

Shri Shivaji Education Society Amravati's  
**SCIENCE COLLEGE**, Congress Nagar, Nagpur

DEPARTMENT OF BOTANY

**INTERNAL ACADEMIC AUDIT**

**2020-2021**

1. Vision and Mission of the Department

**Vision-** To emerge as a centre of excellence in “Plant Science”.

**Mission-** We dedicate & commit ourselves to provide education in plant science & its applications to enrich the students with recent advances in the subject “where sky is the limit”

2. A. Faculty Strength:

Faculty	Recruited	Vacant	Remarks
Regular	04	01	
CHB	--	--	
Ad-hoc	--	--	
Non-teaching	02	01	

B. Faculty profile

Name	Highest Qualification	Designation	Specialization	Teaching Experience
Prof. R.N.Deshmukh	M.Phil., Ph.D.	Professor & Head	Algae & Cytogenetics	34
Prof. P.S.Tiwari	M.Phil., Ph.D.	Professor	Aerobiology & Plant Tissue Culture	23
Dr. R.H.Mahakhode	B.Ed., Ph.D.	Assistant Professor	Cytomorphology & Cytogenetics	10
Dr. R.P.Sonwalkar	Ph.D.	Assistant Professor	Plant Biodiversity	03
Dr.Mrs.Sharayu S.Deshmukh	M.Sc., M.Phil., Ph.D	Assistant Professor	Taxonomy of Angiosperms	03

### 3. Students strength

#### A. (Winter 2020)

Year	Group	Number of Students Admitted
B.Sc. Semester I	CBM	31
	CBZ	53
	CBG	26
	Total	<b>110</b>
B.Sc. Semester III	CBM	29
	CBZ	45
	CBG	19
	Total	<b>93</b>
B.Sc. Semester V	CBM	33+1 (34)
	CBZ	62
	CBG	37
	Total	<b>133</b>
	1*- Biotech., Chem., Bot	
M.Sc. I		
M.Sc. II		
Ph.D.		
Value Added Program		

#### B. (Summer 2021)

Year	Group	Number of Students Admitted
B.Sc. Semester II	CBM	31
	CBZ	53
	CBG	26
	Total	<b>110</b>
B.Sc. Semester IV	CBM	29
	CBZ	45
	CBG	19
	Total	<b>93</b>
B.Sc. Semester VI	CBM	33+1* (34)
	CBZ	62
	CBG	37
	Total	<b>133</b>
	1*- Biotech., Chem., Bot	
M.Sc. I		
M.Sc. II		
Ph.D.		

Value Added Program		

#### 4. Students Performance

##### A. Result Analysis (Winter 2020) UG & PG

Programme Code	Programme Name	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
	B.Sc Semester- I	109	105	96.33%
	B.Sc Semester- III	93	93	100%
	B.Sc Semester- V	132	132	100%

##### B. Result Analysis (Summer 2021 ) UG & PG

Programme Code	Programme Name	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
	B.Sc Semester- II	108	108	100%
	B.Sc Semester- IV	92	92	100%
	B.Sc Semester- VI	131	131	100%

#### C. Achievements

##### A- (Medals/Awards/Prizes at University level)

Sr.No.	Name of the Students	Class	Title
	Mr Yash Nitin Mahule (3 <sup>rd</sup> position)	B.Sc Semester - I	Intercollegiate e-Poster competition on <b>National Wildlife Week</b> organized by Hislop College Nagpur on 7 <sup>th</sup> October 2020
	Tanushree Bannerji, ( 1 <sup>ST</sup> Rank)	B.Sc Semester - VI	Quiz competition conducted during National Webinar on <b>Plant Tissue Culture: Application &amp; Techniques</b> organized by the department in association with St. Alloysius College Jabalpur, M. P. on 15 <sup>th</sup> May 2021.

	Rashmi Chopkar, ( 2 <sup>nd</sup> Rank)	B.Sc Semester - VI	Quiz competition conducted during National Webinar on <b>Plant Tissue Culture: Application &amp; Techniques</b> organized by the department in association with St. Alloysius College Jabalpur, M. P. on 15th May 2021.
	Neha Thakral ( 3 <sup>rd</sup> Rank)	B.Sc Semester - VI	Quiz competition conducted during National Webinar on <b>Plant Tissue Culture: Application &amp; Techniques</b> organized by the department in association with St. Alloysius College Jabalpur, M. P. on 15th May 2021.

B- Merit Position of PG Students in RTMNU (for PG Dept. only): NA

#### 5. Students Progression:

Year	No. of students enrolling into higher Education	Program graduated from
	UG to PG	05 (04- Inst. of Science, 01- PGTD, RTMNU Nagpur)
	PG to Research	
	Placement	
	On campus	
	Off campus	

#### (i) Students' publication in Extra-curricular activity -

Title of the Paper/Book	Name of Author	Title of journal/Book	Year of publication
Vision of life	Ishant M. Nikure	Vision of life	2020
Poem on Transgender Community (LGBTQ)	Ishant M. Nikure	India needs a change	2020

Pankh (Udane ki Khawaish)	Ishant M. Nikure	Pankh (Udane ki Khwaish)	2020
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(ii) Students' Extension Activity

Sr. No.	Name of Activity (Online)	Participation
1.	World Environment Day	52
2.	World Nature Conservation Day	48
3.	National Webinar on Plant Tissue Culture: Application & Techniques	232

(iii) No. of Students pursuing higher course : **05**

(04- Inst. of Science, 01- PGTD, RTMNU Nagpur)

(iv) Students' participation in seminar : Nil

Student of M.Sc. Sem IV Physics participated in conference: NA

Sr. No.	Name of Students	Conference type	Participation as
1.			
2.			
3.			

(v) Students' Learning course through-on-line : Nil

6. Faculty

I. Research Paper Publications

A. Total Number of publications:

i) International : RND-01; RHM - 01

ii) National : RHM- 02

B. Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self-citation
Notes on <i>Aristida spp.</i> from Bhandara District of Maharashtra State , India	Rajendra. N. Deshmukh	Annals of Plant Sciences (ICI)	2020			
Effect of glyphosate on seedling growth of <i>Malachra capitata</i> L	R.H. Mahakhode	Bioinfolet UGC-CARE Approved Journal of Life Sciences <a href="http://www.indianjournals.com">www.indianjournals.com</a>	2020			
Effect of paraquat on rhizosphere mycoflora of <i>Psoraleacorylifolia.</i>	R.H. Mahakhode	Bioinfolet UGC-CARE Approved Journal of Life Sciences <a href="http://www.indianjournals.com">www.indianjournals.com</a>	2020			
Climate Change and Effect of Pollution on Plants.	Dr.Mrs.Sharayu S.Deshmukh	UGC Care Group I Journal Vol-10 Issue-07 No. 3	July 2020			
Sports, Yoga, Music Are Effective in Covid-19	Dr.Mrs.Sharayu S.Deshmukh	SCHE-DC19-LPIW 2020	Aug .2020			
Evaluation of Phytochemical Constituents in Aromatic Plant	Dr.Mrs.Sharayu S.Deshmukh	Research Interventions & Technological Advancements In Plant Sciences	27 <sup>th</sup> -28 <sup>th</sup> march 2020			

Properties of Dried Leaves of <i>Leonotis nepitifolia</i> Plant						
Role & Contribution of Women In Today's Research in Environment Oral PPT (online zoom platform) 23 march 2021	International Journal Of Science Technology And Management	Peer Review & referred Journal Impact factor 6.3 UCG notified Journal	23 march 2021	Yes		

### C. Faculty participation in conferences/seminar/workshop and symposia:

Name of the Faculty	Title of Conference/ Seminar/ workshop Attended	Period	Level International/ National/State /University /College	Whether Presented papers	Whether abstract /paper published in Souvenir/Abstract Book
R.H.Mahakhode	Medicinal Plants as Immuno-stimulants to fight Covid-19	2020	International E-conference	Yes	Abstract Published
R.H.Mahakhode	Algae: Use as sustainable water in purification technology.	2021	International E-conference	Yes	Abstract Published
R.N. Deshmukh	Crosstalk between Ethanobotany & Immunology: A fight against COVID 19	2020	National Webinar	---	---
R.N. Deshmukh	Plant Tissue Culture Techniques and Applications.	2021	National Webinar	---	---
P.S.Tiwari	Plant Tissue Culture Techniques and Applications.	2021	National Webinar	---	---
Dr.Mrs.sharayu S.Deshmukh	Wild Plant <i>Ocimum americanum</i> and Its Uses in Herbal Medicine & Cosmetics( Oral Presentation)	Recent Trends In Plant Science 3 rd – 5 th Dec.2020	Online One Day International Conference Akola	Yes	Peper Published

Dr.Mrs.sharayu S.Deshmukh	Evaluation of Phytochemical Constituents in Aromatic Plant Properties of Dried Leaves of <i>Leonotis nepitifolia</i> Plant (Poster presentation)	Research interventions and technological advancements in plant sciences 26 th& 27 march 2021	International Conference on Conference , Sawantwadi	Yes	Peper Published
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D. Awards to:

Sr. No.	Faculty members	Fellowship/ Award	Award conferring Organization	Event Organizedby	Whetherinternational / national / state / regional / collegeoryuniversity level
1	Dr.sharayu S.Deshmukh	<b>Award for the Best paper-Presentation</b>	Indian Science Congress Association	RajarsheeShahu Science College Chandur Railway, Dist. Amravati	National

7. MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year : Nil

Date of MOU	Organization	Purpose/Activity	Student Participate under MOU

8. Research funds sanctioned and received from various agencies, industry and other organizations : Nil

Nature of the Project	Duration	Name of funding Agency	Amount Sanctioned	Amount Received



### 9. Books Published : Nil

Dr.Sharayu S.Deshmukh	Book		Book Edited
	Title	ISBN and Date	Chapter
Aadhar Publication  (March-2021)	Flora of Warud College Campus Area  Page No 39-46	International ISBN: 978-81-95551-4-9 (March-2021)	
Bhumi Publication (March-2021)	A comparative Study Of Flora Of Campus Area of Mahatma Fule Arts Science,Commerce&Sitaramjichoudharicollege.WarudDist.Amaravati.Page No162-169	International Ecology Research (Volume-I) ISBN: 978-93-88901-19-2, (March-2021)	

### 10. Research Guidance by Faculty during the year : Nil

Name of the guide	Ph.D		
	Awarded	Submitted	Registered

### 11. Alumni engagement

- a. Contributes significantly to the development of the institution through financial and other supports : Nil
- b. alumni contribution during the year : Nil

### 12. Action Plan of the Department

1. To celebrate World Nature Conservation Day.
2. To organize various Eco-friendly activities.
3. To plan excursion tour
4. To organize student seminars
5. To organize guest lectures

6. To conduct workshop on Plant Tissue Culture
7. To encourage the students in various curricular & Extra-curricular activities
8. To organize workshop on Mushroom Cultivation under skill base course
9. To encourage staff to participate in various National & International events

### 13. Best Practices of the department

Eco-Friendly Activities (World Environment Day, World Nature Conservation Day, Rakhi & Dry holi celebration, Study tours etc.)

### 14. SWOT Analysis

#### **Strength**

- Qualified, Competent and Experienced Staff.
- Committed non- teaching staff.
- Disciplined and hard working students.
- Well furnished and equipped Department.
- Safe and secured environment for co-education
- Democratic functioning.
- Various options available with Botany subject.
- Skill base certificate course on Mushroom Cultivation.
- Self-finance certificate course on Plant Tissue Culture .
- Botanical society for students.
- Good results with distinction.
- Teacher Mentor Scheme for students.
- Parent-teacher interaction is encouraged.
- Seminars, counseling, personality development, guest lectures and Awareness programs are regularly arranged.

#### **Weakness**

- Average students seek admission in the subject.
- Moderate employment opportunity.
- Slow economic and industrial growth of Nagpur region.
- Decline of students' academic interest in pandemic (Covid-19).

#### **Opportunity**

- Employment potential in Forest department, various scientific institution e.g, NEERI, Ankur Seeds, Mahyco, CICR, CCRI, MIHAN, NMC Nagpur
- Training and placement cell in college.
- Student faculty exchange programme.
- Seminars, workshop, conferences, inter collegiate competitions, science exhibition for overall development of the students.
- Visit to Scientific laboratories and various localities.

- Research guidance facility available to students.
- Inspire camp is regularly organized to motivate the students for basic sciences.

**Challenges**

- Declining interest of the students in basic science subject.
- Poor response of students during online classes in pandemic period (Covid- 19)
- Mushrooming of professional courses.

Prof. R.N.Deshmukh  
(Head, Department of Botany)