

MANGALORE UNIVERSITY
Department of Applied Botany
MSc Botany

BOS457 - Ethnobotany and IPR

Course outcome:

- Gives the basics of ethnobotany including an understanding of the tribals of India
- There is an exhaustive coverage of the methodologies used in ethnobotanical studies
- Tribal groups and their role in various kinds of agricultural practices are included
- Study of some important medicinal plants which are probably the fallout of ethnobotanical/traditional practices

Teaching Hours: 9/Unit

Unit I:

Ethnobotany: Introduction, concept, scope and objectives; Ethnobotany as an interdisciplinary science. The relevance of ethnobotany in the present context; Ethnic groups and Ethnobotany: Major and minor ethnic groups or Tribals of India, and their life styles. Forest Vs. ethnic groups; Plants in Tribal life with reference to Magico-religious rituals and social customs. Sacred groves.

Unit II:

Methodology of Ethnobotanical studies: a) Field work- documenting the information-questionnaire, video recording, interviews b) Herbarium c) Ancient Literature d) Archaeological findings e) temples and sacred places f) Protocols.

Unit III:

Role of ethnobotany in modern Medicine with special examples; Medico-ethnobotanical sources in India with special reference to Karnataka; Tribals Vs. Agriculture: Shifting, Podu and Jhum cultivation. Role of ethnic groups on surrounding environment. Crop Genetic sources. Endangered taxa and forest management (participatory forest management).

Unit IV:

Ethnobotany and legal aspects. Ethnobotany as a tool to protect interests of ethnic groups. Sharing of wealth concept with few examples from India. Ethnobotany as a source (recent) of already known drugs: a) Withania as an antioxidant and relaxant b) Sarpagandha in brain ailments c) Becopa and Centella in epilepsy and memory development in children d) *Phyllanthus fraternus* in diabetic and viral jaundice e) Artemisia as a powerful cerebral antimalarial agent and its possible use in tuberculosis.

Unit V:

Bioprospecting and Biopiracy, Intellectual property Rights: Forms of protection, Patents, Trademarks, Trade secrets, Designs, Geographical indicator, Plant variety protection