

3rd SEMESTER
HORTICULTURE TECHNOLOGY
(COMMERCIAL MEDICINAL AND AROMATIC PLANTS)
SKILL ENHANCEMENT COURSE (SEC)

MAP322S COMMERCIAL MEDICINAL AND AROMATIC PLANTS-III: ROLE OF MEDICINAL AND AROMATIC PLANTS IN HEALTH CARE SYSTEM

CREDITS: THEORY: 2, PRACTICAL: 2

Objective: To develop understanding of students about post harvest aspects of MAPs

THEORY (2 CREDITS)

S01C- Commercial Medicinal and Aromatic Plants- III: Post Harvest and Processing of Medicinal and Aromatic Plants (Credits: 2+2)

UNIT I

Identification of harvesting period based on active content. Harvesting method of underground parts, leaves, stem, bark, fruits, flowers etc.

Processing of harvested crops of medicinal and aromatic plants. Storage and value addition. Deterioration and degradation of active principles during storage and their control.

UNIT II

Methods of isolation of major proactive contents from medicinal plants (cold and soxlet extraction), preparation of active content enriched extracts. Latest methods of extraction of essential oil.

PRACTICALS (2 CREDITS)

- Visit to nearby pharmaceutical concern for understanding value addition processes. Visit to local market and data collection of sale and sale procedure – organized and unorganized. Internet surfing for latest market value of high value of medicinal and aromatic plants.
- Post harvesting and processing of following ten plant species:
Acorus calamus L.; Artemisia absinthium L.; Asparagus racemosus Willd. ; Atropa acuminata; Berberis lycium; Bergenia ciliate, Inula racemosa ; Lavendula angustifolia, Rosemarrinus officinalis or any other available in the region

SUGGESTED READINGS

1. Alikhan I. and Khanum A. 2008. Role of Biotechnology in Medicinal and Aromatic Plants. UKAZ Publ.
2. CB and Franz C. 2005. Breeding Research on Aromatic and Medicinal Plants. International Book Distr.
3. Chadha K.L. and Gupta R. 2006. Advances in Horticulture. Vol. XI. Medicinal and Aromatic Plants.
4. Gupta A.K, Tandon N. and Sharma M. 2008. Quality Standards of Indian Medicinal Plants. ICMR. Johnson
5. Malhotra Publ. House. Gupta AK & Sharma M. 2008. Reviews on Indian Medicinal Plants. ICMR.
6. Sharma R. 2004. Agrotechniques of Medicinal Plants. Daya Publ.