

Allahabad Advance Agri Solution (A3S)

(An Advance Step to Empower/ Nurture/ Serve Agriculture)



TRAINING MODULE

Tissue Culture Technology

Plant tissue culture / micropropagation technology has made significant contributions to agriculture by enhancing agriculture production & productivity and controlling losses due to disease through propagation of desirable plants throughout the year and production and distribution of elite disease free plants. In India, plant tissue culture industry started way back in 1985 and has revolutionized the commercial agriculture sector particularly crops like banana, sugarcane, potato, date palm, orchids, bamboo, pomegranate etc. Tissue culture plants have been well accepted by farmers all across the country because of its uniform productivity, freedom from disease, vigorous growth and high yield.

Objective of Training

As a corporate social responsibility A3S is mandated to provide hand-on experience/ training to candidates in the field of plant biotechnology under guidance of experts from industry/ core research background. This training will provide a basic knowledge of the plant tissue culture technology along with its application in various crop improvement avenues. Practical experience of this technology not only fulfills candidates thrust towards knowledge to but also offers them to feel an actual experience of research environment in plant biotechnology within a short span of time. Moreover, A3S emphasize on to inculcate and ignite scientific thinking in candidates at graduate and postgraduate level for the betterment of society and their carrier buildup. Lastly it is worthy to mention that we don't want develop technician we want to generate scientist for the world.

Eligibility: B.Sc. / B. Tech./ M.Sc./ M. Tech in Botany/ Biotechnology/ Applied Sciences/ Plant Science/ Biological Sciences/ Agriculture, faculties of universities and colleges etc.

Duration: 1-2 Month

How to apply: Send us a copy of updated CV and passport size photograph along with brief letter of motivation and registration fee. A copy of nomination letter from HOD of university/ institution/ college (In case of nominated candidate from university/colleges)

Procedure of selection: First-come-first serve basis. Due to the limited number of seats written test/ interview might be conducted for selection of suitable candidate for imparting training.

Training structure:

Module I (1stWeek):

- Introduction to plant tissue culture
- Research methodology
- Instrumentation and sterilization
- Aseptic culture condition/ techniques
- Basics of media designing

Module II (2nd Week):

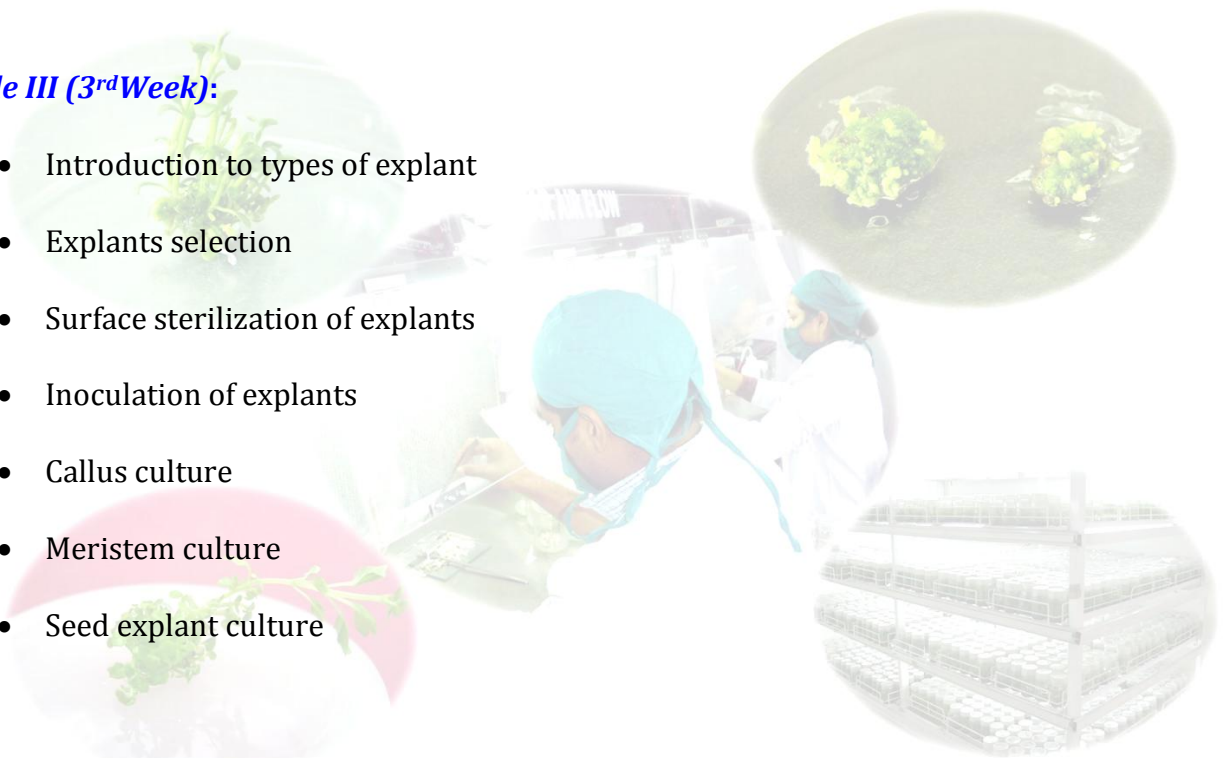
- Basics of organogenesis and somatic embryogenesis
- Amenability of regeneration protocol for transgenic crop development
- Media Stock Solution Preparation
- Media preparation
- Sterilization of glassware, media and chemicals

Module III (3rd Week):

- Introduction to types of explant
- Explants selection
- Surface sterilization of explants
- Inoculation of explants
- Callus culture
- Meristem culture
- Seed explant culture

Module IV (4th Week):

- Anther culture
- Embryo rescue
- Tissue culture screening of various genotypes
- Regeneration of explants
- Somatic embryogenesis
- Rooting of regenerated shoots



- Antibiotic lethality test coupled with regeneration
- Observations on response of media on regeneration
- Feedback on training

Other assistance:

Report preparation (optional)

Assistance in manuscript preparation for publication in peer reviewed journal (optional)

Contact details

Dr. Gaurav Krishna, Director
Allahabad Advance Agri Solution (A3S)
180A/2A, Buksi Kalan, Nag Vasuki Road,
Daragunj, Allahabad-211006,
Uttar Pradesh

Phone: 9718491338/ 9670294371

Email: info@aaagrisolutions.com, md@aaagrisolutions.com

Website: www.aaagrisolutions.com

