrobial activity, antiulcer activity, antioxidative property, cytotoxic activity, anti diarrhea activity, phagocytic activity and many more medicinal values. The present study was aimed to isolate photochemical constituents from *Murraya Koenigii* showing antioxidant properties.

  
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