



COURSE SPECIFICATION 5TH SEMESTER:

ELECTIVE COURSE

Course Name : In Vitro Culture
Code : KL 666
Credit : (2-1)

Course Description:

The in vitro culture course discusses the factors that influence the success of in vitro culture, crop morphogenesis in vitro culture, in vitro propagation, organogenesis, embryogenesis, embryo culture, organ culture, haploid culture, protoplast culture, cryopreservation, culture for metabolite production secondary, crop quality improvement techniques, making crops disease free, the role of in vitro culture in crop engineering, acclimatization of cultured crops. At the end of this course, the application of in vitro culture techniques for crop propagation and its problems is studied.

References:

Roberta H. Smith, 2013, Crops Tissue Culture: Techniques and Experiments, Elsevier. Amsterdam
MK Razdan. 2003. Introduction to Crop Tissue Culture. Science Publisher, New Hampshire

Topics:

1. Preparation of tools, materials and sterilization
2. Inoculation and incubation
3. Sub-culture
4. Multiplication
5. Acclimatization
6. Organogenesis
7. Embryogenesis
8. Application of in vitro culture technology