

Ketaki Amit Vaidya, Ph.D.

Present position

- Assistant Professor and PG Coordinator Botany Department

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020-67656066



Work Experience

- Since Teaching: 20 years
- Research/Industrial: 15 years

Personal Profile

Dr. Ketaki Vaidya is currently working as an assistant professor and PG Coordinator of Botany Department. She has completed her doctorate degree from Pune University in 2013.

Academic Experience

- Taught 2008 (Affiliated College pattern), 2013 pattern, CBCS 2019 Autonomy pattern and NEP 2020 pattern.
- Participated in syllabus framing of affiliated college pattern 2013 and BOS member of Fergusson College, Botany Department under Autonomy.
- Worked as a paper setter for affiliated colleges and participated in CAP.
- Teaching experience of more than 20 years from school level to college.

Administrative Experience

- Currently working as a coordinator of PG Botany at Fergusson College.
- Working as one of the coordinators of PG admission of the college and looking after PG admission of Botany Department.
- Working as a member or Criteria 1 committee of NAAC, CFC (career facilitation centre) Institutional Biosafety committee (IBSC) and co-editor of college magazine Madhyam.
- Mentoring of students of MSc.
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Book Chapters and Books

- Contributed two book chapters in “Reference Book on Life Sciences” for UGC CSIR NET/SET/SLET published by Nirali Publication in 2024
- Written two books: TPS Biology Paper I Std. XII and TPS Biology Paper II Std XII published by Kinnari Publication in 2002.

Guided projects at PG level

1. Effect of mycorrhiza on phenol deposition in *Anethum graveolens* and *Capsicum annum*. (2011)
2. Effect of AM fungi on *Trigonella foenum*. (2011)
3. Effect of mycorrhiza on biochemical content of *Capsicum annum*. (2012)
4. Effect of productivity of tomato with respect to different fertilizers. (2014)
5. Effect of salt stress on nutrient value of *Coriander sativum*. (2014)
6. Study of bioethanol production from fruits like Banana and Chiku. (2015)
7. Production of ethanol from sugarcane bagasse with *Saccharomyces cerevisiae*. (2015)
8. Comparative study of different stretches of Ram Nadi with respect to pollution (2023)
9. Studies of growth responses of Fenugreek (*Trigonella foenum-graecum*) with respect to AM fungi (2023)
10. Studies of growth responses of Dill (*Anethum graveolens* L.) with respect to AM fungi (2024)
11. "Study of effect of salt stress on growth responses of *Trigonella* (Fenugreek) with respect to AM fungi" (2024)

Social outreach:

- Worked as a Social outreach coordinator with the NGO named SNEH. This work included carrying out an educational survey in two slum areas of Pune (Kishindha Nagar and Kelewadi) This work was completed during March and April 2022. The purpose of the work was to enroll the children in the community preschool.
- Worked for slow learners and mentally challenged students.

Co and extra-curricular Activities

- Have taken formal training in Indian Classical Music and have passed Sangeet Visharad examination conducted by Gandharva Mahavidyalaya.
- Has worked for Bal Bharati and Balchitrawani. Worked for Kinnari publication, Navjeevan publication, Reliable series, Blue Dart publication and Mcmillon publication
- Completed the course of Medical Transcription and worked as an editor.
- Conducted a lecture on "Career Options after 12th Standard for Science Students" at Balshikshan College on 9th January 2025.

Course(s) Taught (Only Titles)

Fundamental Botany subjects (Algae, Bryophytes, Pteridophytes, Gymnosperms)

Biophysical Techniques

Plant Ecology

Plant Interactions

Classic Genetics and Evolution

Industrial Botany

Developmental Botany

Cell Biology

Physiology and Biochemistry

Fermentation techniques

Biostatistics

Practicals based on all the above papers.

Field of Specialization/Areas of Interests

- Phycology
- Mycorrhiza
- Ecology and plant interactions

Education

- **Ph.D. – (Mycorrhiza):** from 2009 to 2013
Title of the Thesis: Studies of Growth Responses of Tomato (*Lycopersicon esculentum* Mill.) With Respect to AM Fungi
Name of University / Institution: Pune University
Year of Award: 2013
- **Master of Science- (Botany):** year: 1999
 University/College: Pune University, Botany Department
- **Bachelor of Science- (Botany):** 1997
 College, University, Place: Fergusson College, Pune University, Pune

Fellowship/Awards/ Certifications/Achievements/Recognitions

1. **First Prize** in State level “**Avishkar**” Research Competition in 2009
2. Represented Maharashtra in **Anveshan** 2010 National West Zone Research Convention.
3. Completed successfully a distance learning general course on “Intellectual Property” conducted by WIPO, Geneva, Switzerland, from 1st November and 14th December 2024.

Member of College Committees/ Professional Bodies and Others

College Level	Professional Bodies	Others
• PG admission committee		
• Madhyam magazine committee		
• IQAC criteria 1 committee		
• IBSC		
• CFC		
• Member of BOS		

Employment History

- 1) **Organization : Chate Coaching Classes**
Role : Teacher
Duration : 1999-2000

Responsibilities	• Teaching 11th and 12th . • Teaching Botany to MH-CET students
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- 2) **Organization : Phoenix School for slow learners**

Role : Teacher
Duration : 2002 to 2007

Responsibilities	Teaching students that would appear for 10th open school exam
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3) Organization : Fergusson College
Role : CHB teacher in Biotechnology Department
Duration : 2007 to 2010

Responsibilities	Teaching Developmental Biology and allied subjects.
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Research Projects

Title of the Project	Name of Funding Agency	Amount (Rs)	Duration (Year) (From To)	Type (Minor/Major)	Outcome
Studies of growth responses of dill (<i>Anethum graveolens</i>) with respect to AM Fungi	Seed Money by Fergusson College	30,000	2023-24		Poster presentation and paper in progress

Research Publications in National and International Journals

- Shinde B. P. and **Ketaki Vaidya** 2013. Effect of arbuscular mycorrhizal fungi on antioxidants of *Lycopersicon esculentum* Mill. Flora and Fauna 19(1):419-424. (ISSN 0971-6920).
- Shinde B. P. and **Ketaki Vaidya** 2014. Influence of Arbuscular Mycorrhizal Fungi on Growth and Productivity of *Lycopersicon esculentum* L. Indian Journal of Fundamental and Applied Life Sciences, 4(2): 343-350. (ISSN 2231-6345, IF 0.452)
- Ketaki Vaidya**, Manjusha Khanna and B.P. Shinde 2009. Biodiversity of AM fungi associated to some plants from Fergusson College Campus Pune (MS) India” In proc. of “National Conference of Climate changes and Challenges in Biodiversity Conservation” pp 83-87.

Participation in Conferences/Seminars/Symposia/Workshop:

- Influence of AM fungi on vegetative growth and nutritive value of *Trigonella* sp, **Ketaki Vaidya**, Nishigandha Wable and Himani Kamanapure at National Conference on Plant Omics: Research Trends and Applications conducted by SPPU Botany Department on 21st and 22nd February 2024
- Effect of salinity stress on physical and chemical parameter of Fenugreek. **Ketaki Vaidya**, Himani Kamnapure, Himanshu Raj at International Conference on Exploring Innovations in Life Sciences 2024 on 23rd March 2024

3. Effect of AM fungi on vegetative growth and nutritive value of *Anethum* sp. Muskan Bhati and **Ketaki Vaidya** at International Conference on Exploring Innovations in Life Sciences 2024 on 23rd March 2024.
4. Autecological study of *Aegicerus corniculatum* (L). Blanco. Kritika Khadka, **Ketaki Vaidya**, Sirsha Mitra, Bhagyashri Watve, Mahesh Shindikar at International Conference on Exploring Innovations in Life Sciences 2024 on 23rd March 2024.

Events Organized/Coordinated:

Sr. No	Name of the Event	Name of organizing Institute/ College/ University	Nature of contribution	Dates
1	One Day seminar in Recent trends in Mycology	Department of Botany, Fergusson College	Participation in organization	2016
	One day seminar in Advances in Plant Biotechnology	Department of Botany, Fergusson College	Participated in organization	22 nd August 2016
2	One Day workshop in Current trends in Plant Biotechnology	Department of Botany, Fergusson college	Participation in organization	2017
3	One Day Workshop on NET-SET Examination Preparation 15 th Sept 2017	Department of Botany & Biochemistry, Fergusson College	Coordinator	15 th Sept. 2017
4	Two day workshop on “Hands on Training of Electrophoretic techniques” in 2018	Department of Botany, Fergusson College	Participated in organization	12 nd and 13 th January 2018
5	National Webinar on Trends in Algal Research	Botany Department Fergusson College	Anchor	10 March 2022
6	One Day Workshop on NET-SET Examination Preparation	Department of Botany & Biochemistry Fergusson College	Participation in organization	12 th March 2022
7	One Day Workshop on “Research Publication And It’s Ethics” on 29 April 2022	Department of Botany, Fergusson College (Autonomous), Pune	Participated and organized worked as anchor	29 th April 2022

Additional skills/Activities

Visharad in Indian Classical Music