

# **Plant Biotechnology Summer Training**

NTHRYS provides Plant Biotechnology Summer Training for interested candidates at its Hyderabad facility, Telangana. Please refer below for more details including Fee strctures, Eligibility, Protocols and Modules etc.,. Please do call / message / whatsapp for more details on 9014935156 [India - +91]

**Eligibility**: BSc / BTech / MSc / MTech / MPhil / PhD in any Life Sciences studying or completed students

# **Protocols / Techniques Covered**

## Module - I

- 1. Aseptic culture techniques for establishment and maintenance of cultures
- 2. Preparation of stock solutions of MS basal medium and plant growth regulator stocks
- 3. Micropropagation of Tobacco plant by leaf disc culture
- 4. Micropropagation of Rice by indirect organogenesis from embryo

#### **Module - II**

- 5. Preparation of competent cells of E. coli for harvesting plant transformation vector
- 6. Transformation of competent cells of E. coli with plant transformation vectors
- 7. Small scale plasmid preparation from E. coli
- 8. DNA check run by Agarose Electrophoresis
- 9. Restriction digestion of insert plasmid and binary vector
- 10. Electroelution of insert DNA from agarose gel slice

### **Module - III**

- 11. Mobilization of recombinant Ti plasmid from common laboratory host (E. coli) to an Agrobacterium tumefaciens strain
- 12. Agrobacterium tumefaciens-mediated plant transformation
- 13. Direct DNA delivery to plant by Particle Bombardment
- 14. Isolation of plant genomic DNA by modified CTAB method
- 15. Molecular analysis of putative transformed plants by Polymerase Chain Reaction

## **Durations & Modules Distribution**

5 Days >> Module I

10 Days >> Module I

20 Days >> Module I & II

1 Month >> Module I, II & III

45 Days >> Module I, II, III & Minor Project with optional field work

## Plant Biotechnology Summer Training

Fee details in Rs per student					
Fee	5 Days	10 Days	20 days	1 Month	45 Days
Individual	15100	15900	20200	25100	29800
Group 2 - 4	14300	14300	19200	23900	28500
Group 5 - 7	14200	14200	19000	23700	28200
Group 8 - 10	14000	14000	18800	23500	27900