

Course Code : ECO 302
Course Title : Medicinal and Aromatic Plants
Credit Hours : 2(1+1) Full Marks: 50 Theory: 25 Practical: 25

OBJECTIVES

Upon the completion of this course, the students will be able to understand the importance of medicinal and aromatic plants (MAPs), its traditional uses and research status of MAPs.

I. SYLLABUS

Introduction, history, classification, importance, prospects and constraints of medicinal and aromatic plants, research status of MAPs in Nepal, extraction and storage methods for MAPs, impacts of environmental degradation, climate change and over exploitation on MAPs, phytomedicine and uses of MAPs in different traditional health care system and description, origin, distribution and chemical evaluation of Medicinal and Aromatic Plants.

II. COURSE OUTLINE

A. Lecture

S.N.	Topic	No. of Lectures
1	Introduction, history, classification of Medicinal and Aromatic Plants	1
2	Importance, prospects and constraints of medicinal and aromatic plants	1
3	Classification of Medicinal and Aromatic Plants	1
4	Extraction and storage methods for Medicinal Plants	1
5	Status of Environmental degradation and Climate Change in Nepal	1
6	Effect of Climate change and environment degradation in MAPs	1
7	Way to reduce effect of climate change and over exploitation of MAPs	1
8	Phytomedicines and Medicinal crops. Uses of Medicinal plants in Aurveda,	1
9	Uses of Medicinal plants in Siddha, Yoga, Unani, Naturopathy, Homeopathy, Chinese Medicine,	1
10	Uses of Medicinal plants in Folk-remedies and other traditional health care system	2
11	Description, origin, distribution and chemical evaluation of	
	A) Medicinal plants: Aloe, Datura	1
	B) Medicinal plants: Rauwolfia, Neem	1
	C) Aromatic plants: Ginger grass, Mint,	1
	D) Aromatic plants: Rose, Tulsi	1
ToTal		15

B. Practical

S.N.	Topic	No. of Practical
1.	Preparation of questionnaire designed for recording traditional uses of locally available herbs/ MAPs.	1
2.	Pre-testing of questionnaire designed for recording traditional uses of locally available herbs/MAPs.	1
3.	Documentation of local uses of important medicinal plants of local tribal community tharu	1
4.	Documentation of local uses of important medicinal plants of local tribal community darai	1
5.	Documentation of local uses of important medicinal plants local tribal community bote	1
6.	Documentation of local uses of important medicinal plants local tribal community chepang	1
7.	Identification of important high value herbs and their products	1
8.	Identification of important aromatic plants and their products	1
9.	Nursery bed preparation	1
10.	Planting of medicinal plants.	1
11.	Planting of aromatic plants.	1
12.	Field observation of herbal farms (medicinal plants)	1
13.	Field observation of herbal farms (aromatic plants)	
14.	Field observation of processing plants (medicinal plants)	1
15.	Field observation of processing plants (aromatic plants)	1
Total		15

REFERENCES

- Atal, C. K. and B. M. Kapur (Eds.). 1982. Cultivation and Utilization of Medicinal and Aromatic Plants. Regional Research Laboratory, CSIR, Jammu-Tawi, India.
- Bhattacharjee, S. K. 2000. Hand Book of Aromatic Plants. Pointer Publisher, Jaipur, India.
- Hussain, A. 1992. A status report on Cultivation of Medicinal Plants in NAM countries. Center of Science and Technology of the Non-aligned and other Developing Countries, New Delhi.
- IUCN Nepal. 2000. National Register of Medicinal Plants. IUCN-Nepal, Kathmandu.
- Kaufman, P. B., L. J. Cseke, S. Warber, J. A. Duke, and H. L. Brielmann. 1999. Natural Products from Plants. CRC Press, UAS. Journal of Medicinal and Aromatic Plants