

VSPM Academy of Higher Education
Arvinbhabu Deshmukh Mahavidyalaya, Bharsingi
Department of Botany
Departmental Profile

VISION:- Department of botany seeks to be recognized as the region's premier teaching unit and a centre of academic excellence in plant biology with high-quality academic programmes to foster students' success.

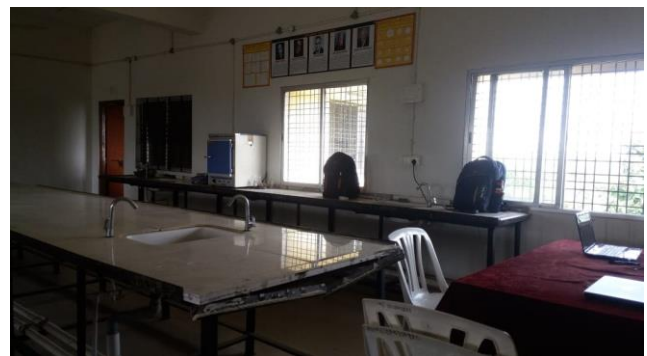
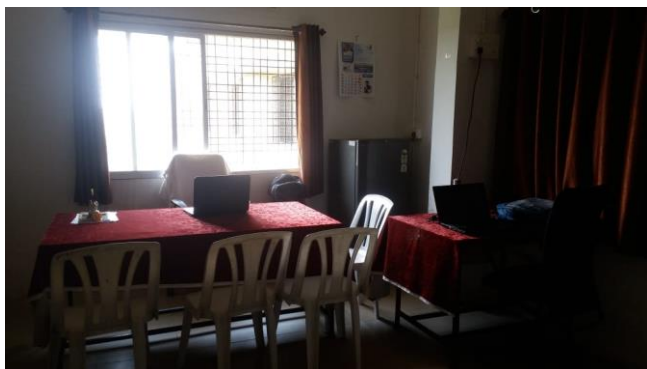
MISSION:-

- To provide quality education of plant biology to rural area students to improve their botanical aptitude among students.
- To disseminate the knowledge of the subject among students by applying conventional as well as a non-conventional tool to understand plant process and their environments.
- To focus on teaching and fundamental research on plants for the development of human resources with hands-on experience in the frontier areas of plant sciences.
- To develop the potential in students for self-employment in various fields of Botany.
- To foster an excellent environment by attracting and supporting active students, faculty and staff to work on the patterns and processes leading to a predictive understanding of plants and their environment at the local, regional and global scale
- To establish a well-equipped, informative and research-oriented department of Botany.
- To motivate society through young minds (students) for the conservation of Biodiversity.

ABOUT DEPARTMENT:-

The Department of Botany established in the year 2008 is one of the leading departments of Arvinbhabu Deshmukh Mahavidyalaya, Bharsingi in the field of teaching and environment awareness programmes and other activities in plant sciences for undergraduate students. The department provides knowledge to the students on the subjects of phycology, Mycology, Cytology, Taxonomy, Palaeobotany, Ecology, Molecular Biology, Phytochemistry, Plant biotechnology, Ethnobotany, Conservation and cultivation of Medicinal Plant along with skill development practices in Botany. The department of Botany fulfilled with 4 permanent qualified faculties and is devoted to the overall academic development of the students. The total intake of students for Botany is 60 each year and most of the students secure good scores in their academic careers. The department of botany regularly organizes curricular and extra-curricular activities for the students to be aware the students about the conservation of biodiversity, the environment and their duties towards the development of society. The department of Botany is well equipped, well-furnished laboratories and facilitated the study material for the theoretical as well as practical analysis of the students.

Some Glimpses of the Department:







Highlights of the Department:

Courses/Programmes:

Courses	Name of course	Specialization	No. of Seats
UG	Bachelor of Science B.Sc. (03 Year Programme) Semester pattern	Chemistry, Botany, Zoology	60 Seats (for each year)

Teaching Staff:

Name of faculty	Qualification	Designation	Date of Joining	Specialization	Area of Research	Photo
Dr.Smita P. Gudadhe	M.Sc. M.Phil. Ph.D.	Assistant Professor	07/12/2013	Bioinformatics	Cytology and Chromosomal Banding	
Dr. Shailesh R. Bansod	M.Sc. Ph.D.	Assistant Professor	11/09/2019	Phycology and Plant Pathology	Phycology and Plant Pathology	
Mr. Surendra R. Sinkar	M.Sc., B.Ed. NET (CSIR), NET (ICAR), SET.	Assistant Professor	05/09/2019	Botany	Plant Biotechnology & Phytochemistry	
Ms. Manasi A. Joshi	M.Sc. SET, GATE	Assistant Professor	09/09/2019	Cytogenetics	Cytogenetics	

Non-Teaching Staff:

Sr. No.	Name	Designation	Qualification
1.	Mr. Manoj Dhoke	Laboratory Assistant	12 th Science
2.	Mr. Narendra Karnake	Laboratory Attendant	12 th Science

Departmental Activities:

Academic Session 2018-19

➤ **Conference/Seminar organized**

The Seminar activity organized for B.Sc.III year students. All students participated in a seminar activity that was conducted from 23rd to 25th September 2018.

➤ **Inauguration function**

Inauguration function and Principal address programme the students of B.Sc. Sem I organized on dated 27/08/2019

➤ **Details of Guest Lectures organized**

One guest lecture organized on 2nd March 2019 on the topic “Adaptations of Hydrophytes and Xerophytes” which was delivered by Dr. Pravin J. Kale, Department of Botany, N. S. Model College, Tah-Karanja (Ghadge), Dist- Wardha.

➤ **Medicinal Plant Exhibition**

The department of Botany has organized the Medicinal Plant Exhibition on 25th September 2018.

➤ **Tree Plantation activity**

The department of Botany has organized the Tree plantation programme on 25th September 2019.

➤ **Project of Plantation of indoor plants in Plastic bottles**

The department of Botany ran a small project of plantation of indoor plants in waste plastic bottles. The main aim behind the project was to aware the students of the best use of waste material for the conservation of plants which is part of the skill development programme.

➤ **Rural Sanitation Programme**

The students of the Department of Science, participated in the One Day Rural Sanitation Programme at Indarwada Grampanchayat organized by the NSS department of Arvindbabu Deshmukh Mahavidyalaya, Bharsingion 30th March 2019.

➤ **Installation Ceremony Of Student's Study Circle**

The installation ceremony of the Student's Study Circle was conducted on 25th August by the Department of Science, Arvindbabu Deshmukh Mahavidyalaya, Bharsingi.

➤ **National Science Day Celebration**

The National Science Day was celebrated in the Department of Science, Arvindbabu Deshmukh Mahavidyalaya, Bharsingi on 28th February 2019.

Student's awards and participation in various activities

➤ **The training programme at Mahatma Fule Science college, Warud**

The two students namely Ms. Shreya Kalbande and Mr. Sanket Jachak from B.Sc. III (CBZ) have participated in the National level training programme on Phylogeny of plants organized by the department of Botany, Mahatma Fule Science College, Warud.

➤ **Poster Competition at Sevadal Mahila Mahavidyalaya, Nagpur**

The two students namely Mr. Devendra Revatkar and Mr. Akash Gajbhiye from B.Sc. III (CBZ) were participated in the Intercollegiate Poster Competition on “Ways and Means of Energy Conservation” organized by Sevadal Mahila Mahavidyalaya, Nagpur.

➤ **One Day National Workshop**

Participation of the 6 students of B.Sc.-II year in One Day **National** Workshop on “Women Empowerment and Gender Equality” organized by Government Science College, Gadchiroli on **24th September 2019**.

Academic session 2019-20

➤ **Project of Seed ball preparation**

The department of Botany ran a small project of seed ball preparation through the students. The main aim behind the project was to aware the students of the best use of waste seeds and plantation for the conservation of plants.

➤ **Workshop on Seedball**

The department of Botany has organized a workshop on seed ball making at NSS camp on 29th January 2019 at Paradsinga. The main objective behind that was to use the waste seeds for the making of seed balls and to spread all over the Paradsinga tekadi where there is no vegetation with the help of all the participants of NSS camp.

➤ **Ecofriendly Herbal colour making Workshop**

The department of Botany has organized an Eco-friendly Herbal colour-making Workshop on 7th March 2020. The main objective behind that to spread the knowledge about the importance and preparation of herbal colours and instead of harmful synthetic chemical-based colours available in the market increase the use of homemade herbal colours for the celebration of Holi.

➤ **Planta lab in a Box**

The department of Botany has organized the activity of Planta lab in a Box for the various Schools and junior colleges to spread the practical knowledge about botany and other related instruments and equipment used in the science stream. The main aim was to develop the interest of rural students in the science stream.

➤ **Hygiene Awareness camp**

The department of Botany has organized the Hygiene awareness camp on 21 February 2020 for the students of various Schools and junior colleges to be aware the students about personal hygiene and how to protect them from hygiene-related diseases.

➤ **Online DNA Quiz-2020**

The department of Botany was organized the online DNA QUIZ 2020 on 25th and 26th April 2020, National DNA Day commemorates the successful completion of the Human Genome Project in 2003 and the discovery of DNA's double helix in 1953. The purpose of this quiz is to be aware of the Human Genome Project and develop curiosity among students about Human Genome.

➤ **Online Pictorial Quiz-2020**

The department of Botany has organized the online Pictorial Quiz for students on 6,7,8 May 2020, the main purpose of this quiz was to develop an interest of students in Botany subject by using the picture of plants.

➤ **Online Webinar**

The department of Botany organized an online Webinar on topic “Proteomics technology and its application in Biology” held on 17 May 2020, Speaker Dr.AmitkumarFulzele, Assistant project scientist, university of California Sang Diego.

➤ **Online Webinar**

The department of Botany organized an online Webinar on the topic “Who cares about Threatened Plants and Animals” held on 5th June 2020, Speaker Dr. Vineet Soni, Founder of save Guggle Movements” Associate professor department of Botany, Mohanlal Sukhadia University of Udaipur.

Academic session 2020-21

➤ **Tree Plantation activity**

The department of Botany organized the Medicinal Tree plantation program on the occasion of “Jadibuti din ” on 8th August 2020. The main objective of this activity was to create a green and fresh environment on the college campus, as well as to create awareness of medicinal plants in this pandemic situation.

➤ **Ozone for life In Photo Frame.**

The department of Botany organized an online competition on “Ozone for life in A Photo frame” on the occasion of World ozone day 16 September 2020.Students submitted Self captured photos of Nature, which sense the Importance of Ozone for life,and submit those photographs on Google doc form.

➤ **E-Poster Competition on Medicinal Plant.**

The department of Botany organized an online Poster competition as “E-Poster Competition on Medicinal Plant” on 31 October 2020. The main objective of this competition is to create awareness about Medicinal plant and their Botanical description.

➤ **One Day Online Webinar**

The Department of Botany with IQAC department of the college organized one day online Webinar on “How to read Scientific literature?” dated 15 February 2021. The main objective of the webinar was to introduce students to the proper way of the use of the internet to search for authentic scientific literature. Speake:-Dr. AnupamaHarshal W. consultant (Science communication and public engagement) Manav –The Human Atlas Initiative

➤ **State Level Online quiz competition**

The department of Botany with Science department organized “State-level online quiz Competition ” for UG Students on the virtual platform, in the subject Botany, Zoology, Chemistry, Physics, Mathematics on dated 27th February on the occasion of National Science day. The main objective of this competition was to spread knowledge of Basic of science in undergraduate students in a different way.

Research Programme:

Minor Research Projects sponsored by UGC

S. N.	Name	Title of Project	Funding Agency	Year of sanction and amount
1.	Nil	Nil	Nil	Nil

Books published by Faculty

Title of the book/chapters published	Name of the author/s	Year of publication	ISBN/ISSN number	Name of the publisher
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The paper published by Faculty:-

Title of the book/chapters published	Name of the author/s	Year of publication	ISBN/ISSN number	Name of the publisher
Biochemical analysis of <i>Indigofera</i> L. species with special emphasis on protein content and phylogenetic analysis.	Dr. S. P. Gudadhe	2018	2249-8109	International Journal of Recent Trends in Science And Technology
Chromosomal Analysis in <i>Chlorophytum tuberosum</i> (Roxb.) Baker from Melghat Forest, Amravati District Maharashtra	Dr. S. P. Gudadhe	2019	2277-5730	Ajanta: An International Interdisciplinary Quarterly Research Journal
Phytochemistry and Pharmacological activities of <i>Caesalpinia crista</i> L: A Review.	Dr. S. P. Gudadhe	2021	0975-8585	Research Journal of Pharmaceutical, Biological and Chemical Sciences
Phytohormonal Effect on <i>In Vitro</i> Callus Induction of <i>Tinospora cordifolia</i> (Willd.) Miers.	Mr. S. R. Sinkar	2020	0972-2025	Plant Cell Biotechnology and Molecular Biology
Studies in Wild Plant Pollinator Diversity, Its Conservation and Pollination Benefits	Mr. S. R. Sinkar	2021	2347 – 517X	International Journal of Researches In Biosciences, Agriculture And Technology

Paper presented by Faculty:-

Title of the book/chapters published	Name of the conference	Date of presentation	Name of presenter	Name of the organizers
Biochemical Analysis of <i>Indigofera</i> L. species with special Emphasis on Protein content and Phylogenetic analysis by Gudadhe S.P. , Gadge P.J. and Dhoran V.S.	International Conference on “Recent Advances in Food, Herbal and Nano Technology”	12 th -13 th January 2018.	Dr. S.P.Gudadhe	Department of Biotechnology, College of Computer Science and Information Technology, Latur during
Morphodiversity of three species of <i>Indigofera</i> L. from the campus of Sant Gadge Baba Amravati University, Amravati by S. P. Gudadhe	National Conference on Emerging Trends in Science and Technology	1 st -2 nd February 2019	Dr. S.P.Gudadhe	Vidyabharti Mahavidyalaya, Amravati in collaboration with S.S.S.K.R. Innani Mahavidyalaya, Karanja (Lad), Washim during
Cytological and banding investigations in <i>Chlorophytum tuberosum</i> (Roxb.) Baker	National Seminar on Diversity of Environmental Allergence and its Threat to Human Health	9 th February 2019	Dr. S.P.Gudadhe	Taywade College, Koradi, Dist. Nagpur
Chromosomal Analysis in <i>Chlorophytum tuberosum</i> (Roxb.) Baker from Melghat Forest of Amravati District, Maharashtra	National Conference on Recent Advances in Science and Technology	5 th to 6 th March 2019	Dr. S.P.Gudadhe	G.S.G. Mahavidyalaya, Umardhed, Dist. Yawatmal
Pollen Viability <i>invitro</i> germination in diploid and tetraploid <i>Chlorophytum</i> species	International conference on “Future tech of life sciences”	14 & 15 Feb 2020	Dr. S.P.Gudadhe	Seth KesrimalPorwal college Kamptee Nagpur.
Mangroves: Threats and its conservation Strategies	International conference on “Climate change , Mangrove and Sustainable Managements	24 April 2020	Dr. S.P.Gudadhe	SPKM Sawantwadi
Treebomb: A new way to enhance the Plant Production	Online one day International conference on Recent trends in plant sciences	15 May 2020	Dr. S.P.Gudadhe	Department of Botany D.H Agrawal Arts and M.G. Agrawal Science college Navapur, Dist.Nandurbar

Pollen Viability <i>invitro</i> germination in diploid and tetraploid <i>Chlorophytum</i> species	International conference on “Future tech of life sciences”	14 & 15 Feb 2020	Mr.S.R. Sinkar	Seth KesrimalPorwal college Kamptee Nagpur.
Treebomb: A new way to enhance the Plant Production (poster presentation)	Online one day international conference on Recent trends in plant sciences	15 May 2020	Mr.S.R. Sinkar	Department of Botany D.H Agrawal Arts and M.G. Agrawal Science college Navapur, Dist. Nandurbar
Studies in Wild Plant Pollinator Diversity, Its Conservation and Pollination Benefits	2nd International Conference on Climate Change and its Effect on Environment, Food & Society (Virtual mode)	15 & 16 June 2021	Mr.S.R. Sinkar	Savitribai Phule Pune University, Pune & Department of B. Voc. & Biological Sciences, Mula Education Society's Arts, Commerce & Science College, Sonai, Dist: Ahmednagar.
“Investigation on algal assemblages across gradient of mine water as an indicator of mine water quality”	National Conference on “Recent Trends in Mathematical, Physical, Chemical, Library and Life Sciences”	7 th February 2020.	Dr.S.R.Bansod	Nilkanthrao Shinde Science and Arts College, Bhadrawati, Dist. Chandrapur
“Exploring Pharmacological Potential of Adhatodavasica Nees”	“International E-Conference On Innovative Research Trends In Life Sciences (ICIRTLS-2020)”	3 rd -5 th December 2020	Dr.S.R.Bansod	Department of Life Sciences, Shri Shivaji College of Arts, Commerce and Science, Akola .
Pollen Viability <i>invitro</i> germination in diploid and tetraploid <i>Chlorophytum</i> species.	International conference on “Future tech of life sciences”	14 & 15 Feb 2020	Ms. Manasi A. Joshi	Seth KesrimalPorwal college Kamptee Nagpur.

Gallery:-



Seedball Drive



Distribution of Seedballs to local people



Students Seminar Activity



Planta Lab in A Box



Ecofriendly Rakhi Competition



Latitude: 21.351992
Longitude: 78.463685
Elevation: 386.43m
Accuracy: 6.1m
Time: 25-09-2019 09:49

Tree Plantation Activity



Campus flora observation in Botanical Garden



Latitude: 21.352596
Longitude: 78.463144
Elevation: 405.43m

Identification of Bryophytes in Campus



Latitude: 21°20'58"
Longitude: 78°28'19"
Elevation: 1241.13ft
Accuracy: 31.7ft
Time: 01-11-2020 10:57
Note: personal Hygiene

Hygiene camp at Sant Kabir Vidyalaya, Bharsingi



Latitude: 21.352661
Longitude: 78.463601
Elevation: 398.22m
Accuracy: 12.9m
Time: 03-07-2020 12:45
Note: Eco-friendly Holi

Holi Herbal colour Preparation Workshop



Medicinal Plant Exhibition cum Competition



Students participated in Patriotic singing Competition



Students Participation in College Gathering



Felicitation of Meritorius Students



Guest Lecture organized by of Botany Department



Freshers Party organized by Senior students



NSD organized by the students



Botanical Excursion at Forest regions



Students participated in other colleges activities



Self Governance programme on Teachers Day