

# Invasive Alien Insects : Threat to Agriculture, Horticulture, and Forest Ecosystems, 23 & 24, December 2009

This important National Conference is aimed at promoting research and development for managing invasive alien insects.

## Objectives

- \* To bring together entomologists working on invasive insects affecting agriculture, horticulture and forest ecosystem to share their experiences.
- \* To assess the current state of research and development on invasive insects.
- \* To review bio-control and bio-rational strategies to manage invasive insects to reduce environmental pollution.
- \* To develop web based Indian invasive insects database and establish Indian Invasive Insect Specialist Group.
- \* To develop and recommend policy initiatives for management of invasive insects.
- \* To stimulate public - Private research and development collaboration.
- \* To encourage young researchers to pursue relevant research and development themes.

## Global Concern for Invasive Alien Insect Threat

Invasive alien species (IAS) occur in all taxonomic groups and can affect all types of ecosystems. While a small percentage of organisms transported to new environments become invasive, the negative impacts can be extensive and over time these additions become substantial. Native ecosystems that have undergone human induced disturbance are often more prone to alien invasions because there is less competition from native species. They also threaten human health, displace native species or degrade environmental aesthetics. Total annual costs, including losses to crops, pastures and forests, as well as environmental damages and control costs, have been conservatively estimated to be in the hundreds of billions of dollars.

With increases in international trade and travel, India like any other country, is becoming increasingly exposed to the vagaries of infiltration by potentially dangerous insect pests threatening plants that provide food, fibre, timber and other means of economic and ecological prosperity. Many exotic insect pests have been regularly invading several crops resulting in serious loss to Indian agriculture. Discovery of new exotic pests may lead to trade embargo. While total eradication is seldom achieved, satisfactory management of alien species is possible. While time and money are limited, the number of introduced species continue to increase. The study and control of invaders cannot be sustained on a case-by-case basis. These questions need to be attended by taking a fresh look at the invasive insects.

**Scope of the National Conference:** In this context, Department of Agricultural Entomology, University of Agricultural Sciences, Dharwad is proposing to convene a National Conference during December, 2009 to provide a platform for experts and other stake holders to focus on Invasive Alien Insect threats in Agriculture, Horticulture and Forest ecosystems. The major focus will be to assess current status of research and development and prioritize themes for future research thrusts.

## Major Thematic Areas for Submission of Papers

- \* Diversity, Ecology, Biogeography and characteristics of invasive insects and mites.

- \* Molecular techniques for diagnosis and identification of invasive insects.
- \* Invasive insects and plant quarantine.
- \* Alien insect invasions and environmental interactions (competitive exclusion, niche displacement, hybridization, predation, and extinction, climate change and insect invasions).
- \* Hinderance to sustainable use of biodiversity due to insect invasions.
- \* Pest and environmental risk assessment.
- \* Biological control of invasive alien insects and weeds.
- \* Bio-rational and eco-friendly approaches for invasive alien insect management.

## About the Department

The Department of Agricultural Entomology, College of Agriculture, Dharwad came into existence during 1947. The PG programmes leading to M.Sc (Agri) & Ph.D began in 1973 & 1977, respectively. The Department has completed several adhoc projects funded by ICAR, DBT, DST, GOI, GOK etc. with an outlay of more than 100 crores. The Department has attracted several PG students with JRF & SRF from all over the country. During the current year the department has been sanctioned with FIST programme to develop the infrastructural facilities by DST, New Delhi. The Department has done pioneering work on many alien insects viz., subabul psyllid, serpentine leafminer, spiralling whitefly, coconut perianth mite, sugarcane woolly aphid & eucalyptus gall wasp. The Department is recognised as National Centre for Biogeography and Molecular studies and National Repository for honey bees.

**Papers and Awards:** For each session there will be 1-2 lead papers presented by invited experts. Submitted papers will be assigned oral/poster presentations, as per the importance/content. Awards will be given to the best papers across the sessions, besides awards for young scientists (<35 yrs.) and student research.

**Abstract, Paper and Paper Format:** Extended abstract of the paper not exceeding two pages with Arial 11 font including Title, Abstract, Tables or Figures (a maximum of two) and References may be submitted as email attachments to reach the Organizing Secretary by 1st October, 2009. Format of the abstract should be as per Indian Journal of Entomology. Hard copies (two) of the extended abstract and a CD/email attachment should reach by 1st November, 2009. Abstracts not arriving within the time limit may not find place in the proceedings. The standard poster size is 1.5 m x 1.0 m (Leave 2.5 cm border on all sides and font size should be atleast 26 points).

**For registration, registration fees, travel to Dharwad and logistics please check :**

**<http://www.uasd.edu>**

**and if you can't figure it out write to us at this address [pravin@zooreach.org](mailto:pravin@zooreach.org) and he will send you a brochure. We can't figure it out either. We'd like this useful and important workshop to be very successful however. Ed.**