

## Tropical Forest Research Institute, Jabalpur organized 320 hours Certificate Course on “Plant Tissue Culture Techniques and its Applications” at Genetics and Tree Improvement Division, Under GSDP-ENVIS

Tropical Forest Research Institute, Jabalpur organized a 320 hours Certificate Course on “Plant Tissue Culture Techniques and its Applications” from 19 December 2018 to 5 February, 2019 under Green Skill Development Programme (GSDP) - ENVIS sponsored by the Ministry of Environment, Forest and Climate Change (MoEF & CC), Government of India, New Delhi. In the inaugural function, Dr. G. Rajeshwar Rao (ARS), Director TFRI welcomed the Chief Guest, Shri Chandramauli Shukla, IAS, Commissioner, Jabalpur Municipal Corporation and CEO, Jabalpur Smart City. The programme was initiated by lighting the lamp by the Chief Guest, Director of TFRI and other dignitaries. Dr. Geeta Joshi, Scientist - F and Head of Extension Division and Training Incharge explained in detail about the GSDP and conveyed its purpose to the house. Dr. Fatima Shirin, Scientist-F and Head of Genetics & Tree Improvement Division and Training Coordinator briefed about the training schedule consisting of lectures, hands on practicals and exposure visits to Commercial Tissue culture Laboratories and farmer's fields constituting various aspects of plant tissue culture and its applications. In his address, Dr. G. R. Rao, Director, TFRI welcomed the participants who reached TFRI from different places of Madhya Pradesh and Uttar Pradesh. He spoke about the importance of plant tissue culture technique and its use in propagation of endangered and rare species. He evoked the trainees to utilize their time at the institute to improve their knowledge on plant tissue culture to the best of their capacity. The Chief Guest, Shri Chandramauli Shukla appreciated the full-fledged course design of the training encompassing various techniques of Plant Tissue Culture. He emphasized on the importance of Plant Tissue Culture as an emerging field with employment opportunities. The course manual was also released during the inaugural function. The participants were graduates from diverse field's viz., microbiology, biotechnology, agricultural, forestry interested in micro propagation of economically importance forest plant species. During the technical sessions of this 320 hours training programme, lectures were undertaken for 70 hours and 250 hours were devoted to hand-on practical training of the participants. Lectures on a wide range of topics viz., introduction and history of plant tissue culture, applications of plant tissue culture, introduction to aseptic techniques, handling and maintenance of equipments, somatic embryogenesis, preparation of plant tissue culture media, sterilization procedure, plant growth regulators, stages of micropropagation, inoculation of explants, shoot multiplication, rooting, hardening and acclimatization of plants, DNA isolation, purification and PCR technique etc were delivered by various Resource persons and experts. Practical demonstrations were provided to the trainees by expert teams. Besides, the trainees were taken on field trips to different places like Plantation of tissue culture raised edible bamboo *Dendrocalamus asper* at Barha, Jabalpur. The field trips also included visit to two Commercial Tissue Culture Laboratories, viz., Reva Flora at Barwani, which is the largest commercial tissue culture laboratory in Madhya Pradesh. Then a medium size commercial Tissue Culture Laboratory Sri Mukund Biotech, Majitha,

Jabalpur was also visited. The training was concluded on 5 February, 2019. During the valedictory session, Dr. G. Rajeshwar Rao, Director of TFRI warmly welcomed the Chief Guest Dr. Anupam Mishra, Director, Agriculture Technology, ICAR-ATARI, Jabalpur. The dias was occupied by Dr. Anupam Mishra, Dr. G. Rajeshwar Rao, Shri C. Behera, Head of Office, Dr. P.B. Meshram, GCR, Dr. Nanita Berry, Training Incharge, GSDP and Dr. Fatima Shirin, Training Coordinator. At the outset of valedictory function, Dr. Fatima Shirin, presented the training report before the august gathering and made a presentation of the activities carried out during the 1.5 month training programme. She informed that participants have been offered job opportunities with the commercial tissue culture laboratories. Dr. Rajeshwar Rao, Director of the Institute praised the Training Coordinator, Training Incharge and all the team members for their efforts and hard work in successful organization of the training programme. He wished the participants well in all their future endeavors. Dr. Anupam Mishra, Chief Guest interacted with the trainees and counseled them about job opportunities in the field of Plant Tissue Culture for their career development. He wholeheartedly appreciated the structure of the training program with maximum time devoted to practicals and congratulated the Director and Training Coordinator for successful completion of the training program. Dr. Anupam Mishra appreciated the efforts of all resource persons to enrich the participants on different aspects of Plant tissue culture techniques and its applications. He distributed the certificates to the participants on the occasion. In the feedback, the participants thanked TFRI for organizing such an excellent and diversified training course on Plant tissue culture techniques and its applications. They especially appreciated the exposure visit to different commercial tissue culture laboratories which provided them clear understanding to start entrepreneur for livelihood. Few of the participants wished to establish their own entrepreneurship based on Plant tissue culture. During the event, Head of Divisions, Scientists, Officers and supporting staff of the Institute were present. The programme was successfully conducted by Naseer Mohammad Scientist-D. Dr. Fatima Shirin, Training Coordinator delivered the Vote of thanks.

# Glimpses of Training programme

## Inaugural Session



## Lectures during the training programme



## Demonstrations and hands on practicals during the training programme





## Field visits to Commercial plant tissue culture laboratories and plantations



## Valedictory function and course lunch



## Media coverage

### औषधीय पौधों, बाँस, कैश फसलों और सजावटी पौधों के उत्पादन के लिए मिलेगी ट्रेनिंग सिटी रिपोर्टर | जबलपुर

प्लांट टिशू कल्चर का उपयोग बड़े पैमाने पर आर्थिक रूप से महत्वपूर्ण पौधों की प्रजातियों के उत्पादन के साथ-साथ लुप्तप्राय पौधों की बचाने के लिए होता है। विभिन्न प्रकार के औषधीय पौधों, बाँस, पेड़ की प्रजातियों, कैश फसलों और सजावटी पौधों के उत्पादन के लिए युवाओं को प्रशिक्षण प्रदान किया जाएगा। कौशल भारत विकास कार्यक्रम के तहत उष्ण कटिबंधीय वन अनुसंधान संस्थान में आयोजित होने जा रहे 6 प्रशिक्षण कार्यक्रमों की, जिनके अंतर्गत पर्यावरण, वानिकी और जलवायु परिवर्तन के क्षेत्र में युवाओं को प्रशिक्षित किया जाएगा। पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय भारत सरकार द्वारा प्रायोजित इन प्रशिक्षण कार्यक्रमों के अंतर्गत 'प्लांट टिशू कल्चर टेक्नोलॉजीज और उसके अनुप्रयोगों' पर पहला प्रशिक्षण 19 दिसंबर से शुरू होगा, जिसका उद्घाटन ननि आयुक्त चंद्रमौलि शुक्ला सुबह 10 बजे करेंगे। पी-5

## टीएफआरआइ में प्रशिक्षण कल

जबलपुर @ पत्रिका। उष्ण कटिबंधीय वन अनुसंधान संस्थान में कौशल विकास प्रशिक्षण कार्यक्रम के अंतर्गत 19 दिसम्बर को सुबह 10 बजे से प्रशिक्षण कार्यक्रम शुरू होगा। डायरेक्टर डॉ. जी. राजेश्वर राव ने बताया कि युवाओं को पर्यावरण, वानिकी एवं जलवायु परिवर्तन पर तकनीकी जानकारियां दी जाएंगी। पहले दिन प्लांट टिशू कल्चर टेक्नोलॉजी एवं उसके प्रयोगों पर आधारित प्रशिक्षण दिया जाएगा। जबकि, विभिन्न तिथियों में अकाष्ठ वन एवं औषधीय पौधे, वन एंटेमोलॉजी एवं कीट नियंत्रण, लघु बॉटनिकल गार्डन, बांस उत्पादन एवं प्रबंधन पर प्रशिक्षण दिया जाएगा।



# प्रशिक्षुओं को टिशू कल्चर तकनीक का मिला ज्ञान



## पत्रिका PLUS रिपोर्टर

जबलपुर ♦ उष्णकटिबंधीय वन अनुसंधान संस्थान में पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय द्वारा हरित कौशल विकास कार्यक्रम का आयोजन हुआ। प्लांट टिशू कल्चर तकनीक और उसके अनुप्रयोग पर प्रशिक्षण दिया गया। समापन कार्यक्रम में निदेशक डॉ. जी राजेश्वर राव निदेशक ने

कार्यक्रम की जानकारी दी। आयोजन में कृषि प्रौद्योगिकी अटारी के निदेशक डॉ. अनूप मिश्रा शामिल हुए।

डॉ. फतिमा शरीन ने प्रशिक्षण कार्यक्रम की झलकियां प्रस्तुत की, जिसमें 320 घंटे के इस प्रशिक्षण के बारे बताया। 70 घंटे टिशू कल्चर तकनीक के सिद्धांत और 250 घंटे टिशू कल्चर तकनीक पर विभिन्न प्रैक्टिकल शामिल थे। 41

दिनों तक चलने वाले इस प्रशिक्षण में विभिन्न शहरों से लगभग 17 छात्रों ने भाग लिया। उन्होंने इस प्रशिक्षण में भाग लेने के कारण रेवा पल्लोरा कल्चर एवं मास्टर प्रशिक्षु बनने के नौकरी के अवसरों की भी सराहना की।

आयोजन में डॉ. नसीर मोहम्मद, सी. बेहरा, वैज्ञानिक डॉ. पीबी मेश्राम, डॉ. ननिता बेरी, डॉ. अरुण कुमार मौजूद रहे।

