



G.VENKATASWAMY NAIDU COLLEGE (AUTONOMOUS), KOVILPATTI -2.
(Affiliated to Manonmaniam Sundaranar University, Tirunelveli)
(Reaccredited by NAAC with 'A' Grade | DBT - STAR College scheme)

DEPARTMENT OF BOTANY

1. Facility Available

a) Unique features of the Department

1. **Specialized Research Areas:** The department may have a strong focus on niche areas of botany, such as ethnobotany, plant biotechnology, or conservation biology, making it a leader in these specialized fields.
2. **State-of-the-Art Laboratories:** Equipped with advanced instrumentation and technology, the department offers cutting-edge facilities for research in plant sciences, allowing students and faculty to engage in high-quality, innovative research.
3. **Botanical Garden and Herbarium:** The department might maintain a well-curated botanical garden and herbarium, which serve as invaluable resources for both research and education, providing hands-on learning experiences and opportunities for plant conservation studies.
4. **Strong Industry and Research Collaborations:** The department could have established partnerships with industry, research institutions, and government agencies, offering students opportunities for internships, collaborative research projects, and job placements.
5. **Community and Environmental Engagement:** Actively involved in community outreach, the department might conduct workshops, seminars, and awareness programs on environmental conservation, sustainable agriculture, and the use of medicinal plants.
6. **Experienced Faculty:** The department could be home to highly qualified and experienced faculty members, many of whom might be recognized for their contributions to botanical research and education both nationally and internationally.
7. **Focus on Traditional Knowledge and Ethnobotany:** If the department emphasizes the study and preservation of traditional knowledge related to plants, it might play a crucial role in documenting and promoting the cultural heritage of indigenous and local communities.
8. **Strong Alumni Network:** The department may have a vibrant and active alumni network, with former students holding prominent positions in academia, research

institutions, industry, and government, contributing to the department's reputation and providing mentorship to current students.

9. **Innovative Teaching Methods:** The department might employ innovative teaching methods, including field-based learning, problem-based learning, and the use of digital tools and resources, to enhance the educational experience of students.

These unique features collectively contribute to making the Botany Department a center of excellence in education, research, and community engagement.

b) Student oriented process

1. **Mentorship and Guidance:** Providing personalized academic and career mentoring through faculty advisors, helping students navigate their educational journey, select appropriate courses, and plan for their future careers.
2. **Student Support Services:** Offering comprehensive support services, including academic advising, counseling, tutoring, and career services, to address the diverse needs of students and assist them in overcoming challenges.
3. **Collaborative Learning Environments:** Creating collaborative learning spaces where students can work together on projects, engage in peer learning, and share knowledge, fostering a sense of community and teamwork.
4. **Experiential Learning Opportunities:** Providing opportunities for experiential learning through internships, research projects, fieldwork, and community service, enabling students to apply their knowledge in real-world contexts.
5. **Career Development and Preparation:** Integrating career development into the curriculum by offering workshops, career fairs, mentorship programs, and networking opportunities to prepare students for the job market.
6. **Use of Technology and Digital Tools:** Leveraging technology to enhance learning experiences, such as using online learning platforms, digital resources, and virtual labs to provide students with flexible and accessible educational opportunities.
7. **Regular Curriculum Updates:** Continuously updating the curriculum to align with the latest developments in the field, industry needs, and student feedback, ensuring that the education provided is relevant and up-to-date.

By focusing on these aspects, a student-oriented process ensures that the educational experience is centered around the needs, goals, and well-being of students, leading to better learning outcomes and overall student satisfaction.

c) Innovative Teaching Practice

Virtual Field Trips: Use online resources to take students on virtual field trips to museums, historical sites, or scientific institutions. Virtual field trips can bring the outside world into the classroom and make learning more dynamic.

Connecting Quiz is an innovative and engaging teaching method where quiz questions are designed to build connections between different concepts or topics. This type of quiz encourages students to think critically and see the relationships between various pieces of knowledge.

Peer Teaching: Allow students to teach each other by presenting a topic or explaining a concept to the class. Peer teaching reinforces their knowledge and builds confidence in their understanding of the material.

d) Instruments Available.

- Autoclave
- Hot air oven
- Incubation Chamber
- Shaker
- Water bath
- Soxhlet Apparatus
- Leaf Area Meter
- Laminar Hood
- Photosynthetic Photon Flux Density Meter
- Spectrophotometer
- Binocular Microscope
- Plant Tissue Culture Facilities
- Centrifuge
- pH meter

2. Achievements

a) Student

Ms. P. Bagavathi, II M.Sc., Student have selected for the Internship at **Indian Institute of Science & Engineering Research, Thiruvananthapuram** from December 3 to 20, 2023.

b) Staff

Dr. B. Makesh Kumar, Associate Professor & Head of the Department of Botany received Tamil Nadu Government Aringar Anna Award and Cash Prize of Rs. 15,000/- on June 5, 20223 from the Ministry of Environment and Climate Change for the Environmental conservation & awareness activity conducted in the academic year 2019.

3. Collaboration

S.No	Name of the Collaboration Agency	Nature of work
1.	ATREE	Bird Counting

2.	Tamil Nadu State Council for Science and Technology	To conduct IPR workshop
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4. Extension Activity

S.No	Date	Name of the Activity	Number of participants	Beneficiary
1.	30.08.2023	School student visit to Laboratory	120	School Students
2.	23.09.2023 & 24.09.2023	Bird counting	12	Society
3.	26.11.2023	Eco-heritage trail	37	Students & Public
4.	14.01.2024 & 24.1.2024	Bird counting	17	Society
5.	25.02.2024	Soil Testing and Collection	12	Village People
6.				