



Conference/ Workshop Report

National Conference on Agrotechnology and Profitable marketing of Tropical Medicinal and Aromatic Plants & Workshop on Stake holders Meet on Medicinal and Aromatic Plants Production with Market Linkage

February 16-18, 2017

Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu, India

The National Conference on Agrotechnology and Profitable marketing of Tropical Medicinal and Aromatic Plants was held on February 16-17, 2017 at Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu, India. The deliberations of the two days conference were planned under five technical sessions, including inaugural function, a key note lecture, and valedictory function. Each technical session included lead, oral and poster presentations.

The conference was inaugurated by the Dr. K. Ramasamy, Vice Chancellor, TNAU who highlighted the importance of medicinal plant research in India and also discussed the need to establish linkage between institutes for conducting need based research in medicinal plants. Dr. G.P. Dubey, Emeritus Professor, Banaras Hindu University, Varanasi and the Guest of honor highlighted the progress made in IPR on herbal drugs developed for diabetes in India and also highlighted on the need for producing raw material of *Salacia* for the herbal formulation. Dr. Lalit Narayan of NMPB, New Delhi called for strengthening the medicinal plant research in India and requested awareness among farmers in respective emerging area for increasing cultivation of the medicinal plants and also for a secured market for the produce. Padamshri Dr. P.R. Krishnakumar, Managing Director, Arya Vaidya Pharmacy elaborated on growth of AYUSH sector in India and its reach at global level. He stated that consistent availability quality raw material of herbal plants is the foremost challenge in marketing herbal formulations and called upon the scientists to ensure the supply chain of raw material is met with in future.

A total number of 16 lead speakers, 22 oral speakers and 32 posters were presented during the two days of conference. The major recommendations of 2 days conference on various technical sessions are as follows:

Genetic resources, diversity and ethnobotany

1. The germplasm wealth of medicinal and aromatic plants in India needs to be adequately shared by the institutions for evolving selection/varieties that will benefit the farmers and the AYUSH industry.
2. Patentable molecules, bioactive compounds, improved processes, novel methods/ techniques in extraction, formulations were highlighted. The intellectual property of the elite germplasm / breeding line of material are to be protected through appropriate IP protection mechanism. The registration of valuable genetic stock are to be registered with ICAR – NBPGR, New Delhi.

Conservation

1. The need for eco habitat mapping in India for RET species like *Salacia* was discussed.
2. Conservation and domestication of such RET species is to be given utmost priority and efforts to be strengthened for collection of land races and wild ecotypes. These elite genetic material needs to be propagated and distributed to farmers for cultivation on demand basis.

Production technology and Post harvest management

1. It was suggested to compile the wealth of information available in the country on medicinal and aromatic crops on improved varieties developed, technologies evolved for increasing the productivity, post harvest and processing so that the farmers are benefitted. Remunerative medicinal plants with market linkage for each agroclimatic zones of India need to be identified and promoted.
2. Vetiver, the aromatic crop suitable for dry region was proposed for further research to make it as a viable commercial crop mainly for distillation of essential oil and export.

3. In *Gloriosa superba*, the mini tuber techniques evolved by TNAU may be scaled up to meet the tuber demand in the country.

Biotechnology, phytochemicals and extraction

1. Biotechnological approaches for improved extraction of valuable compounds that occur in sub minimal doses in plants and are ascribed with immense medicinal properties are to be explored without damaging the natural habitat for which basic research has to be strengthened.
2. In rare species like *Salacia*, the demand for planting material is high and there is need to evolve protocol for tissue culture using the explants of improved clones.

Biotic & Abiotic stress management

1. Biological control of pest and disease in medicinal and aromatic crops using predators and biocontrol agents was highlighted. The potentiality of *Acorus calamus* for anti-insect activities was discussed and the possibility of using the extract against pest in food crops was indicated. The detection and diagnosis of phytoplasma disease in elephant foot yam was explored.
2. The insect vector relationship of gloriosa necrosis was established for the first time and the possibility of management technology was proposed for gloriosa thrips serving as vector for gloriosa necrosis.

Likewise, the etiology of root rot disease of *Gloriosa superba* was explored and the possibility of ecofriendly management of root rot disease using the antagonist, *Bacillus subtilis* was discussed.

Workshop on Stake Holders Meet

On 18.2.2017, a Stake Holders Meet was organised to establish linkage between the farmers and the companies. About 150 participants from Tamil Nadu, Kerala and Pondichery including progressive farmers of glory lily, Coleus, senna, rosemary, aromatic crops like vetiver, palmarosa, representative from 12 leading companies, bank, State Department of Horticulture, NGOs, farmers federation, FPOs and scientists participated. The recommendations of the meet are as follows.

1. Progressive farmers expressed the need for availability of quality planting material/seeds of improved varieties like tulsi, ashwagandha, kalmegh, senna, periwinkle and *Gloriosa* for which the DMAPR/ Agricultural Universities/CSIR institutions should give priority for distribution of the seed/planting material.
2. Representatives of phytochemical companies conveyed their willingness to tie-up with farmers group for cultivation of medicinal and aromatic plants ashwagandha, adhatoda, *Hemidesmus*, shatavri, rosemary, palmarosa, vetiver, tulsi and insisted that farmers form into clusters to avail subsidies and technological support.

Glimpses of National Conference Agrotechnology and Profitable Marketing of Tropical Medicinal and Aromatic Plants (February 16-17, 2017)



**Glimpses of National Workshop and Stake Holders Meet
Medicinal and Aromatic Plants Production with Market Linkage
(February 18, 2017)**

