



NATIONAL AGRICULTURAL BIOINFORMATICS GRID

(Insect Domain)



Subject Training on “Bioinformatics: Methods and Approaches for Insect research” (19th November – 1st December, 2012)

Under



Objectives of the training

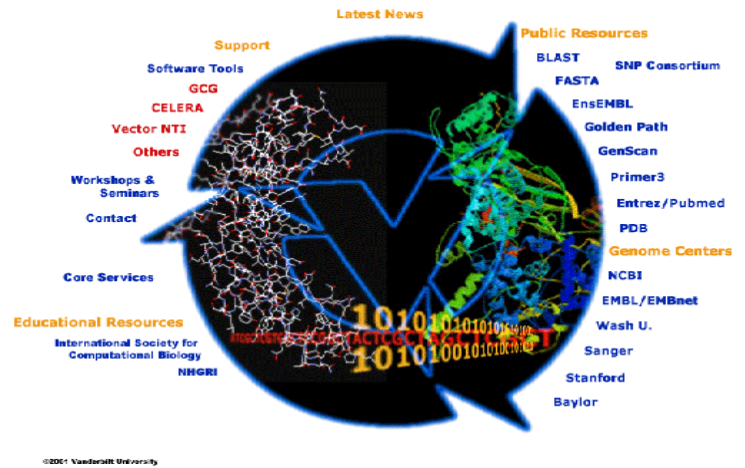
- To provide insights to scientists in analyzing & organizing data related to biological complexity
- To provide understanding of bioinformatics tools and software employed for the data analysis
- To strengthen strategies for integrating bioinformatics tools for data mining

About *National Agricultural Bioinformatics Grid (NABG)* project

Formally launched on 18th Sept., 2010 by Hon'ble Director General (ICAR) and Secretary (DARE) Dr. S. Ayyappan, the Establishment of “National Agricultural Bioinformatics Grid (NABG)” in ICAR is a National project funded by NAIP. The project entails the creation and advancement of databases, algorithms, computational and statistical techniques and theory to solve formal and practical problems arising from the management and analysis of biological data. The field of Bioinformatics focuses on developing and applying computationally intensive techniques (e.g., pattern recognition, data mining, machine learning algorithms and visualization) which gives the opportunity to quickly and efficiently study the heap of genomic information, chemical structure and other biological data. Bioinformatics has already started showing its profound impact on agricultural research and development. NABG will help Indian scientists to solve problems and mysteries in uncovering wealth of hidden biological information in different subject domains.

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 NABG

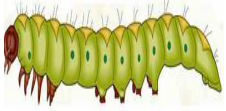
National Bureau of Agriculturally Important Insects (NBAII), Bangalore, was established in 1993, is the nodal agency in the country that organizes biological control research at the national level with 16 centers spread across the country for carrying out field studies on biosuppression of pests of crops and weeds. The Directorate at Bangalore has carried out basic research on the biosystematics of important groups of insect bioagents such as trichogrammatids, chrysopids, coccinellids, and tachinids. The reference collection maintained at NBAII has been catalogued in the form of a technical bulletin and also available in a retrievable, electronic format. The holdings contain 3441 species under 216 families and 16 orders and a small collection of insect type material is also being maintained. Multimedia-aided and traditional identification tools have been generated for several insect parasitoids and predators. The National Biodiversity Authority (NBA) recognized NBAII as one of the Designated National Repositories (DNR) for various kinds of biological specimens, both dead and live.

Our Mission

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.

Themes of the Subject training on “Application of Computational Biology for studying Abiotic Stresses in Insects”

1. Genome analysis and Gene mapping.
2. Phylogeny studies, Insect systematics, Molecular systematics, etc.
3. Development of Biological databases.
4. Computational methods for Pathways and Systems Biology.
5. RNA secondary structure prediction.
6. Computational Biology methods and Protein structure prediction.
7. Docking studies.
8. DNA bar coding and Molecular markers of insects.
9. Insecticide resistance and management.



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 Applicant

Instructions to the Applicant:

1. *The complete application should be emailed to Dr. S.K. Jalali, Principal Scientist, Molecular Entomology Laboratory at jalalisk1910@yahoo.co.in or to Dr. M. Pratheepa, Scientist (SS) at mpratheepa@gmail.com*
2. *The application should be submitted through proper channel.*
3. *Workshop details are also available online at <http://www.nbaii.res.in/>*
4. *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.*
5. *Food and accommodation will be provided by workshop organizers.*

Total Number of participants: 25 only

Last date for receiving applications: 15th October, 2012

For further details, please contact

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Phone: 080-2351 1982 Extn. 337/080-3531627

Eligibility

Personnel working not below the rank of Scientists/Assistant Professors of middle level from NARS system, ICAR, SAUs and conventional Universities, in area of biological sciences and bioinformatics.

