Anand Charitable SansthaAshti's

#### ANANDRAO DHONDE ALIAS BABAJI MAHAVIDYALAYA

(Arts Commerce and Science)

KADA TAL. ASHTI DIST. BEED (M. S.) INDIA

## DEPARTMENT OF BOTANY

### PROFILE



#### **Scope and Importance of the Subject:**

**After completing graduation in Botany student** can appear for various competitive examinations and PG courses like

- ❖ Indian Forest Services, Indian Administrative Services conducted by UPSC.
- ❖ PG courses like M.Sc. (Botany), M.Sc. (Biotechnology), M.Sc. (Molecular Biology), M.Sc. (Genetics).
- Amongst the careers available to a person who enjoys outdoors are positions as an ecologist, taxonomist, conservationist, and forester.
- Student can obtain specialization in plant breeding, plant pathology, agronomy, and horticulture.
- Number of employments available in pharmaceutical companies, seed companies, biotechnology firms, scientific publishers and biological supply.

#### Vision of Department:

Achieve academic excellence in basic and applied aspects of plant sciences. To make aware of natural resources and environment and the importance of conserving it.

**Introduction:** The College was started considering the need by the time to provide science and technological education to rural students in and around Kada. There was no any science faculty in Ashti taluka before this college. The department of Botany runs UG courses. The faculty members of this department actively involved in various academic as well as extracurricular, social activities. All faculty members are actively participating in various national conferences, seminars, workshops etc.

Dr.G.M.Pathare and Dr.Smt.S.A.Khedkar Professor of this department working since 1993. For the development of this department Principal Dr. H. G. Vidhate and Management contributed timely. Faculty of the department is actively engaged in research since 2004. Dr. G.M Pathare awarded Ph. D. degree in 12<sup>th</sup> September 2005 and Dr. Smt S.A.Khedkar awarded Ph. D degree in 14<sup>th</sup> October 2005. They published their research papers in national and international journals, conferences, seminars and workshops. Department runs B.Voc. Nursery Degree course since 2020-21.The department encourages students to perform various projects, seminars, tour visits. Department organized National Webinar in 10<sup>th</sup> August 2020 on Biodiversity and Its Conservation. In the month of July & August department arranged camp for tree plantation Programme in College campus. Tree plantation program was also organized in collaboration with 'Broadcasting Ministry of Government of India, Regional People Contact Bureau, Ahmednagar' under Swatch Bharat Abhiyan and department of Botany, Ananrao Dhonde Alias Babaji Mahavidyalya, Kada on 28/10/2021.

#### **Programs Specific out comes:**

- Student acquires knowledge about general characteristics, morphology, anatomy of Pteridophytes, Gymnosperms and fossil.
- Knowledge and Understanding of the range of plant diversity in term of structure and function. Plant classification and the flora of Maharashtra.
- The students learn about general characteristic, morphology, reproduction and economic importance of algae, fungi and Bryophyte.
- The students become familiarize themselves with Angiosperms like its Taxonomy, Morphology, Embryology and Anatomy.
- The student becomes competent in understanding plant physiological process, plant metabolism and ecology, phytogeography.
- The student acquires preliminary knowledge of cell biology, Genetics, molecular biology and Biotechnology.
- Genetics provides knowledge about laws of inheritance, various genetic interactions, chromosomal aberrations &multiple alleles.
- Cell biology gives knowledge about cell organelles &their functions.

#### **Course out comes:**

Name of the	Course Outcomes
course	
Diversity of cryptogams	Knowledge and understanding about plant diversity. Carrier opportunities and job opportunities. After competition of this course the students are expected to describe the cryptogams, plant diversity like viruses, Bacteria, Lichens Algae and Fungi. Understand the useful and harmful activities of algae. Know the economic importance of fungi. Understand the economic importance of the bryophytes. Know the economic importance of Pteridophytes.
Morphology of Angiosperm	It gives knowledge different plant families and species of Angiosperm plant and describe conservation method of different plants. Understand the habit of angiosperm plant body. Know the vegetative characteristics of the plants. Understand the plant morphology and basic taxonomy.
Histology, Anatomy and Embryology	After competition of this course students are expected to describe the morphology of angiosperm plant and its histology, Anatomy & Embryology. The general term, anatomy for the study of internal structure of plants. Understand the scope and importance of anatomy. Understand the normal and anomalous secondary growth in plants and their causes. Know various tissue systems.

Taxonomy of Angiosperms	Understand the systems of classification of Angiosperms, nomenclature and interdisciplinary approaches. Understand the general range of variations in the group of angiosperms. To learn about the characters of biologically important families of angiosperms
Plant Ecology	After completion the course the students are expected how to conserve soil and water. To understand how to control air, water and noise pollution. To know the structure and function of ecosystem. To understand the ecological pyramids. To know the adaptation of hydrophytes, xerophytes, epiphytes and halophytes.
Gymnosperm and utilization of plant	After competition of this course, students are well known about economic importance of Cycas ,Pinus and Gnetum To know the economic importance of gymnosperms. Understand the diversity of gymnosperms in India. To know the evolution of bryophytes, Pteridophytes and gymnosperms.
Plant Physiology	To understand the process of photosynthesis in higher plants with particular emphasis on light and dark reaction. To understands the plants and plant cells in relation to water. To know the concept of enzyme activity and general features of enzymes. To know importance and scope of plant physiology. To understand the plants and plant cells in relation to water.
Cell Biology and molecular biology	On completion of the course students of the course students are able to understand the eukaryotic cell cycle and mitotic and meiotic cell division. In this subject students will understand the cell at molecular level as well as how the process like replication of DNA occurred. Understand cell wall, plasma membrane, cell organelles and cell division. Understand the biochemical nature of nucleic acid and their role in living system
Diversity of Angiosperms	Accurately interpretation of collected information and use taxonomical information to evaluate and formulate position of plant in taxonomy. To understand plant morphology and basic taxonomy. Understand the major evolutionary trends in various parts of angiosperm plants.  Understand the phylogeny of angiosperms – A general account of origin of angiosperms. Trace the history of development of system of classification emphasizing angiosperm taxa.
Genetics and Biotechnology	Students are able to understand Mendel's law of inheritance. Students understand different type of genetic interaction. Students know about genetic engineering. To study phenomenon law of dominance, laws of segregation and independent assortment. To understand different types of genetic interactions, incomplete dominance, co-dominance. Understand the fundamental of recombinant DNA technology. Understand tissue culture techniques.

1. **Date of Establishment** : 23<sup>rd</sup> July 1990

2. **Built up Area** : 95.25 Sqm

3. Level of Programmes :UG (B.Sc. Degree Course)

Run by department

4. Options available for students to select the group with Botany: Chemistry, Zoology

5. Temporal plan of the academic work : Semester System

#### 6. Faculty Profile:

Sr. No.	Name	Qualificatio n	Date of Appointment	Designation	Specialization
1	Prof.G.M.Pathare.	M.Sc.Ph.D	27/07/1993	Professor	Cytogenetic &Plant Breeding
2	Prof.Smt.S.A. Khedkar	M.Sc.Ph.D	27/07/1993	Professor	Plant Pathology
3	Shri.S.S.Waghule	M.Sc. (NET)	101/10/2021	Assit.Prof. (C.H.B.)	Advance Medicinal Botany
4	Shri.A.A.Waghule	M.Sc	01/10/2021	Assit.Prof. (C.H.B.)	Plant Pathology

#### 7. Current Year Time-Table UG (2022-23)

Period	Time	Monday	Tuesday	Wednesda y	Thursday	Friday	Saturday
01	9.10	B. Sc. III	B. Sc. III	B. Sc. III	B. Sc. III	B. Sc. III	B. Sc. III
	to	Paper-	Paper-	Paper-	Paper-	Paper- XV	Paper- XV & XIX
	10.00	XVI& XX	XVI& XX	XVI& XX	XV &	& XIX	(G.M.P.)
		(S.A.K.)	(S.A.K.)	(S.A.K.)	XIX	(G.M.P.)	
					(G.M.P.)		
02	10 to	B. Sc. II	B. Sc. II	B. Sc. II	B. Sc. II	B. Sc. II	B. Sc. II
	10.50	Paper-	Paper-	Paper-	Paper-	Paper-	Paper- VII& XI
		VIII& XII	VIII& XII	VIII& XII	VII& XI	VII& XI	(S.A.K.)
		(G.M.P.)	(G.M.P.)	(G.M.P.)	(S.A.K.)	(S.A.K.)	
03	11 to	B. Sc. I	B. Sc. I	B. Sc. I	B. Sc. I	B. Sc. I	B. Sc. I
	11.50	Paper-	Paper-	Paper-	Paper- I	Paper- I &	Paper- I & IV
		II&V	II&V	II&V	& IV	IV	(G.M.P.)
		(S.A.K.)	(S.A.K.)	(S.A.K)	(G.M.P.)	(G.M.P.)	

#### Practical Time Table (2022-2023)

Period	Time	Monday	Tuesday	Wednesda y	Thursda y	Friday	Saturday
01	12.30	B. Sc. II	B. Sc. II	B. Sc. I	B. Sc. I	B. Sc. III	B. Sc. III
	pm to	Paper-IX	Paper X	Paper- III	Paper- III	Paper-	Paper-XVIII
	3.30p	and XIII	and XIV	&VI	&VI	XVII and	and XXII
	m.	Batch- A	Batch -C	Batch- F	Batch- E	XXI	Batch-C
		(S.A.K.)	(S.S.W.)	(G.M.P.)	(S.A.K.)	Batch- A	(A.A.W)
						(G.M.P.)	
02	3.30	B. Sc. II	B. Sc. II	B. Sc. I	B. Sc. I	B. Sc. III	B. Sc. III
	to	Paper X	Paper-IX	Paper- III	Paper- III	Paper-	Paper-XVII and XXI
	6.30	and XIV	and XIII	&VI	&VI	XVII and	Batch- D
	pm	Batch -D-	Batch- B	Batch- D	Batch- B	XXI	(G.M.P.)
		(G.M.P.)	(A.A.W)	(A.A.W.)	(S.S.W.)	Batch B	
						(S.S.W.)	

#### **Practical Time Table (2022-2023)**

Period	Time	Monday	Tuesday	Wednesda y	Thursda y	Friday	Saturday
01	12.30 pm to 3.30p m.	B. Sc. II Paper X and XIV Batch-A (S.S.W.)	B. Sc. II Paper-IX and XIII Batch -C (A.A.W)		B. Sc. I Paper- III &VI Batch- C (A.A.W.)	B. Sc. III Paper- XVII and XXI Batch-C	B. Sc. III Paper-XVIII and XXII Batch- A (S.A.K.)
		, ,	, ,		(1 211 21 11 1)	(S.S.W.)	,
02	3.30 to 6.30 pm	B. Sc. II Paper-IX and XIII Batch- D (A.A.W)	B. Sc. II Paper X and XIV Batch-B (S.S.W.)	B. Sc. I Paper- III &VI Batch - A (S.S.W.)		B. Sc. III Paper- XVIII and XXII Batch- D	B. Sc. III Paper-XVIII and XXII Batch-B (A.A.W)
		( , , , , , ,	(	(**************************************		(S.A.K)	( ,

#### **8. Intake capacity for students:**

Progamme	Class	Intake Capacity
TIG.	B.Sc.F.Y.	240
UG	B.Sc.S.Y.	240
	B.Sc.T.Y.	240

#### 9. No. of Books in the Library: 904

• Reference Books:499

• Text Books:405

#### 10. Student Strength during last Five Years

			Category wise Admissions									To	otal	
Year	Class	S	С	,	ST	O	BC		Gen	(V.	thers J/NT& EBC)			Gross total
		M	F	M	F	M	F	M	F	M	F	M	F	
	B.Sc. F.Y.	10	02	-	-	33	16	42	29	20	08	105	55	160
2021-	B.Sc. S.Y	10	02	-	-	13	14	17	10	18	04	58	30	88
22	B.Sc. T.Y	03	02	-	-	20	11	28	16	08	05	59	34	93
	B.Sc. F.Y	15	03	-	-	21	19	26	20	41	12	103	54	157
2020-	B.Sc. S.Y	05	04	-	-	26	15	34	17	17	08	82	44	126
21	B.Sc. T.Y	04	03	-	-	12	08	30	15	16	13	62	39	101
	B.Sc. F.Y.	05	03	-	-	26	18	43	24	19	11	93	56	149
2019-	B.Sc. S.Y	04	05	-	-	11	12	33	21	17	15	65	53	118
20	B.Sc. T.Y		03	-	-	10	06	20	19	05	08	35	36	71
	B.Sc. F.Y.	05	07	-	-	14	15	45	29	25	20	89	71	160
2018-	B.Sc. S.Y		02	-	-	10	08	27	23	09	08	46	41	87
19	B.Sc. T.Y	04	02	-	-	07	07	34	22	19	02	64	33	97
	B.Sc. F.Y.	05	02	01	-	14	14	37	32	14	14	71	62	133
2017-	B.Sc. S.Y	03	04	-	-	11	11	37	23	20	04	71	42	113
18	B.Sc. T.Y	03	03	-	-	19	14	25	26	08	11	55	54	109

#### 11. Result Analysis during last five years

Year	Class	Semester	Students Appeared	Pass Class	Second Class	First Class	Distinction	% Result
	B. Sc. I	II	144	00	95	26	04	86.80
2021-22	B. Sc. II	IV	83	00	09	58	09	91.56
	B. Sc. III	VI	89	00	01	47	36	94.38
	B. Sc. I	II	129	05	10	53	44	86.82
2020-21	B. Sc. II	IV	110	02	18	17	57	85.45
	B. Sc. III	VI	87	00	01	13	62	87.35
	B. Sc. I	II	166	03	85	45	16	89.75
2019-20	B. Sc. II	IV	112	00	28	66	08	91.07
	B. Sc. III	VI	66	00	00	06	57	95.45
	B. Sc. I	II	153	07	69	50	07	86.92
2018-19	B. Sc. II	IV	79	00	24	39	13	96.20
	B. Sc. II	VI	85	00	02	67	14	97.64
	B. Sc. I	II	102	03	53	08	06	68.62
2017-18	B. Sc. II	IV	100	00	55	27	09	91.00
	B. Sc. III	VI	96	00	05	66	19	93.75

### 12. Laboratory Equipments:

Sr. No.	Laboratory Equipments	Numbers	Sr. No.	Laboratory Equipments	Numbers
1	Simple Microscopes	12	14	Printer	01
2	Compound Microscopes	24	15	Scanner	01
3	Binocular Microscope	03	16	Metal Herbarium Press	01
4	Tilak Air Sampler	02	17	Autoclave	3
5	Rain gauze	1	18	Laminar Air Flow	01
6	Hot Air Oven	1	19	Trinocular Microscope	01
7	Slide Projector	1	20	Digital pH Meter	01
8	Camera (Nicon,Sony)	1	21	Digital Colorimeter	01
9	Weight Balance	1	22	Charts	54
10	Electronic Weight Balance	1	23	Models	12
11	Centrifuge Machine	02	24	MuseumSpecimens.	30
12	Laptop (Dell)	01	25	Hygrometer	01
13	Hair Dryer	01	26	Barometer	01

### 13. Guest Lectures Arranged: 10

Sr. No.	Name of the Guest	Topic	Date
1	Dr.Smt.Sutar S.S.	Chromosomes	19/09/2017
2	Dr. Talekar S.M.	Transpiration	04/01/2018
3	Dr. Patale S .S.	Use of Trichoderma	11/08/2018
4	Dr. Kardule S.R.	Soil Erosion& Conservation	12/01/2019
5	Dr. Smt. Ahuja S.R.	Process of Fossilization	12/12/2020
6	Dr. Smt. Bhosale S.S.	Endemism& Hotspots	17/08/2019
7	Dr. Khetmalas P.N.	Structure of Eukaryotic Cell	13/01/2021
8	Dr. Smt. Sukte S.M.	Application of Biotechnology	24/04/2021
9	Dr. Pawar S. M.	Impacts of Climatic Factors	04/10/2021
10	Dr. Smt. Kshirsagar J.S.	Sex-linked Inheritance	12/03/2022

### 14. Use of ICT by Faculty:

Name of the Faculty	Type of ICT Developed/ Used					
	Class	PPT	PDF			
	B.Sc.I	25	21			
Prof. G.M Pathare.	B.Sc.II	20	19			
	B.Sc.III	25	23			
	Total	70	63			
	B.Sc.I	09	05			
	B.Sc.II	08	07			
Prof.Smt.S.A.Khedkar.	B.Sc.III	08	06			
	Total	25	18			

## 15. Conference / Seminar / Workshop/ Webinar Organized by department during last five years:

Sr. No.	Title of Conference / Symposium / Workshop	Level	Period
1	<b>Biodiversity and Its Conservation</b>	National	10/08/2022

#### 16. Publications of faculty during last five years:

Sr. No.	Name of the Teachers	Year	Number of rese publish		Number of research
			International Journals/ E-Journal	National Journals	papers presented
		2021-22	03	-	03
		2020-21	02	-	-
		2019-20	10	-	05
1	Prof. G.M.Pathare.	2018-19	03	-	02
		2017-18	04	01	03
		Total	22	01	13
		2021-22	01		01
2	Prof.Smt. S.A.Khedkar.	2020-21	03		03
		2019-20	03	04	07
		2018-19	03		03
		2017-18	01	03	04
		Total	11	07	18

Total Paper Publication: 41 Total Paper presented: 31

#### 17: Study Tours Arranged By Departments

Sr.No.	Year	Date	Place of Visiting
1	2019-20	07/02/2020	C.S.P.A.College of Agriculture, Ashti
2	2019-20	29/01/2020	College of Food Technology Ashti
3	2018-19	07/02/2019	H.U.Gugale Biotech Lab Jamkhed And Choundi
4	2017-18	05/10/2017	Sautada and MahadeoDara Forest

#### 18. Conferences /Seminars / workshops /Webinars attended by faculty during last five years

Name of Teacher	Year	Regional /State	National	International	Total
	2021-22	03	08	05	16
Draf CM Dathara	2020- 21	02	27	06	35
ProfG.M Pathare.	2019-20	01	37	06	44
	2018-19	-	02	-	02
	2017-18	-	03	01	04
	Total	06	97	18	121
Prof.Smt.S.A.Khedkar	2021-22	07	10	02	19
	2020- 21		12	03	15
	2019-20		14	03	17
	2018-19		03	01	04
	2017-18		03		03
	Total	07	42	09	58

## 19. Participation Faculty in OC/ Induction Program, RC, FDP/ STC, etc. during last five years $\frac{1}{2}$

Sr. No.	Name of the Faculty	Year	FDP/ STC
		2021-22	01
1		2020-21	05
	Prof. G.M Pathare.	2019-20	09
		2018-19	01
		2017-18	-
		Total	16
		2021-22	01
2		2020-21	08
	Prof. S.A Khedkar	2019-20	01
	11000 2001 2000	2018-19	00
		2017-18	-
		Total	10

## 20. Resource Person /Chaired Session/ Guest Lectures in Conferences / Symposium / Workshop

Sr. No.	Resource Person / Chaired Session / Guest Lectures	Level	Topic	Place	Date
1	Prof.G.M Pathare . (Resource Person)	National	Role of Microorganism in Agriculture& Plant Science for Sustainable Development	Smt S K Gandhi Arts and Amolak College Kada	16/02/2018
		National	"Impact of fruits and vegetables on General Immunity"	Arts, Commerce and Science, Ashti	05/038/2021
2	Prof.Smt.S.A. Khedkar.	State	Women's Law's	Arts, Commerce and Science, Ashti	13/10/2018
	(Resource Person)	National	Role of Microorganism in Agriculture & Plant Science for Sustainable Development	Smt S K Gandhi Arts and Amolak College Kada	16/02/2018
		State	Effects of Herbicide on Plants and soil	Bhagwan Mahavidyala, Ashti	03/01/2019

### 21. Publications of Faculty- Books.

Name of the Faculty	Book/ Chapt ers / Articl es	Title of Book	Publisher Details with ISSN/ISB N	Published Year	Sole/ Co-author
Prof.Smt. S.A .Khedkar.	ВООК	Seed	International Publication 6A/540,Avas Vikas, Hanspuram Kanpur-208-021 ISBN No-978- 93-90775-33-0	2021-22	Dr.Sangeeta Ahuja Dr.Vishal Wakode Dr. Suman Khedkar

### 22. Research Supervisor and their Students

Sr.	Name of the	Name of	Date of	Topic	Status
No.	Research	the	Confir		
	Supervisor	Researcher	mation		
		Mule	2021-	Floristic Composition of	on-going
		Akashy	22	Bhor, Velhe And	
		Mahadev		Purandar Tehsil, Pune	
				MS, India	
		Varpe	2021-	Biochemical	on-going
		Subhas	22	Characterization, anti-	
		Nanasaheb		Cancerous activates and	
1	Prof.Smt.			tissue culture approaches	
	S.A			of	
	Khedkar.			ChlorophytumTuberosm	
		Padwal	2021-	Phytochemical	on-going
		Anup	22	investigation and	
		Dashrath		pharmacological	
				properties of four edible	
				vegetables from	
				Northern region of	
				Ahmednagar District	
				(M.S) India	
		Patole	2021-	Studies on Fungal	on-going
		Kiran	22	Mycoflora on Guava	
		Nivrutti		roots	

#### 23. Eminent Personalities visited

Sr.	Name	Designation	Place
1	Dr. Ashok Chavan	Professor and	Dept. Of. Botany Dr.B.A.M.U.
		Head.	Aurangabad
2	Prof. B.N.Pande	Ex Professor and	Dept. of Environmental Science.
		Head	Dr. B. A. M. Uni. Aurangabad
3	Dr. Vijay S. Kothekar	Ex Professor and	Dept. Of. Botany Dr.B.A.M.U.
		Head	Aurangabad
4	Dr. Milind Jadhav	Ex.B.O.S.	Dept. Of. Botany. Sir Sayyed
		Chairman	College, Aurangabad
		Professor and	
		Head.	
5	Dr.Navanath Kashid	Professor	Vasant Mahavidyalya Kaij,Beed
6	Dr.Mukand Kulthe	Professor and	Dept.Of.Botany. Millind Science
		Head	College, Aurangabad

### 24. Awards/ Recognitions received by Students and faculty.

Sr. No	Name of the Faculty	Name of the activity	Name of the Awards/ Recognition	Name of the Awarding government/government recognized bodies
		Research	A.P.J.Abdul Kalam	Universal research Ground
		International	NariAsmita	Srjjana Vangmaya Parishad
1	Prof.Smt.S.A.Khedkar	Women's	Awards	,
		Day		Bhopal.
		Human	Swami	SrjjanaVangmaya Parishad,
		Rights Day	Vivekanand	Bhopal
			Siksha	
			Bhushan	
			Purasakar	

#### 25. Prominent Alumni of the Department

Sr.No	Name of Alumni	Designation
1	Dr.Santosh M.Talekar	Associate Professor
2	Dr.Pandurang .S.Anarse	Associate Professor
3	Sagar.S.Waghule	Assistant Professor
4	Amar.A.Waghule	Assistant Professor
5	Satayvan Sasane	Teacher
6	Sagar Sangale	Assistant Professor
7	Jaydeep Joshi	Teacher
8	Ganesh Tandale	Teacher
9	Sharad Waghmode	X-Ray Technician
10	Bharat Pandule	Constable in BSF
11	Amit Deshmukh	Quality Department, Ajit seeds
		Co. Aurangabad
12	Babalu Shaikh	Lab technician
13	Ranjit Sake	Medical Representative

#### **26.MoU and Collaborations of the Department** –

Botany department has collaboration with three institutions for Students and faculty exchange, academic deliberation and collaborative research activities

- Gangai Pharmacy College Kada Tal Ashti, Dist-Beed
- Chhatrapati Shahu,Phule,Ambedkar College of Agriculture Ashti,Dist-Beed
- Taluka Agriculture Officer Ashti, Dist-Beed

## 27. Academic and Administrative Positions of Faculty Prof.G.M.Pathare.

- Head of Department
- Paper setting Semester V & VI
- CAS Subject expert
- Member of Alumni Parent Teacher Association
- Member of Governance, Leadership and Management
- Life membership of Indian Aerobiological Society

#### Prof.Smt.S.A. Khedkar

- Chairmen Mahila Sexual Harassment & Grievance Committee
- Co-ordinator B. Voc. Nursery A. D.CollegeKada
- Member of Best Practices & Extension Activities..
- Member of Grievance Discipline College Committee
- Chairman of Affiliation Committee.
- Life membership of Academic & Research Conclave
- Life membership of Indian Aerobiological Society
- Life membership of Society of Life Sciences
- CAS Subject expert, Paper setting.

#### 28. Extension / Co-curricular Activities run by department:

- Participation in Tree plantation
- Field Visits with Students
- Member of Green Army
- Participation in Environment & Water conservation
- Participation in Study tours
- Participation in N.S.S. activities.
- Organize Ozone Day Programmee
- Arrange Students Seminars

#### 29. Best Practices:

- **Soil testing:** Soil testing services provide free of cost.
- Green Auditing: a) To enumerate the number of trees & plants available in the campus. b) Sustainable development of greenery in the campus.
- Preparation of woolen model and preservation of plant specimen in the form of herbarium.

#### **30. Department Achievements**

Five Alumni of our department are lecturer in Senior College.

One Alumni (Sagar Waghule) of our department qualified NET exam.

Forty one research papers published in reputed National &International Journals.

#### 31. SWOC analysis

#### **Strength:**

- Faculty is well qualified & research oriented.
- Availability of P.G. teachers and guides
- Engaged in extension activities.
- Well equipped lab.
- Well established botanical garden with medicinal plants
- Participation of faculty in National, International Scientific events for knowledge up gradation.

#### Weakness:

Insufficient extensive activities for student's establishment support

#### **Opportunity:**

- Degree student have opportunities in forest department, different seed company, tissue culture laboratory.
- Students have opportunities in Nursery, Field Botanist, Plant biochemist, Molecular biologist, Environmental consultant, Green house manager and Ecologist.
- Degree candidates have opportunities in Food Company.
- Aware farmers about advanced technology in farming.

#### **Challenges:**

- To enhance self-reliant among the students.
- Syllabus is more theoretical based. Needs to be more skill based
- To strengthen national & international collaboration.
- To strengthen collaborative research & enhance quality of higher education.

#### 32. Future Plans:

- To submit of minor & major research projects proposals.
- To start short courses on Mushroom & Spirulina cultivation
- To run P.G.courses.
- Organization of Seminars, Workshops on Global warming.
- Guidance regarding organic farming.

#### PHOTO GALLERY

#### **Botany Excursion tour**







Study Tour Visits College of Food Technology, Ashti.







Study Tour Visits C.S.P.A.College of Agriculture, Ashti







Study Tour Visits at Sautada Forest







Study Tour Visits at **Chondi** and **Gugale Biotech Lab** Jamkhed







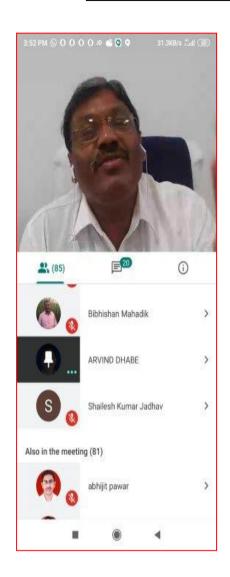
Study Tour Visits at **Chondi** and **Gugale Biotech Lab** Jamkhed

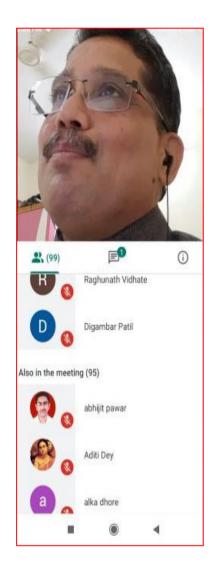
### Field Visits of B.Sc. Students at Gangai Pharmacy College Kada





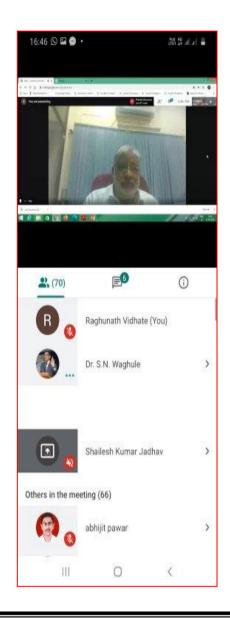
## NATIONAL WEBINAR ON BIODIVERSITY & ITS CONSERVATION





Resource Person **Prof.Arvind Dhabe**, Head Dept.of.Botany.Dr.B.A.M.University, Aurangabad

Chief Guest **Prof.B.B.Waykar** Dean Faculty of Science & Technology, Dr.B.A.M.University, Aurangabad





Resource Person **Prof. Shailesh Jadhav** (Dean, Faculty Life Science, School of Studies in Biotechnology Pandit Ravishankar Shukla University, Raipur (C.G.)

Resource Person **Prin. Rangnath Aher** (New Arts, Commerce & Science
College, Parner, Dist. Ahmednaga)

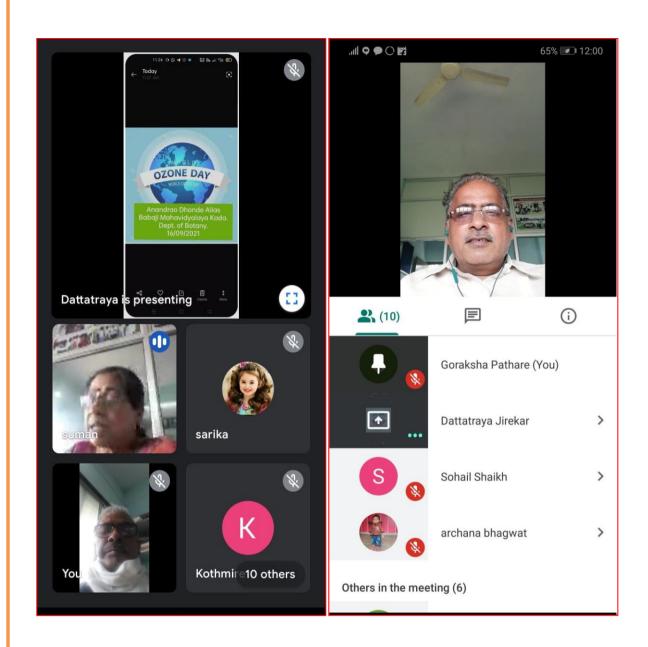
### Departmental Co-curricular Activities



Wild Life Conservation



**International Ozone Day** 



International Ozone Day through Online Mode

# Department Best Practice Soil Testing



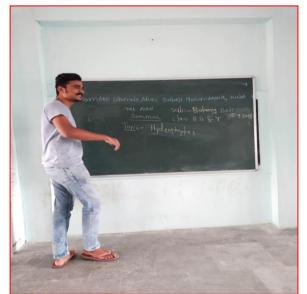
### **Collection of Soil Sample**

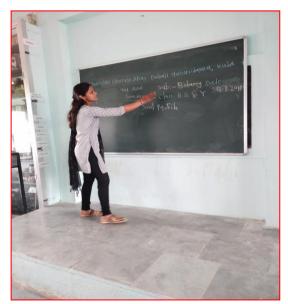


### **Student Seminar and Group Discussion**











### **Tree Plantation in College Campus**













### **Tree Plantation Programmee Outside College Campus**





### **Laboratory Equipments**



**Laminar Air Flow** 



Slide Projector







**Laminar Air Flow** 





**Hot Air Oven** 



Trinocular Microscope



Binocular Microscope



**Digital Photometer** 

