



NATIONAL AGRICULTURAL BIOINFORMATICS GRID

(Insect Domain)



NATIONAL BUREAU OF AGRICULTURALLY IMPORTANT INSECTS, BENGALURU

Organizing
Subject matter training

on

Bioinformatics: *In vitro* to *In silico* approaches in Entomology

18-30 November-2013

Under



OBJECTIVES OF THE TRAINING

- ✓ To provide insights to scientists in analyzing & organizing data related to biological complexity.
- ✓ To provide understanding of bioinformatics tools and software employed for the data analysis.
- ✓ To strengthen strategies for integrating bioinformatics tools for data mining.

ABOUT NATIONAL AGRICULTURAL BIOINFORMATICS GRID (NABG) PROJECT

Establishment of National Agricultural Bioinformatics Grid(NABG) funded by NAIP, ICAR was formally launched on 18th Sept., 2010 by Hon'ble Director General (ICAR) and Secretary (DARE) Dr. S. Ayyappan.

OBJECTIVES OF NABG

- Development of agricultural bioinformatics grid for the country.
- Creation of local databases and Bioinformatics Data Warehouse (BinDW) for genomic resources across species.
- Human resource development in agricultural bioinformatics.
- Create and promote inter-disciplinary research groups with focus on agricultural bioinformatics.

ABOUT NBAII

National Bureau of Agriculturally Important Insects(NBAII), Bengaluru, was established in 1993, is involved in the collection, cataloguing and conservation of insects and related organisms of agriculturally important and carrying active research on all aspects of systematics, molecular entomology and insect ecology. This Bureau has carried out basic research on biosystematics of important groups of insect bioagents such as trichogrammatids, scelionids, braconids, chrysopids, coccinellids, anthocorids, tachinids also various pests including aphids, fruitflies and mealybugs. The reference collection maintained at NBAII has been catalogued in the form of a technical bulletin and also available in a retrievable, electronic format.

Apart from research, NBAII is also training scientists, teachers and other researchers in Biosystematics, Molecular Entomology, Bioinformatics and Biocontrol. National Biodiversity Authority (NBA) recognized NBAII as one of the Designated National Repositories (DNR) for various kinds of biological specimens, both dead and live based on the significant achievement of this bureau.

NBAII MISSION FOR NABG

To act as a nodal agency for collection, characterization, documentation, conservation, exchange and utilization of agriculturally important insect resources (including mites and spiders) for sustainable agriculture.

TOPICS TO BE COVERED

- Molecular techniques
- DNA Barcoding and Submission to Barcode database
- Basics in Bioinformatics
- Computational Biology
- Genomics: Bioinformatics approach
- Proteomics: Bioinformatics approach
- Tools and techniques in Phylogeny
- Gene Prediction: *In silico* approach
- Molecular Docking
- IPR
- Introduction to gene Expression using Microarray Data analysis
- Systems Biology and Interactome Analysis
- Database development and Front end user tool development
- One day study trip

WHO CAN ATTEND

Scientists/faculty members from NARS system and departments working in biological sciences from various agricultural universities/institutes will be given priorities. Research Associates(RA) and Senior Research Fellows(SRF) may also apply for the training but their selection will be subjected to the availability of seats.

Note for RA/SRF's: **No** TA/DA and stay facility (institute hostel) will be provided

INSTRUCTIONS TO APPLICANT

- ✓ The complete application should be sent via post to any of the following address

Dr. T. VENKATESAN

Course Director,

Division of Molecular Entomology,
National Bureau of Agriculturally Important Insects(NBAII)
P.Bag No:2491, H.A. Farm Post
Bellary Road, Bangalore - 560 024.
Karnataka.

Dr. S. K. JALALI

Course Coordinator,

Division of Molecular Entomology,
National Bureau of Agriculturally Important Insects(NBAII)
P.Bag No:2491, H.A. Farm Post
Bellary Road, Bangalore - 560 024.
Karnataka.

or email to Dr. S.K. Jalali,

Principal Scientist, Division of Molecular Entomology at

jalalisk1910@yahoo.co.in (or) Dr. T. Venkatesan, Principal Scientist, Division of Molecular Entomology at venkatesan.nbaii@gmail.com

- ✓ The application should be submitted through proper channel.
- ✓ For Workshop details and to download application visit: **www.nbaii.res.in**
- ✓ Selected participants are eligible for TA (as per ICAR norms). Train fare is limited to AC II tier of Railways on submission of original tickets. Selected candidates will be informed via email.
- ✓ Food and accommodation will be provided by workshop organizers.

Total Number of participants : 15 only

Last date for receiving applications : 18th October, 2013

**NAIP-NABG Subject matter Training
on**

Bioinformatics- *In vitro* to *In silico* approaches in Entomology

Application Form

(Fields marked '' are mandatory)*

Name of the Applicant* : -----

Designation* : -----

Research Institute* : -----

Official Address : -----

Telephone No. : -----

Mobile* : -----

E-mail Address* : -----

Bioinformatics skill : -----

Accommodation required* : Yes/No -----

Signature of the applicant