SHRI SHIVAJI COLLEGE OF ARTS, COMMERCE AND SCIENCE, AKOLA <u>DEPARTMENTAL PROFILE</u>

1. Name of Department : BOTANY

2. Year of Establishment UG: 1967

PG : 1993 Ph. D. : 2000

3. Details of Teaching faculty

Sr.	Name of Faculty member	Qualification	Designation
No.			
1	Dr. Pratiksha P. Umale	M. Sc., M. Phil., Ph. D.	Professor & HOD
	(Kokate)		
2	Dr. Deepak K. Koche	M. Sc., NET, Ph. D.	Professor
3	Dr. Vaishali S. Patil	M. Sc., Ph. D.	Professor
4	Mr. Nikhil B. Chaukhande	M. Sc. NET	Assistant Professor
5	Dr. Anand V. Oke	M. Sc., B.Ed., Ph. D.	Assistant Professor
6	Mr. Subham A. Rathod	M. Sc. NET	Assistant Professor
7	Dr. Rasika N. Patil	M. Sc., B.Ed.,Ph. D.	Assistant Professor
8	Ms. Isha S. Nagwanshi	M.Sc. (Botany)	Assistant Professor (Adhoc)
9	Mr. Gopal. N. Dhobale	M.Sc. (Botany), GATE,	Assistant Professor (Adhoc)
		B.Ed.	
10	Mr. Nilesh S. Sonone	M.Sc. (Botany)	Assistant Professor (Adhoc)
11	Ms. Bushra Anjum Shaikh	M.Sc. (Botany)	Assistant Professor (Adhoc)
	Saleem		

Faculty Positions (2017): Sanctioned: 11 Filled: 07

4. Details of administrative/ Technical Staff:

Sr. No.	Name	Qualification	Designation
1	Mr. V. D. Dhotre	B. A.	Lab Attendant
2	Mr. V. V. Nakat	SSC	Lab Attendant

3	Mr. V. S. Gawande	SSC	Lab Attendant
4	Mr. B. L. Solanke	SSC	Peon

5. Students Profile of the Programs (2020-21)

Course	Male	Female	Total	Gender ratio
B. Sc.	204	370	574	1: 1.8
M. Sc.	06	45	51	2:15
Ph. D.	4	6	10	4:6
Ph. D. Course	1	2	3	1:2
work				

6. Success rate of each program (comparative):

Course	2016-17	2017-18	2018-19	2019-20	2020-21
B. Sc.	78.24%	77.78%	76.26%	78.41%	99.81%
M. Sc.	94.11%	87.06%	85.00%	79.38%	98.91%

- The success rate of Undergraduate classes is very good as compare to cumulative results of University in the subject.
- The success rate of Post graduate classes is high with sizable number of University rank holders.
- The drop out rate of PG is zero.

7. Learning resources available in the Department:

- Separate laboratories for Undergraduate and Post graduate classes.
- Department have Seven desktop computers with Internet facilities. Each faculty member has personal laptops.
- Departmental library is well equipped with more than 550 text books, reference books, journal issues and student's projects.
- Department have well maintained Botanical Garden with variety of medicinal & ornamental plants.
- Department have a small vermicompost unit.

- Department have Museum of fossil and botanical specimen along with Seed bank.
- Department have good herbarium collection as a live resource for students reference.
- Department have well developed research Lab and Plant Tissue culture Lab for Ph.D. Students.
- A seminar hall with smart board and LCD facility for student's disposal.
- Technical information displayed in the form of QR code on plants through "Talking Tree App".

8. Enhancement of learning resources during last five years:

- UG and PG laboratories were furnished as per needs.
- Few new instruments like, UV- visible spectrophotometer and Incubator is made available.
- Wi-Fi internet facility
- Seminar hall with smart board facility.
- More than 200 titles added in Departmental library.
- Drinking water facility was availed for students in the Department.

9. Details of conferences/ Seminars/ symposia / workshops organized by the Department (Since 2015-16):

- One day Regional workshop on Preparation of Bio-fertilizers"- Funded by IQAC, Shri Shivaji College of Arts commerce and Science, Akola (MS)-Dated 13th January 2018. [The event was organized for PG students and Farmers in collaboration of Dr. Panjabrao Deshmukh Krishi Vidyapith, Akola]
- "Vegetable exhibition" for students on dated 18th September 2018.
- One day workshop on "Bonsai Making" for PG students, dated 21st January 2019.
- "Every flower is a soul blossoming in nature" Keeping this in our spirits our Department organized Flower Exhibition on the occasion of 121 the Birth Anniversary of Dr. Punjabrao alias Bhausaheb Deshmukh on dated 15th of January 2020.
- Inter- University Poster competition for UG and PG students of Biological Sciences, organized by Department on dated 05/02/2019. [The event was funded under UGC- CPE grant]
- "Online Test Series: A Nationwide Approach" a series of online tests for Post Graduate and Post PG students of Life Sciences organized by Department from 8th May to 10th May 2020.
- Webinar Series on Preparation for Competitive Exams in Life Sciences (26/05/2020 to 31/05/2020) organized by Department.

- International E-Conference on Innovative Research Trends in Life Sciences Organized by Department of Life Sciences. (3rd, 4th & 5th December 2020)
- World Wetland Day Celebration 2021 Interuniversity "Wetland Photography Competition" Organized by Department in collaboration with IQAC on dated 2nd February 2021.
- Virtual Value Based Program 21/02/2021Time 4 to 5 PM organized by Department of Botany in collaboration with Woman Doctors Wing Akola, IMA
- One Day Virtual Work Shop on Organic Fertilizers: A Miracle of Nature Organizing by Department of Botany and IQAC on dated 31/08/2021.
- A Virtual Guest Lecture on the occasion of World Ozone Day Organized by Department of Botany & IQAC on dated 16th September 2021.
- Virtual seminar competition organized by Department in collaboration with Shri Shivaji Science College, Amravati & Mycological Society of India on the occasion of "World Fungus Day" Celebration of Fungal Awareness Week 27th Sep to 2nd Oct 2021
- Inauguration of Botanical Association, Induction Program, Guest lectures of eminent persona in the field, plantation in college campus, felicitation of meritorious students are among the routine practices of the Department.

10. Research activities:

A] Research Supervisors in the Department: 03

- Dr. Pratiksha P. Umale (Kokate)
- Dr. Deepak K. Koche
- Dr. Vaishali S. Patil

B] Number of Ph. D. Awardee produced by the Department:

Sr. No.	Name of students	Supervisor	Year of award
1	Mr. M. B. Bobade	Dr. E. V. Upadhye	2006
2	Ms. P. S. Kokate	Dr. E. V. Upadhye	2007
3	Mr. P. N. Pawade	Dr. S. P. Rothe	2009
4	Mr. D. G. Bhadange	Dr. E. V. Upadhye	2011
5	Mr. Nafees Iqbal	Dr. S. S. Suradkar	2011
6	Ms. R. P. Shirsat	Dr. S. S. Suradkar	2013
7	Mr. Manoj Kakpure	Dr. S. P. Rothe	2013
8	Mr. Mohnish Bokhad	Dr. S. P. Rothe	2013

9	Ms. K. V. Kothale	Dr. S. P. Rothe	2013
10	Ms. Megha Naise	Dr. D. G. Bhadange	2014
11	Mr. Suraj Sharma	Dr. D. G. Bhadange	2014
12	Ms. Sujata Shende	Dr. D. G. Bhadange	2014
13	Ms. Swati Pundkar	Dr. P. S. Kokate	2015
14	Mr. Nitin Khandare	Dr. D. G. Bhadange	2015
15	Mr. Ajay Jadhav	Dr. D. G. Bhadange	2015
16	Mr. Syed Imran	Dr. S. S. Suradkar	2016
17	Ms. Kanchan Thorat	Dr. P. S. Kokate	2016
18	Ms. P. J. Deshmukh	Dr. D. G. Bhadange	2016
19	Mr. A. A. Maheshwari	Dr. S. P. Rothe	2018
20	Mr. S. B. Chavan	Dr. D. K. Koche	2018
21	Ms. J. M. Jasutkar	Dr. D. K. Koche	2018
22	Ms. Suchita Dighe	Dr. P. S. Kokate	2018
23	Ms. Rashika Patil	Dr. S. P. Rothe	2019
24	Ms. Rakhi Deshmukh	Dr. P. S. Kokate	2019
25	Ms. Deepali Wankhade	Dr. S. P. Rothe	2019
26	Ms.Priyanka Pandharmise	Dr. D. G. Bhadange	2020

Ph. D. Students awarded till 2015 = 15

Ph. D. Students awarded after 2015 = 11

C] Number of Students registered for Ph. D.

Sr. No.	Name of students	Supervisor	Year of Registration
1	Ms. Ruchita R. Gandhi	PET	2019
2	Ms. Ashwini P. Shirsat	PET	2019
3	Mr. Nikhil B. Chaukhande	NET (IARI)/PET	2019
4	Mrs. Shital S. Patil (Hiwale)	PET	2019
5	Mr. Shivdas R. Aher	SET/ NET (IARI)	2019
6	Ms. Pooja K. Dhawale	PET	2019

D] Number of Students completed Ph. D. course work & working for their Ph. D.

Sr. No.	Name of students	Eligibility
1	Mr. Nilesh S. Sonone	PET

2	Mr. Gopal N. Dhobale	GATE
3	Mr. Vivek S. Kalpande	PET
4	Ms. Tripty D. Jagtap	PET
5	Mr. Akshay G. Deshmukh	PET
6	Ms. Sunanda Dekate	CSIR NET
7	Ms. Neha Kopare	MH-SET

11. Number of Research projects completed/ ongoing with faculty members:

Name of PI	Project title	Major/ Minor/ Funding agency/ Amount	Status (Duration)
Dr. S. P. Rothe	Changing pattern of biodiversity in Akola District	Minor / UGC/ 0.75 L	Completed (2005-2007)
Dr. S. S. Suradkar	Anatomical investigations in some Sapindales	Minor/ UGC/ 0.65 L	Completed (2005-2007)
Dr. D. K. Koche	Immunostimulent activity of some plant derived elicitors in Vigna radiata	Minor/ UGC/ 0.75 L	Completed (2005-2007)
Dr. D. K. Koche	Preliminary phytochemistry and antimicrobial activity of some lamiaceae members	Minor/ UGC/ 1.30 L	Completed (2007-2009)
Dr. S. S. Suradkar	Ethnomedicinal survey of Katepurna wildlife sanctuary	Minor/UGC/ 0.90 L	Completed (2008-2010)
Dr. V. S. Dandge (Patil)	Morphological studies of some members from class deuteromycetes and their mechanism of biological control	Minor/ UGC/ 0.60 L	Completed (2008-2010)
Dr. D. G. Bhadange	Investigation on anti- phytopathogenic activity of some solanaceae members	Minor/ UGC/ 1.20 L	Completed (2008-2010)
Dr. P. P. Umale (Kokate)	Paleoenvironmental study of the flora of Deccan intertrappean beds of some new fossiliferous locations in Buldhana District	Minor / UGC/ 0.60 L	Completed (2008-2010)
Dr. S. P. Rothe	Digitalized inventory of medicinal plants resources from Maratha (Akola and Buldhana District)	Major/ RGSTC and ARI/ 17.80 L	Completed (2009-2012)
Dr. D. G. Bhadange	Exploration of ethnobotanical and ethnomedicinal plants from Akola District	Major/ UGC/ 9.99 L	Completed (2011-2014)

Dr. D. K. Koche	Improvement of Chickpea (Cicer arietinum L) using induced mutation with special reference to grain yield and nutrition	Major/ DAE- BRNS/ 20.46 L	Completed (2015-2018)
Dr. P. P. Umale (Kokate)	Antioxidant potential of some wild medicinal plants from Akola region (MS) India	Minor/ UGC/ 4.6 L	Completed (2017-2019)
Dr. D. K. Koche	In vitro defense biochemistry of <i>Cicer arietinum</i> L.	Minor/UGC/4.9 L	Completed (2017-2019)

12. Students with fellowships:

Name of	Fellowship	Sponsoring	Mentor/ Guide
student		agency	
Mr. Syed Imran	JRF (Major Project) (2009-2012)	UGC	Dr. D. K. Koche
Mr. Mohnish Bokhad	JRF (Major Project) (2009-2012)	RGSTC	Dr. S. P. Rothe
Mr. Manoj Kakpure	JRF (Major Project) (2009-2012)	RGSTC	Dr. S. P. Rothe
Ms. Rupali Shirsat	MANF (2009-2012)	UGC	Dr. S. S. Suradkar
Mr. P. R. Bogawar	JRF (Major Project) (2015-2018)	BRNS- DAE	Dr. D. K. Koche
Ms. Dipali Wankhade	MANF (2016-2019)	UGC	Dr. S. P. Rothe

13. Achievements of students during last 05 years:

University rank holders-

- o Miss. Leena Patil 5th rank in University Merit position 2016-17.
- o Miss. Rupali Ingle- 5th rank in University Merit position 2016-17.
- Miss. Pranita Talokar- 3rd rank in University Merit Position 2017-18
- o Mr. Syed Ovais- 4th rank in University Merit Position 2017-18
- Miss. Nusarat Parveen Shaikh Naseen 1st rank in University Merit Position 2019-20
- Miss. Bushra Anjum Shaikh Saleem- 2nd rank in University Merit Position 2019-20
- o Miss. Leena Patil qualified MPET 2021 exam of SGBAU, Amravati
- o Miss. Bushra Anjum qualified MPET 2021 exam of SGBAU, Amravati
- o Miss. Tejal Tayde qualified MPET 2021 exam of SGBAU, Amravati

• Achievements in Avishkar Research convention-

- o Mr. Abhimnyu Maheshwari- Research student, selected for State level Avishkar Competition (2016-17)
- Mr. Shivdas Aher Post PG section, selected for university level Avishkar Competition (2017-18)

• Any other-

- o Miss. Komal Pote secured 2nd rank in the Poster competition held at Shri Dr. R. G. Rathod College, Murtizapur (19/01/2018).
- Mr. P. R. Bogawar, Secured 2nd rank in Poster presentation competition in One day State level Seminar on Current Scenario of Botanical Research – 02nd February 2018.
- Ms. Nusrat Parveen and Bushra Anjum secured 1st rank in the poster competition organized by Shri Shivaji College, Akola (28/02/2019)
- Ms. Taleya Fatema and Komal Pote secured 1st and 2nd rank in the Poster competition organized by MSP Arts, Science and KPT Commerce College, Manora Dist- Washim. (28/02/2019).
- Mr. Sankalp P. Gajghate has secured 3rd Rank in Online National Competition to explore wild beauty & Wealth – "Wild Glory" Flower exhibition and competition held on 8th September 2021 and organized by Vinayak Vidnyan Mahavidyalaya Nandgaon (Kh), Amravati (MS).

14. Road map for next 05 years:

- Up-gradation of UG and PG laboratories with more sophisticated instrumentation.
- Improvement in Research facilities of the Department with more specialized structure.
- Introduction of some rare medicinal plant in Botanical Garden.
- To improve learning resources, including e- learning.
- To start consultancy service in possible subject area.
- To expand extension activities of Department to make the subject more student centric and society oriented.

Photo Gallery





Inaugural event -Inaugural Speech by- Hon. Nareshchandraji Thakare



Key note speaker- Dr. ArchanaJoshi, BARC Mumbai



Poster presentation competitio

One Day Regional Workshop on "Preparation of Biofertilizer" - 13th Jan. 2018



Chief guest- Shri Keshaoraoji Metkar



Inaugurator- Shri Prakashji Pohare







Expert- Dr. S. S. Mane and Dr. Totawar

Participants of the Regional workshop

Inter-University Poster Competition for UG and PG Students (5th Feb. 2019



Inaugural Event of Inter-University Poster Competition



Chief Guest Dr. S. N. Malode With HOD observing Posters



Valedictory function



Prize Distribution

One day Workshop on "Bonsai Making" 21st Jan. 2019



Inaugural Event



Experts Demonstration



Participant students



Dignitories observing the outcome

Botanical Excursions



At- Chikhaldara range forest



At- Muktagiri and nearby forest area



At- Pench National Park



At- Tadoba National Park- Pauni Gate



At- ICRISAT- Hyderabad



At- NBPGR- Hyderabad

SOME GLIMPSES OF FLOWER ARRANGEMENT



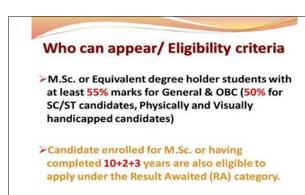




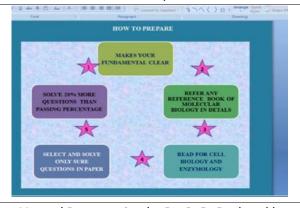




Dignitaries Observing Flower Arrangement



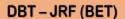
Vertual Presentation by Mr. S. V. Hiwrale



Vertual Presentation by Dr. P. D. Deshmukh

Important Topics: Biochemistry Non Covenant Interactions Concept of pH Protein Structure (Ramachandran Piot and Dihedral angles) Structure and Types of DNA (Chargaff Rais, Segar Packering, Sin-Anti) Lipids (Phospholipids and Glycolipids, PM Components.) Enzymes (Kinetics, Michaelis Monten, Allosteric, Inhibition) Metabolic Pathways (Glycolysis, Linkage, TCA, ETS, Cholesterol BS.) Vitamins (Coenzymes, Blood clotting, Vision, Deficiency Disorders) Thermodynamics (A O Calculations of biochemical reactions)

Vertual Presentation by Mr. H. Jaiswal



- Organising Agency: Department of Biotechnology
- Eligibility PG Biotechnology or in any discipline of Life sciences with 60 % (55% for SC/ST)
- Applicable for –Fellowship only
- Website: http://rcb.res.in/
- Tentative date of Notification: March April, every year
- Age and Attempt Limit: 28 years (relaxable upto 5 years for SC/ST) (relaxable upto 5 years for women candidates)

Vertual Presentation by Dr. A. A. Maheshwari

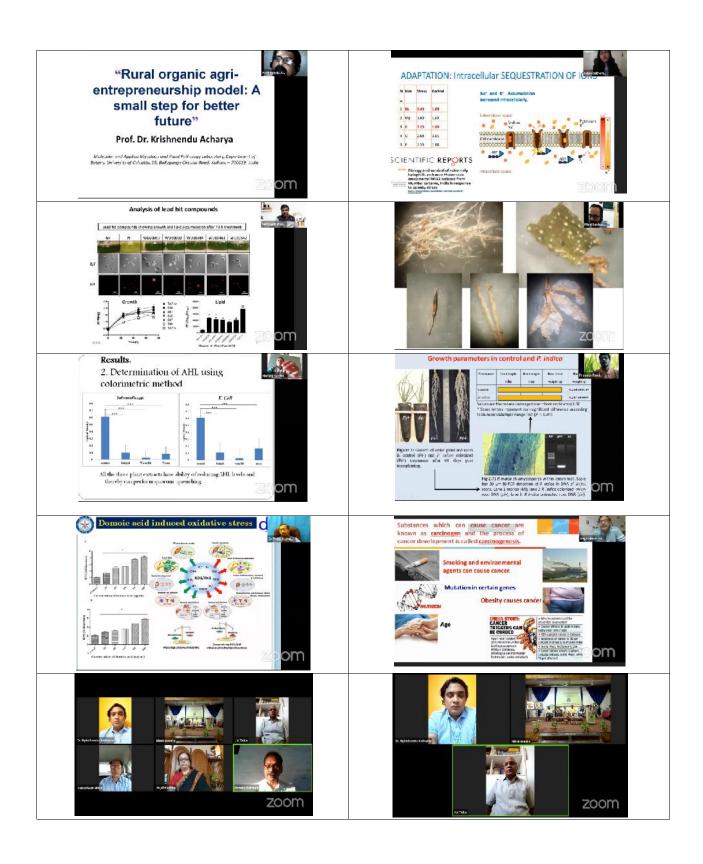


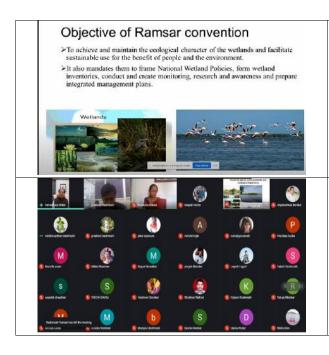
Vertual Presentation by Dr. V. Narkhedkar

International E-Conference on Innovative Research Trends in Life Sciences











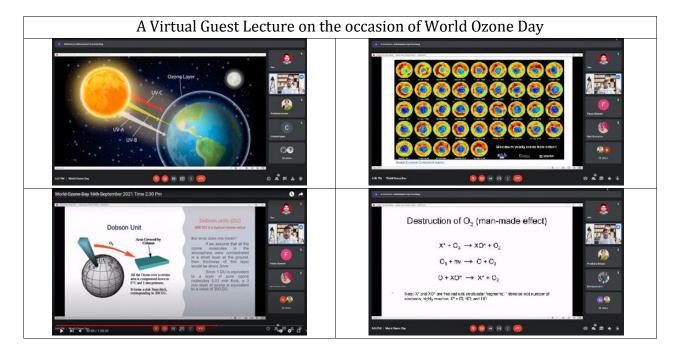












Virtual seminar competition on the occasion of "World Fungus Day" Celebration of Fungal Awareness Week 27th Sep to 2nd Oct 2021











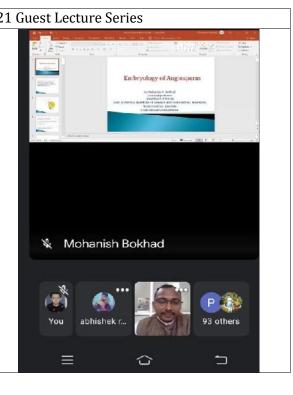
Main Characteristics of Fungi



- Eukaryotic cells are non photosynthetic that is heterotopic.
- Most are multicellular that is molds but some are unicellular that is Yeast.
- · The cell wall of fungi made up of chitin.

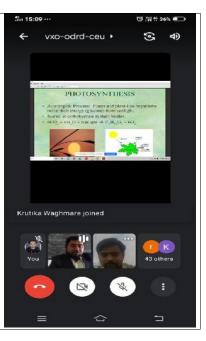




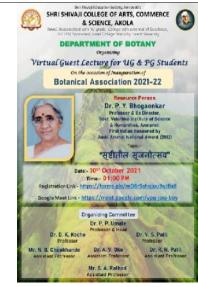


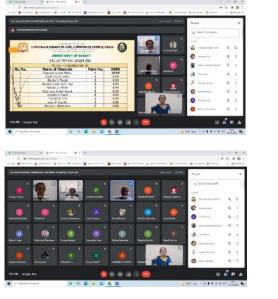


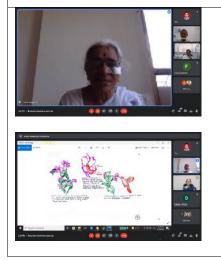


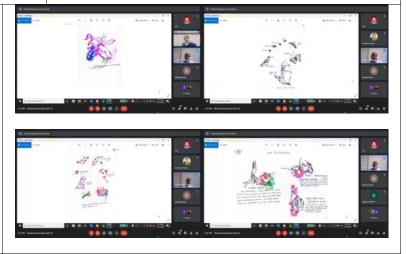


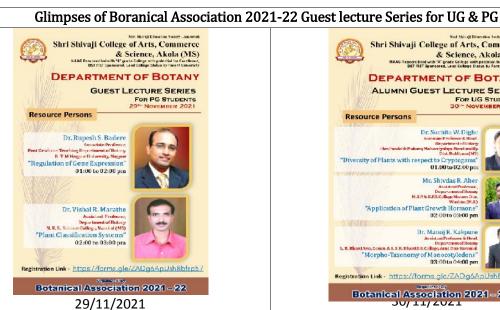














29/11/2021











30/11/2021

