



**ADD-ON COURSE
OFFERED BY THE DEPARTMENT OF ZOOLOGY
BIJNI COLLEGE::BIJNI**

Course Title	: Sericulture
Course Code	: S-101
Course Duration	: 30 Hours
Credit	: 2(1 Credit = 15 Hrs.)
Course Designed by	: Dr. Anindita Chakravarty, HoD & Assistant Professor : Ms. Lipika Dey Dutta, Assistant Professor : Dr. Sewali Pathak, Assistant Professor
Course Co-ordinator	: Ms. Lipika Dey Dutta, Assistant Professor
Approved by	: Governing Body, Bijni College, Bijni
Date of Approval	: 14-02-2025

Course Description:

The course deals with the study of Sericulture which is the art and technique of silk production. It is an agro-industry comprising of two aspects viz. cocoon production and silk reeling. This agro-industry has important socio-economic implications as it generates employment and income especially in the informal sector, among landless and marginal farmers and women; mitigates poverty and paces down rural to urban migration. The caterpillars of the 'Bombyx mori' are the most commonly used silkworm species in sericulture. Other types of silkworms (such as Eri, Muga, and Tussar) are also cultivated for the production of 'wild silks'. The course is designed to learn both theory and practice of sericulture.

Course Objectives:

The objective of the programme is to equip students with basic knowledge of sericulture essential for research and entrepreneurship.

Course Outcomes:

Through the "sericulture" add-on course, students were able to learn about the culture process, the climate required for silkworm rearing, the various pests and microorganisms that attack silkworms, prevention and remedies, and the business side of sericulture. Participant's trust in silkworm culture, rearing, and cultivation of various food plants was improved by the program. They receive hands-on instruction on various sericulture equipment during the practical classes. All 61 participants had successfully learned the silkworm culture process by the end of the course. Students might launch a sericulture business using this course.

Course Structure:

Unit-1

- Introduction to sericulture: Prospects and scope of mulberry and non- mulberry Sericulture in Assam.

Unit-2

- Food plants of silkworms and their cultivation.

Unit-3

- Life cycle of silkworms (Eri, Muga & Pat)
- Rearing of silkworms & Production of silks.
- Diseases of silkworms with remedies.

Unit-4

- Entrepreneurship of sericulture: Employment generation and potential of Mulberry and Non-mulberry sericulture.

Suggested Readings:

- a) Bukhari, R. and Kour, H. 2019. Background, Current Scenario and Future Challenges of the Indian Silk Industry. International Journal of Current Microbiology and Applied Sciences., 8(05): 24482463.
- b) Sarkar, K., Majumdar, M., & Ghosh, A. (2017). Critical analysis on role of women in sericulture industry. International Journal of Social Science, 6(3), 211-222.
- c) De, U. K., & Das, M. (2010). Economics of Sericulture in Assam: A Comparative Analysis of Three Cultivars. South Asia Economic Journal, 11(2), 309-336.)
- d) Saikia, M., & Ghosh, K. (2021). An Analysis of Families Engaged in Silk Production, Trend of Raw Silk Production and Area under Silkworm Food Plant Cultivation in Assam. Saikia & Ghosh Biological Forum-An International Journal, 13(4), 51. www.researchtrend.net
- e) Kherkatary, A., & Daimari, P. (2017). Growth Pattern in Raw Silk Production and Employment Generation in Sericulture in Assam: An Economic Analysis.

Evaluation Process

1. A minimum of 75% class attendance is mandatory for course completion. 5 marks will be assigned for attendance. 1 mark for 75%-80% attendance, 2 marks for 81%-85% attendance, 3 marks for 86%-90% attendance, 4 marks for 91%-95% attendance and 5 marks for 96%-100% attendance.
2. Evaluation will be based on- attendance, class tests/assignments, and practical.
3. Students must attend all the above-listed evaluation components.
4. To receive the course completion certificate, students must secure a minimum of 40% aggregate marks.
5. The percentage of Marks secured by students will be converted into a Grade as follows-
40%-50%: Grade A
30%-40%: Grade B
20%-30%: Grade C

