

# PROFILE OF THE DEPARTMENT OF BOTANY

## **Bhattadev University : Bajali**

BARPETA-ASSAM: 781325

### MISSION OF THE DEPARTMENT

*The Department of Botany was established in the year 1959 with a mission to revolutionize plant science knowledge among the young students of the area, so that its agro-based society be greatly benefited.*

The department of botany was established in the year 1959 under the able leadership of late *Prof. Hem Chandra Sarma*, M.Sc., M. Phil. with four faculty members. In the year 1969, honours course was introduced and the 1<sup>st</sup> batch appeared for the final Examination in 1973. So far, more than one hundred students have successfully passed B.Sc. with botany honours / major which include University Toppers (**Miss Nilam Sarma, Barnali Das and Pranjana Neyogi**).

Till 2006, the dept. was running with six faculty members. Presently, the dept. is running B.Sc. and pre-degree science programme with two faculty members of which one of them is a Ph.D. degree holder. Our faculty members are rendering their valued service to the dept. & in society.

Current H.o.D., *Mr. Kanak Das*, M.Sc. is an active member of Assam Science Society, Bajali Branch and is associated with different teachers training programs organized by the Ass. Sci. Soc. and Extension Education Cell, Bhattadev University. Presently, he holds the finance secretarial position of the Teachers Association and also the Estate officer (i/c) of the University.

*Dr. Surendra Mohan Nath*, M.Sc. (Gold medalist), Ph.D. is the life member of Assam Science Society and the Journal of Association for Plant Taxonomy/ Phytotaxonomy, BSI, Kolkata. He is actively associated with biodiversity and conservation programs, besides being in-charge of departmental Seminar library and Indoor Garden.

There are two experienced and dedicated bearers in the department to assist our day to day laboratory works.

## **TEACHING AND LEARNING PROCESS:**

We have been successfully adopting the following methodologies in the teaching and learning process. These are as follows:

1. Within the permissibility's of infrastructures, emphasis has been given to proper class room arrangement and its utilization.
2. Chalk & talk methodology is most commonly adopted in teaching.
3. In support of effective teaching, charts & models and Audio-visual systems are also used.
4. The proper assessment of students' progression has been done through periodic unit tests, home assignment and evaluation. Besides, seminars, questioning and cross-questions, remedial classes are part of our regular teaching process.

## **ACTIVITIES:**

Our faculty members are actively engaged in extra classroom activities within and outside the college campus. We have already been carrying out the comprehensive surveys of floristic composition of the University campus. Various tree species growing in and around the College campus are identified and annexed with name plates.

## **INFRASTRUCTURE:**

So far as the infrastructures are concerned, we have all the basic facilities within our laboratories which include one Trinocular Microscope with microphotography facilities, one Binocular Microscope, twenty four numbers of workable compound Microscopes (light and electric), eight nos. of Simple Microscopes, one Incubator, Digital pH Meter, one set of digital Centrifuge, one set of hand Centrifuge, one Autoclave, one Chromatographic chamber, one set of Rotary Microscopic apparatus, Refrigerator, Lux Meter, Hot Air Oven, UV-Vis digital Spectrophotometer Colony Counter, Hygrometer, Water and Soil Analysis Kit, Bunsen Burner, Digital Balance, Students' Manual Balance, Bacterial Incubator, Haemocytometer, Slide Chamber, glassware and other Charts and Models. The Dept. is provided with full-fledged water supply facilities.

## **SEMINAR LIBRARY:**

The dept. of botany maintains a seminar library in which about 100- text books (including few reference books) and as many as 7- Journals (own collection) are in the stock. Accordingly, the total nos. books includes 40- different titles. The department also has a small museum which in a limited way, gives a glimpse of local plant varieties.

## **BOTANIC GARDEN:**

We have maintained an Indoor garden and a medicinal plant garden having about 40- varieties of plant species (mostly medicinal plants) viz., *Costus speciosus* (Koen. ex Retz.) Sm., *Costus igneus* (insulin plant) *Rauvofia serpentine* (L.) Benth. ex Kurz., *Boerhaavia diffusa* L., *Hemidesmus indicus* (L.) Schult, *Aloe barbadensis* Mill., *Acorus calamus* L., *Asparagus racemosus* Willd. Var. *javanicus* Baker *etc.*

## **ALUMNI:**

From the very start of introduction of Hons/Major courses in the dept., students passing out with Hons/Major and our alumni are elevated to various prestigious positions in various disciplines. With the available records and information's 13- alumni has received Ph.D. degree of which 2 are in Gauhati University- one Assoc. Prof. and another one was the Registrar, as many as 25 are college teachers (Asstt. /Assoc. Prof.), 9 are in the administrative services, 2 are Scientists, besides, quite a good number of them are in Central Govt. services (e.g., Armed Forces, Railway, LIC *etc.*)

## **RESULT:**

It has been observed that mostly mediocre with a few meritorious students being exception; choose botany as their honours / major subject. For last few years, it is observed that most of the students do better result in botany Hons / Major in the final Examinations. So far, 64 students have got I<sup>s</sup> - class including a first class first holder.

## **STRENGTH:**

- I. We have two competent faculty members in the dept.
- II. All the faculty members of the dept. have attended Refresher Course/ Orientation Programmes, Seminars and Symposia.
- III. All faculty members of the dept. have published research papers.
- IV. The laboratory is more than adequately equipped.

## **WEAKNESS:**

- a. Lack of full-fledged Seminar Library
- b. Shortage of National and International journals
- c. The need of a well furnished botanic garden.
- d. Infrastructure for museum, herbarium are urgently needed
- e. Shortage of faculty members

### **OPPORTUNITY:**

1. We undertake self-employment trainings like-
  - a. Mushroom cultivation
  - b. Floriculture
  - c. Horticulture *etc.* by taking major / minor projects
2. Introduction vocational courses in –
  - a. Biotechnology (already introduced)
  - b. Microbiology
  - c. P.G. Course in Botany

### **CHALLENGES:**

- a. To provide information and carrier guidance to the unemployed youth with agriculture & Botany background for self-employment.
- b. Establishment of a fully fledged tissue culture laboratory for mass production and conservation of rare and endangered plants of the area.
- c. Establishment of collaboration with Assam Agricultural University, Jorhat; NEIST, Jorhat and I.I.T., Guwahati.