

DEPARTMENT OF BOTANY

- 1. Name of the Department** : BOTANY
- 2. Year of Establishment** : 1970
- 3. Courses/ Programmes offered** : UG-B.Sc.
(U.G., P.G., M.Phil., Ph.D. etc.) PG- M.Sc.
(Angiosperm Taxonomy)
M. Phil., & Ph.D.: Botany
- 4. Names of Interdisciplinary courses and the departments/units involved:**

The Post graduate research projects get completed with the help of Department of Microbiology and Biotechnology. The Ph. D. research student cope their work with Department of Zoology, Microbiology and Biotechnology.

5. Annual semester/ choice based credit system (Programme wise):

UG: Semester and credit system (60+40) and (80+20) CGPA Pattern

PG: Semester and credit system (60+40 CGPA Pattern)

6. Participation of the department in the courses offered by other departments:

Environmental studies at F.Y.B.Sc. is the inter disciplinary subject.

7. Courses in collaboration with other universities, industries, foreign institutions, etc.: -
NA

8. Details of courses/programmes discontinued (if any) with reasons- NA

9. No. of teaching posts:-

Post	Sanctioned	Filled
Professor	01	01
Associate Professor	-	-
Assistant Professor	04	04
Others (CHB)	02	02

10. Faculty profile with name, qualification, designation, experience and research under guidance:

Name of Faculty	Qualification	Designation	Specialization	Experience Years	Ph.D students guided in the last 5 years
Prof. Dr. S. K. Tayade	M.Sc. Ph.D.	Professor & Head	Angiosperm Taxonomy	23	Ongoing-01
Prof. V. K. Patil	M.Sc. NET	Assistant Professor	Phycology	05	Nil
Dr. S. S. Pathak	M.Sc. Ph.D.	Assistant Professor	Mycology	05	Nil
Prof. N. K. Athawale	M.Sc. NET	Assistant Professor	Plant Physiology	05	Nil
Prof. M. B. Jagtap	M.Sc. NET	Assistant Professor	Botany	03	Nil

11. List of senior visiting faculty:

Sr. No	Name	Qualification	Specialization	Experience
1	Dr. T S. Patil	M.Sc., Ph.D.	Phycology	33 years
2	Dr. V.N. Bhivare	M.Sc., Ph.D.	Physiology	34 years

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

UG: B. Sc. (Botany) - **15 %**

PG: M. Sc. (Angiosperm Taxonomy) - **20 %**

13. Student -Teacher Ratio (programme wise):

UG: B. Sc. (Botany) - **88:1**

PG: M. Sc. (Angiosperm Taxonomy) - **7: 1**

14. Number of academic support staff (technical) and administrative staff:

Post	Sanctioned	Filled
Lab Assistant	01	00
Lab Attendant	02	02
Peon	01	00

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.:

No. of faculty members with Ph.D. = **02**

No. of faculty members with M. Phil. = **00**

No. of faculty members with PG = **03**

16. Number of faculty with ongoing projects from a) National b) International Funding agencies and grants received:

Sr. No.	Name of the project	Name of the Principal Investigator	Funding Agency	Amount (Rs)	Duration
1	MRP	Dr. S. K. Tayade (F.No.10/14/08-CS/DG/50 Dated-29 September 2008)	MoEF, New Delhi	4,94,800	2009- 2016
2	MRP	Dr. K. V. C. Gosavi (File.No.SB/FT/LS/130/2012 Dated-22 October 2013)	(SERB), New Delhi	15,70,000	2013- 2016

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

(a) Departments Project Funded by MoEF : **14, 94,800/-**

(b) Science and Engineering Research Board : **15, 70,000/-**

Total Grants Received so far : **30, 64,800/**

18. Research Centre /facility recognized by the University:

Department is recognised as research centre for Ph. D and M. Phil. study by affiliated University.02 students have registered for their Ph.D. work

19. Publications:

The details of publications and books authored by faculty members
Number of papers published in peer reviewed journals:

1.	International	:	18
2.	National	:	02
3.	Monographs	:	Nil
4.	Editing Books	:	01
5.	Books with ISBN	:	01
6.	Citation/ index	:	07
7.	Impact factor	:	0.23 –6.0
8.	h- index	:	01

20. Areas of consultancy and income generated: Nil

21. Faculty as members in:

Dr. S. K. Tayade -

- Member, B.O.S. in Botany N.M.U., Jalgaon 2010-2015
- Member, Faculty of Science N.M.U., Jalgaon 2010-2015
- Life Member Indian Botanical Society
- Life Member Indian Association for Angiosperm Taxonomy
- Life Member Ethno botanical Society
- Syllabus Framing Committee Member, M.Sc. I- II and B. Sc.

22. Student projects:

- a) Percentage of students who have done in-house projects including inter departmental/programme: **100 % for M.Sc. students**
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: **Nil**

23. Awards/Recognition received by faculty and students: Nil

24. List of eminent academicians and scientist/visitors to the department:

Sr. No.	Name of the eminent academicians and scientist/visitors	Institute or Place	Duration
1	Prof. R. M. Pai	Ex. Head, Dept. Of Botany Dr. B. A. M. University, Aurangabad,	07 th Sept. 2013
2	Dr. N. K. Patel	Seth. M. N. Science College, Patan, Gujarath	07 th Sept. 2013
3	Prof. T. R. Sahu	Dr. H. R. Gaur Central University, Sagar, M.P.	07 th Sept. 2013
4	Dr. S. L. Laware.	Fergusson College, Pune	07 th Sept. 2013
5	Dr. A. S. Reddy	Sardar Patel University, Vallabh Vidya Nagar, Gujarat	07 th Sept. 2013
6	Prof. S. D. Bonde	Agarkar Research Institute, Pune	07 th Sept. 2013
7	Dr. M. J. Kothari	Botanical Survey of India, Western Circle, Pune	07 th - 09 th Sept. 2013

25. Seminars/ conferences/ workshops organized and the source of funding:

The Department has organized National Conference “Recent Emerging Trends in Plant Sciences” (RETPS-2013) funded by UGC, Western Region, Pune, on 7-9 September 2013. (Letter NO.F.No.24-030/12(WRO) 08 March 2013.

26. Student profile programme/course wise:

Year	Name of the Course/programme	Applications received	Selected		Pass percentage
			Male	Female	
2011-12	F.Y.B.Sc.	285	115	125	78
	S.Y.B.Sc.	110	44	66	63
	T.Y.B.Sc.	11	02	09	84
	M.Sc. Part I	NA	05	09	72
	M.Sc. Part II	NA	02	02	75
2012-13	F.Y.B.Sc.	280	117	138	68
	S.Y.B.Sc.	126	43	83	64
	T.Y.B.Sc.	07	06	01	71
	M.Sc. Part I	NA	04	08	62
	M.Sc. Part II	NA	05	09	86
2013-14	F.Y.B.Sc.	287	119	142	79
	S.Y.B.Sc.	150	54	96	66
	T.Y.B.Sc.	14	06	08	79
	M.Sc. Part I	NA	06	07	67
	M.Sc. Part II	NA	04	08	92
2014-15	F.Y.B.Sc.	263	113	129	83
	S.Y.B.Sc.	140	57	83	74
	T.Y.B.Sc.	14	06	08	64
	M.Sc. Part I	NA	07	04	65
	M.Sc. Part II	NA	06	07	85
2015-16	F.Y.B.Sc.	250	108	136	77
	S.Y.B.Sc.	157	61	96	69
	T.Y.B.Sc.	16	08	14	45
	M.Sc. Part I	NA	13	05	58
	M.Sc. Part II	NA	07	04	55

27. Diversity of students:

Name of the Course	% of students from the same state	% of students from other state	% of students from abroad
F.Y.B.Sc.	97	03	-
S.Y.B.Sc.	98	02	-
T.Y.B.Sc.	98	02	-
M.Sc. (I)	100	00	-
M.Sc. (II)	100	00	-
Ph. D.	100	00	-

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? NIL

29. Student progression:

Student progression	Against % enrolled
UG to PG	18
PG to M.Phil.	Nil
PG to Ph.D.	5
Ph.D. to Post-Doctoral	Nil
Employed • Campus selection • Other than campus recruitment	80

30. Details of Infrastructural facilities:

- **Library:** Departmental Library contains more than 400 reference books (+ books in central library).
- **Internet facility for staff and students:** Department is equipped with 10 Mbps internet connection, 04 (03 PC and 01 Laptop) units are available for staff and students.
- **Class rooms with ICT facility:** LCD Projector system is available for the ICT Based Lecture delivery.
- **Laboratories:** A total of **05** laboratories are available for UG and PG students and **01** separate research laboratory is for researchers.

31. Number of students receiving financial assistance from college, university, government or other agencies:

The students belonging to SC, ST, OBC, NT and Minority receive financial assistance from state and central government. They also get substantial financial assistance through “Karmaveer Bhaurao Patil Earn and Learn Scheme” from the University.

32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts:

- Remedial coaching given to weaker students.
- NET/SET Coaching classes arranged for SC, ST, OBC and Minority Students.
- Seminar arranged on various topics during.
- Seminar, Group discussion, Home assignments etc. are regularly conducted for UG and PG students.
- Botanical Excursion arranged for UG and PG students.

33. Teaching methods adopted to improve student learning:

- Traditional Lecture Method using chalk and talk.
- Regular evaluation of both theory and practicals.
- Each teacher mentor takes care of 50 students and helps in their all round personality development.
- Interactive Method by conducting seminars, presentations and group discussions.
- Use of PowerPoint presentation using LCD projector.
- Text book, Handouts, E-books and Question papers of previous examination are made available in department.
- Educational and Industrial visit for the assimilation of subject on various relevant techniques for the benefit of students.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

- In addition to regular academic activities, the students and the faculty frequently participate in the social activities and the programs organized by the college for the welfare of weaker section of the society.
- To promote environmental awareness, our department participated in “One Student-One Tree” campaign.
- Faculty of our department actively participated in “Biodiversity Audit”.
- Students and faculty of our department participated in a rally on “Social Awareness and equality”.
- With NSS volunteers faculties have actively participated in various social activities viz. Environment Awareness, AIDS awareness and Blood Donation camps, save water drive, involvement in rallies against social evils.

35. SWOC analysis of the department and Future plans:

Strengths:

- Departmental activities organized to enrich programme.
- The faculty of the department is actively engaged in the research, presented research papers in different national/state level seminars & conferences.
- Research publications in international / national journals.
- Well equipped Laboratories with all types of major equipments and departmental Library
- Students exposure to industry through-field trips, study tours
- Highly qualified staff. 02 Ph.D. holders and 02 registered for Ph.D.
- Demand ratio of students for the subject is good.
- Number of students seeking admission exceeds the number of seats available
- Department is recognized research centre of the affiliating university.
- Two faculty members have applied for MRP to UGC.

Weakness:

- The revised curriculum is overloaded with subjects.
- Lack of requisite number of trained Non-Teaching Staff.
- No additional teacher for postgraduate work.
- Time constraint in semester pattern is the main setback for the course
- Number of teachers as per work load is not sufficient at UG level.

Opportunities:

- Participation in events, seminars and Internship Programmes
- Collaboration with reputed companies and NGO
- Exposure to expert perspectives and ideas through sessions and workshops
- Coordinating with alumni with regard to placements

Challenges:

- To provide 100% campus placement

- To increase research facilities comparable to other national laboratories.
- To encourage students to read national newspapers, magazines and promote reading habits.
- Since a large number of students join technical/medical colleges after STD. XII, it is a challenge to teach subject for below average students, who comes from rural and tribal areas

Future plans of the department:

- To promote research activities.
- To develop interest of Botany in students.
- To promote students for competitive examinations
- To adopt e-learning methods.
- Tie-ups with NGOs.
- To start skill based certificate and diploma courses.
- To extend the knowledge of subject and its application to the society.