

National Training

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Current approaches in fungal biology: Diversity analysis, identification and taxonomy of Deuteromycetes fungi

28th Nov. -7th Dec. 2018



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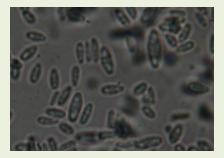
Current approaches in fungal biology: Diversity analysis, identification and taxonomy of Deuteromycetes fungi

Introduction

Directly or indirectly fungi play important role in every aspect of human life. Fungi belonging to Deuteromycetes particularly Alternaria, Rhizoctonia, Fusarium and Helminthosporium are economically very important. Many important diseases like blights, leaf spots, blast, anthracnose and wilt are caused by Deuteromycetes. Fungi have been studied in detail for a variety of basic and applied researches, but less than 1% of them have received serious attention in different sectors such as agriculture, food, health and industry. Although many of the gold standard classical methods to study fungal taxonomy and diversity are available but along with that many of the modern molecular biology tools based on PCR and DNA sequencing are being used. The rapid advancement in the area of fungal biology is expecting continuous up-gradation in the knowledge as well as skill sets to handle advance fungal taxonomy techniques. The proposed national training programme has been designed with an aim to deliver vital practical working knowledge on various classical as well as modern advancements in the area of diversity analysis, identification and taxonomy of Deuteromycetes fungi e.g. Alternaria, Rhizoctonia, Fusarium and Helminthosporium . The training programme will be equally beneficial for Ph.D. students, scientists and faculties working in this area.









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Programme Director
Anil K. Saxena, Director
Course Coordinator
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Course Co-coordinators
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Objectives

- To acquaint the trainees with the conventional methods of identification of Deuteromycetes fungi *i.e.* Alternaria, Rhizoctonia, Fusarium and Helminthosporium
- To provide fundamental expert knowledge in diversity analysis and taxonomy of fungi.
- To enable participants to develop a portfolio of experimental skills and practical techniques

Methodology and content

Training would focuses mainly on important deuteromycetes fungi like *Alternaria*, *Rhizoctonia*, *Fusarium* and *Helminthosporium*. Hands-on training will be given on morphological, biochemical and physiological characterization of fungi. Practical and theory classes on different techniques i.e. PCR, fingerprinting and sequencing will be conducted to study identification and taxonomy of fungi. Hands-on training will also be given on the modern tools to study the fungal diversity and evolution. Use of computational tools and techniques for the study of diversity will be discussed.

A total of 16 sessions will be held consisting of lectures and hands on practical sessions which will personally be monitored and handled by the resource experts from Bureau and other reputed institutes.



ICAR-NBAIM

About NBAIM

Microorganisms are omnipresent and play an important role in ecosystem. National Bureau of Agriculturally Important Microorganisms (NBAIM) is one of the premier institutions of Indian Council of Agricultural Research (ICAR) for microbiological research in India. The Bureau is aimed to work for the collection, conservation and preservation of agriculturally important microorganisms. The Bureau since its inception is dedicated to decipher and utilize microbial diversity of agricultural importance existing across the country. The Bureau also works in molecular microbiology, genomics, meta-omics and bioinformatics. Human Resource Development (HRD) is also an important mandatory activity of the Bureau. NBAIM successfully organized several national and international training programmes on different areas of microbial identification, characterization, molecular taxonomy, bio-control, plantmicrobe interactions and the applications of bio-informatics. Microbial research at NBAIM basically focuses in the areas of microbial diversity analysis from extreme habitats, biological control of plant diseases, microbe mediated plant growth promotion, plant-microbe interaction, quality microbial management system with special emphasis on bio-systematics, DNA fingerprinting, microbial genomics and proteomics, meta-bolomics, stress tolerance in microbes and bio-informatics.

Eligible participants

Research scholars, Post docs, Students, Technical officers, Scientists/Assistant Professors/Lecturers or above, from any university/institute/organization working in the area of biological sciences.

Fees for the training

Rs. 2500.00 per trainee for students, research scholars and Rs.5000.00 for Technical officers, Scientists, Lecturers, Assistant Professors or above from Universities or Govt. Institutions. Rs.10000.00 per trainee for researchers from private or non-government organizations.

How to apply?

Participants may write to the Director, ICAR-NBAIM in the given application forms along with their brief resume latest by November, 2nd 2018. The selected candidates will be notified on 3rd November, 2018 by email.

Applications should sent to

- 1. Director ICAR-NBAIM, email id: nbaimicar@gmail.com
- 2. Dr Sanjay Kumar Goswami, email id: sanjaygoswami65@gmail.com