

AMH23 BREEDING AND SEED PRODUCTION OF FLOWER AND ORNAMENTAL PLANTS

UNIT-1 THEORY

- 1.1 History of improvements of ornamental plants,
- 1.2 Centre of origin of flower crops and ornamental crops,
- 1.3 Objectives and techniques in ornamental plant breeding.
- 1.4 Introduction, selection, hybridization, mutation and biotechnological technique for Major Ornamental flower crops viz. rose, chrysanthemum, gladiolus, tuberose,
- 1.5 Jasmine, marigold, crossandra, dahlia, liliium, gerbera, petunia, pansy, China aster, orchids, carnation, antirrhinum, hibiscus, bougainvillea and annuals.
- 1.6 Breeding for disease resistance.
- 1.7 Development of promising cultivars of important ornamentals and flower crops.
- 1.8 Role of heterosis and its exploitation, production of F1 hybrids and utilization of male sterility, production of open pollinated seed.
- 1.9 Harvesting processing and storage of seeds, seed certification.

UNIT-2 PRACTICAL

- 2.1 Study of floral biology of commercial flower crops and annuals and pollination in important species and cultivars.
- 2.2 Techniques of inducing polyploidy and mutation.
- 2.3 Production of pure and hybrid seeds.
- 2.4 Harvesting, conditioning and testing of seeds.
- 2.5 Practice in seed production methods.

Reference Books:

1. De. L. C. and Bhattacharjee, S. K. 2011. Ornamental crop breeding. Aavishkar Publishers, Distributors, Jaipur.
2. B.P. Pal. The Rose in India.1966.Directorate of Knowledge management in Agriculture, Indian council of Agriculture Research-New Delhi.
3. T.K. Bose, L.P. Yadav, P. Patil, P. Das and V.A. Partha Sarthy. 2003. Commercial flowers. Partha Sankar Basu, Nayaudyog, 206, Bidhan Sarani, Kolkata-700006.