



## Agricultural Biotechnology Summer Training

NTHRYS provides Agricultural Biotechnology Summer Training for interested candidates at its Hyderabad facility, Telangana. Please refer below for more details including Fee structures, 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

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Fee details in Rs per student					
Fee	5 Days	10 Days	20 days	1 Month	45 Days
Individual	18100	19000	24400	30400	36200
Group 2 - 4	17100	17100	23100	28900	34500
Group 5 - 7	16900	16900	22900	28600	34100
Group 8 - 10	16700	16700	22600	28400	33800