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

Course Title	: Ethnomedicinal Plants
Course Code	: AD-ETH-BOT-MP
Course Duration	**:** 30 Hours
Credit	: 02 (2T +1P)
Course Designed by	: Dr. Jabin Chandra Ray, HoD & Assistant Professor
	: Lily Devi, Assistant Professor
	: Anindita Bhattacharjee, Assistant Professor
Course Co-ordinator	**:** Lily Devi, Assistant Professor
Approved by	**:** Governing Body,Bijni College, Bijni
Date of Approval	**:** 14-02-2025

Course Description:

The course, Ethnomedicinal Plants is focused on reclaiming sustainability in Indian traditional medicinal and aromatic plants specially found in Bodoland Territorial Region of Assam through educating learners with scientific knowhows, guidelines, quality policies, processing and developing a viable value addition and sustainable product.

Course Objectives:

- To know about the traditional knowledge of plants and their uses especially their roles in curing various human diseases.
- To know and understand identification of the medicinal plant.
- To acquire practical knowledge of medicinal plants and their products.
- To Study certain important plants involved in home remedies.
- To expose the diversity of medicinal plants to the students.

Course Outcomes:

- The students will be liable to understand medicinal plants and their utilization.
- The students should understand various medicinal plants surrounding to their localities.
- Develop the skill and methods used to collect and preserve plant materials
- Know and/or identify important medicinal plant species
- The students should understand ecological variation among the medicinal plants.

Course Structure:

Unit-1: Historical Background (10 Hours)

- History, Definitions and concepts of Ethnobotany; Ethnobotany as an interdisciplinary science; Importance of ethnobotan . Importance of Medicinal plants.
- Some common ethnic groups of Assam or Tribal of India and their life styles; Plants used by the Tribals: a) Food plants b) Medicines and miscellaneous uses.
  Importance, scope and uses of medicinal plants. Application of natural products to certain diseases- Jaundice, cardiac, cough, diabetes, blood pressure and skin diseases.

Unit-2: Intellectual Property Rights on Traditional Knowledge(08 hours)

- Biopiracy, Intellectual property rights (IPR) and traditional knowledge in relation to IPR. Herbarium: Herbarium and Field techniques, Importance of herbaria.
- Propagation of Medicinal Plants: Objective of the nursery. Its classification, important components of a nursery, use of green house for nursery production, propagation through cuttings, layering, grafting and budding.
- Conservation of biodiversity and medicinal plants. IUCN Red list criteria; in-situ conservation: National Parks; Ex- situ conservation: Botanical Gardens. Hot spot areas of India

Unit-3: Study on Local Medicinal Plant (12 Hours)

- Study of medicinal plants in the locality/ botanical garden and collection of plant samples for preparation of Herbarium
- Submission of digital photo album of at least 10 medicinal plants with brief description.
- Identification of locally available common medicinal plants.

Suggested Readings:

a. Ghosh D.; et.al. Int. J. Pharmacol. Pharm. Sci. (2015) 2:6; 5-10
b. Mao AA, Hynniewta TM, Floristic diversity of North East India. J Assam Sci Soc 2000; 41(4):255-266. 2.
c. Hynniewta TM, Annual Report, All India Co-ordinated Research Projection Ethnobiology, MoEF (Unpublished), 1987. 4. http://assamforest.in/environment/environment.php 5.
d. Taid TC, Rajkhowa RC, Kalita JC, A study on the medicinal plants used by the local traditional healers of Dhemaji district, Assam, India for curing reproductive health related disorders. Advances in Applied Science Research 2014; 5(1):296-301.

e. Das NJ, Saikia SP, Sarkar S, Devi S, Medicinal plants of North-Kamrup district of Assam used in primary healthcare system. Indian Journal of Traditional Knowledge 2006; 5(4): 489-493.
f. Hazarika R, Abujam SS,Neog B, Ethno Medicinal Studies of Common Plants of Assam and Manipur. Int J Pharm & Bioll Arch 2012; 3(4):809-815. 19.
g. Vaithiyanathan S, Krishnaveni M, Amla: A Novel Ayurvedic Herb as a Functional Food for Health Benefits"- A Mini Review. Int J Pharm Pharm Sci 2013; Vol 5(1): 1-4

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