

## BOE463 - Medicinal Plants

Teaching Hours: 9/Unit

### Unit I:

Plant classification - Broad outline of major groups and ranks of taxa, Plant Nomenclature- Common names, Binomial nomenclature, IUBN- brief outline of methods in nomenclature; Typification. Herbarium- Methods of collection, processing of herbarium specimens; Major herbaria of the world, Botanical Survey of India- brief outline of its organization and its role and significance.

### Unit II:

Medicinal plants - system of herbal medicine, threatened medicinal plants- Threats, various approaches to conservation - *in-situ* and *ex-situ*; MPCA, Biosphere reserves, National parks, Sacred grooves, CITES, IUCN categories of plant, Brief account of Biodiversity Act.

### Unit III:

Ethnobotany: Basic approaches to study the traditional knowledge on plant use. Collection methods, field methods and studying of Herbarium specimens and folklore; verification of data, Aesthetic value.

### Unit IV:

Plants as medicine: Drugs of botanical origin. Medicinal properties of important local plants, Nutraceuticals Bioprospecting, Biopiracy. Intellectual property Rights: Forms of protection, Patents, Trademarks, Trade secrets, Designs, Geographical indications, Plant variety protection.

### Unit V:

Cultivation potential of important medicinal plants Agroclimatic requirements, propagation, Transplanting and aftercare of the following medicinal plants.

*Acorus calamus*

*Andrographis paniculata*

*Asparagus racemosus*

*Azadirachta indica*

*Centella asiatica*

*Piper longum*

*Rauwolfia serpentina*

*Zingiber officinale*

*Vinca rosea*

*Embllica officinalis*  
*Cinnamomum suphuratum*

**Suggested Reading:**

Agarwal.S.S.M.Paridhavi (2007) Herbal Drug Technology, University press, Hyderabad.

Bennet, S.S.R. 1979. An Introduction to Plant nomenclature. International Book Distributors. 9/3. Rajpur Road, Dehra Dun 248001. India.

Davis, P.H., V.H. Heywood. 1963. Priniciples of Angiosperm Taxonomy. Oliver and Boyd Ltd., Tweeddale Court, Edinburgh.

Heywood V.H., 1976. Botanical Systematics, Academic Press London.

Stace, C.A. 1989. Plant Taxonomy and Biosystematics (2nd Edition). Edward Arnold Ltd., London.

Sumy, Ved & Krishnan (2000) Tropical Medicinal Plants, FRLHT, Bangalore.