

# Training Course on Classical and Modern

# Methods in

# Plant Taxonomy & Biosystematics

CSIR-NBRI, Lucknow-226001 December 14-21, 2018

## **Background**

Taxonomy is the science of describing, naming and classifying organisms, and it is therefore, an important tool in understanding the biological diversity. Unfortunately, the ongoing efforts on inventory and documentation of biological resources have been constrained by the scarcity of taxonomic expertise in many groups of organisms. Without taxonomists it is impossible to describe and name new species, survey biological diversity and identify biodiversity hotspots or other areas of special conservation concern.

There are very few active centers in India, where researchers are being trained in taxonomy. It is observed that taxonomic researches are not attracting reasonable funding to carry forward the Linnaean legacy. Therefore, there is a declining trend in taxonomic research as well as availability of quality taxonomists world-wide. This concern has been expressed globally by eminent biologists. Considering the increasing demand of trained taxonomists for biodiversity inventory, conservation, monitoring and management, it is important that taxonomy-based institutions in India take stock of the situation, and find out appropriate solutions by organizing training courses on various aspects of traditional and contemporary taxonomy. In this context, CSIR-NBRI, Lucknow is organizing a 8 day training course on "Classical and in Plant Methods Taxonomy Modern Biosystematics".

#### **About CSIR-NBRI**

CSIR-NBRI is a premier plant-based multidisciplinary research institute of India. The institute is well known for its high quality research that ranges from classical taxonomy to cutting edge areas of modern biology. CSIR-NBRI has an excellent team of researchers and adequate infrastructure for carrying out taxonomic research on different plant groups such as algae, lichen, bryophytes, pteridophytes, gymnosperms and angiosperms. The herbarium (LWG) of the institute houses about 3,00,000 specimens and is recognized as one of the "National Repositories" for Indian flora by National Biodiversity Authority (NBA) of India. Spread over 25 hectare area, the Botanical Garden of the Institute is a "National Facility" with three main functions viz.. conservation, education and bioaesthetics. The garden has rich collection of germplasms of gladiolii, bougainvillea, canna, roses, lotus, plumeria and cycads. Bonsai, fern, palm, moss, orchid, cycad, cactus and succulent houses are other attractions of the botanical garden. The library of CSIR-NBRI has a rich collection of books and journals related to plant sciences. The library subscribes 210 print and 40 online journals. The expert manpower, herbarium and library are expected to provide a splendid atmosphere to the participants of the training course.

# Eligibility

The training course has been designed to attract young and enthusiastic research scholars, scientists and faculty members working in various research institutions, colleges and universities. Fresh M.Sc. students having deep interest to pursue research in Plant Systematics will be encouraged.

#### **Registration Fee**

Rs 8000/- (Rupees eight thousand only) including GST will be charged from each candidate towards the course material and local hospitality viz., fooding and lodging. No TA/DA will be provided to the participants. Selected candidates will have to make their own arrangements for *to and fro* travel. Registration charges are to be paid through Demand Draft of a Nationalized Bank drawn in favor of "Director, CSIR-NBRI" payable at Lucknow.

## How to Apply?

Completed application forms duly forwarded and recommended by Research Guide/Supervisor/ Head of the Department should reach the "Course Coordinator" on or before October 31, 2018.

#### Structure of the training course

- Theory and practical classes on systematics of Algae, Lichens, Bryophytes, Pteridophytes, Gymnosperms and Angiosperms.
- Hands on training on herbarium and DNA fingerprinting/ DNA marker techniques.
- Lectures on various aspects of Plant Systematics by eminent experts of different plant groups.

















# Topics to be covered in the training course

- 1. Herbarium Techniques and Curation
- 2. International Code of Nomenclature for algae, fungi and plants
- 3. Botanical keys, plant descriptors, floras, revisions and monographs
- 4. Species concepts
- 5. Phytogeography and Plant Evolution
- 6. Plant Diversity Conservation
- 7. Molecular Systematics and Phylogeny
- 8. Ethnobotany and Bioprospection
- 9. Horticultural Taxonomy
- 10. Bioinformatics

#### **Important Date**

October 31, 2018: Last date for receiving the application form along with registration fee.

#### Excursion

Participants will be exposed to "hands on training" on collection of plants representing both higher and lower plant groups, knowledge to gather field data, processing and preservation of collected materials.

# **Application Form**

Name of the candidate Dr./Mr./Ms
Designation:
Address:
Email:
Mobile No:
Telephone No:Fax:
Are you registered for Ph.D.? If, Yes name of the University:
Year of Registration:
Current research activity in plant systematics:
Why do you want to attend the training course?
Recommendation of the Research Guide/ Supervisor/ HOD:
Signature of the Research Guide/Supervisor/ HOD
Signature of the Candidate

\*Application form can be downloaded from CSIR-NBRI's website <a href="http://www.nbri.res.in">http://www.nbri.res.in</a>

#### Patron

Prof. S. K. Barik Director, CSIR-NBRI

#### Convener

Dr. T.S. Rana Senior Principal Scientist

#### Course Coordinator

Dr. Priyanka Agnihotri Scientist

Plant Diversity, Systematics & Herbarium Division CSIR-National Botanical Research Institute Rana Pratap Marg, Lucknow-226001

Phone (O): 0522-2297827, (Mob.) 08004923566

Fax: 0522-2205836

Email: p.agnihotri@nbri.res.in priyagni\_2006@yahoo.co.in

Training Course on

"Classical and Modern Methods in Plant
Taxonomy & Biosystematics"

(December 14-21, 2018)

#### Venue

CSIR-National Botanical Research Institute Rana Pratap Marg, Lucknow-226001

