



Science & Engineering Research Board
Department of Science & Technology
Government of India



सत्यमेव जयते

Department of Biotechnology,
Ministry of Science and Technology,
Government of India



The Energy and Resources Institute

WORKSHOP ON Role of Mycorrhiza in Sustainable Agriculture and Forestry

Wednesday, 22 March 2017
TERI, Darbari Seth Block,
India Habitat Centre,
Lodhi Road,
New Delhi



Background

Mycorrhiza, the plant root and fungus association has benefited the crop plants and forest trees immensely as natural partners of terrestrial ecosystem. Mycorrhiza played a key role in mobilizing phosphorus efficiently and increased the absorptive area of root, thus improved the plant growth and offered many other benefits. Ectomycorrhiza (EM) seems to have greater role in forestry while Arbuscular mycorrhiza fungus (AMF) in crop production. Though some success has been achieved in producing ectomycorrhizal inoculum commercially, such commercialization has become difficult with reference to AMF. India, which has greater diversity of forest trees, crop plants and other plants, the mycorrhizal research did not reach the expected peak. Still mycorrhiza as biofertilizer has to reach the farmers and foresters in near future.

Against this background, the Mycorrhiza Information centre at The Energy and Resources Institute (TERI), is organizing a brainstorming session on the topic "Role of Mycorrhiza in Sustainable Agriculture and Forestry".

Objective

The objective is to familiarize participants with the mycorrhiza fungi and their application including technology; procedures involved in the production of mycorrhizal inoculum and their utility as biofertilizer; application of mycorrhizal inoculum in agriculture and forestry.

Key focus areas

- Biology, commercialization and technology transfer of mycorrhizal fungi
- Mycorrhizal intervention to boost agriculture production
- Sustainable agriculture and forestry

Participants

- Researchers and budding scientists who are engaged in the field of mycorrhiza research
- Agriculturists (who are involved in organic farming)
- Agricultural Technology Information Centre, ICAR
- Students and Faculty from State Agricultural Universities
- Farmer-Entrepreneurs and Extension workers
- Development agencies (Non-governmental organizations, community-based organizations)
- Other stakeholders

About TERI

TERI is an independent and not-for-profit research institute, established in 1974, which began its activities as a documentation and information centre. By 1982 research activities were initiated in the fields of energy, environment, biotechnology, forestry, and in the whole range of sustainable development issues. At present, the TERI team consists of more than 500 dedicated professionals drawn from a wide range of disciplines. While its headquarters is located in New Delhi, TERI has regional centres in Bangalore, Panaji, Guwahati, and Kolkata, a presence in Japan and Malaysia, and affiliate institutes in USA and the UK, namely TERI North America in Washington, DC and TERI Europe in London

About Mycorrhiza Network

The Mycorrhiza Network was set up at TERI on 1st April 1988 with seed support from IDRC and was subsequently supported by the Department of Biotechnology, Government of India (for the period 1993-1998). The general objective of the Network is to strengthen research, encourage cooperation, promote exchange of information and germplasm, and facilitate transfer of technology to the field through the establishment of a mycorrhiza research network.

Within the Network, a Mycorrhiza Information Centre (MIC) has been set up with support from the Department of Biotechnology, Government of India, with the following objectives:

- Function as a specialized centre for collection, compilation and dissemination of information and resources on Mycorrhizal research and developments
- Promote research and communication among mycorrhiza scientists, educators, and students, besides exposing the researchers to frontline research, innovation and new methodologies

The MIC publishes a quarterly newsletter in order to promote communication among mycorrhiza scientists in India and other countries; and caters to the needs of the mycorrhiza researchers.



PROGRAMME

09:00	Registration
10:00	Opening Remarks and Welcome Mr Prabir Sengupta, Distinguished Fellow & Director, Knowledge Management Division, TERI
10:10	Keynote Address Dr Alok Adholeya*, Director - Research and Technology Development Mycorrhizal Applications, USA
10:20	Special Address Prof. C Manoharachary, Emeritus Scientist, CSIR
10:25	Special Address Dr Reena Singh, Fellow, Centre for Mycorrhizal Research, Sustainable Agriculture, TERI
10:30	Inaugural Address Dr T Madhan Mohan, Adviser, Department of Biotechnology, Government of India
10:40	Vote of Thanks Mr T P Sankar, Fellow Knowledge Managements Division, TERI
10:45	Coffee break
11:00	TECHNICAL SESSION I
	Chair: Dr Alok Adholeya*, Director - Research and Technology Development Mycorrhizal Applications, USA
11:15	Prof. C Manoharachary, Emeritus Scientist, CSIR Commercialization of AM Fungi and Biofertilizer
11:45	Mycorrhiza in Sustainable Agriculture, Horticulture and Forestry Prof. D.J. Bagyaraj, INSA Hon. Scientist; Chairman, Centre for Natural Biological Resources and Community Development, Bangalore
12:15	AM Fungal Inoculum Production, Commercialization, and recent trends Dr Reena Singh, Fellow, Centre for Mycorrhizal Research, Sustainable Agriculture, TERI
12:45	Role of Ectomycorrhizae in Forestry Development Prof. N. Raaman, Director, Centre for Advanced Studies in Botany, University of Madras
13:15	LUNCH
	TECHNICAL SESSION I (Contd.)
14:00	Scope and Limitations of AM Bio-fertilizers Prof. B.F. Rodrigues, Department of Botany, University of Goa
14:30	Arbuscular Mycorrhiza in cultivation of Medicinal Plants Prof. Rupam Kapoor, Department of Botany, University of Delhi
	Interactive Session
15:00	TECHNICAL SESSION II
	Mycorrhiza – Future Vision – Interactive session with students and faculty Prof. C Manoharachary and Dr Reena Singh
16:00	TEA
	END OF WORKSHOP