

Review Meeting of the Network Project on Insect Biosystematics
2nd and 3rd September, 2015, NBAIR, Bengaluru

The ninth review meeting of Network Project on Insect Biosystematics was held on the 3rd and 4th of September, 2015 at ICAR - NBAIR, Bengaluru.

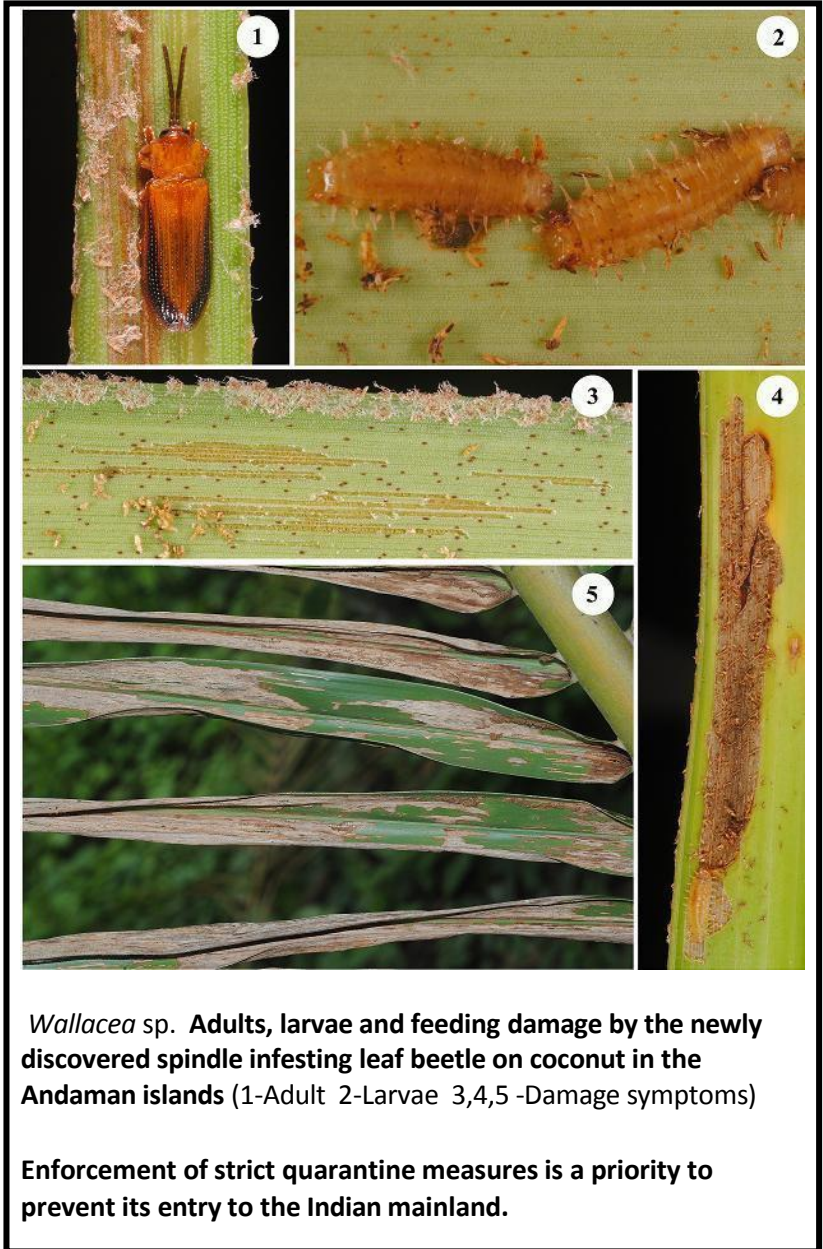
This is the first meeting of the project after NBAIR took over as the coordinating centre from IARI, New Delhi. Dr. Abraham Verghese, Director, NBAIR welcomed the gathering and Dr.P.K.Chakrabarty, ADG (PP & B), ICAR, N. Delhi inaugurated the meeting. Dr. Prashanth Mohanraj, Principal Scientist, NBAIR reviewed the progress made in the project since its inception. Dr. Ankita Gupta, Scientist, NBAIR proposed the vote of thanks bringing the inaugural session to a close.

The Technical Sessions commenced with presentations from all the eleven centres located at NBAIR, Bengaluru (Coordinating centre) ; IARI, New Delhi; UAS, GKVK, Bengaluru; KAU, Trichur; TNAU, Coimbatore; PAU, Ludhiana; MPUAT, Udaipur; AMU, Aligarh; BHU, Varanasi; TU, Agartala and NEH, Shillong.

Over 50,000 insects were collected and curated from 19 States and 3 Union territories during the course of the last year. Many new species, including many parasitoids, in several insect taxa in the Cicadellidae, Miridae, Acrididae, Aphelinidae, Trichogrammatidae, Encyrtidae, Mymaridae, Microgastrinae, etc. were collected.

New species of mites in the Eriophyidae (3 new species),Bdellidae (*Bdella novbalensis*) and Phytoseiidae (*Euseius coimbatorensis*, *Neioseius daturae*) were also discovered during the period. The Phytoseiidae are predatory mites used extensively in biocontrol programmes which have the potential for exploitation in pest management programmes.

The largest collection of flea beetles belonging to the Alticini of India has been built up with about 40,000 specimens and almost all the 120 genera of Hispini known from India have been collected and are being studied taxonomically.



A new species of *Wallacea*, a beetle that causes severe damage to coconut seedlings in particular, was discovered in the Andaman islands. This is the first confirmed report of *Wallacea* on coconut. As this beetle does not occur on the Indian mainland it is imperative that strict quarantine measures are enforced to ensure that it does not gain entry to the coconut growing areas of our country.

Barcodes were developed for four species of fruit flies (*Bacrocera tau*, *B. zonata*, *B.dorsalis*, *B. correcta*) of quarantine importance. This will enable the identification of even the immature stages of these flies in infested fruits meant for export / import.

Barcodes have been developed for quick, reliable identification of the following fruit flies to enable quarantine officials to detect their presence in agricultural produce at the ports of entry into our country.



B. correcta



B. dorsalis



B. tau



B. zonata

The scarabaeid *Xylotrupes gideon* which was thought to exist in India has now been found to be *X. siamensis* on the basis of molecular studies. DNA barcodes for fifteen species of Cerambycidae (Coleoptera) have been developed and accession numbers obtained after submission to NCBI.

A little over 1000 visuals have been developed for crop-wise inventories of pests including the immature stages of pests, adults and damage symptoms.

The eight databases developed on insects of agricultural importance, viz., Insects in Indian Agroecosystems, Factsheets on Agriculturally Important Insects, Indian Genera of Mymaridae, Indian Fauna of Pteromalidae, A pictorial guide to Diapriinae genera of India, Indian genera of Aphelinidae and its related families, Aphids of Karnataka and Type Specimens in NBAIR Collection, were expanded bringing the total number of fact sheets hosted to 1500 with about 25000 images.



Dr.Abraham Verghese, Director, NBAIR, Bengaluru delivering the welcome address



Dr.P.K.Chakrabarty, ADG (PP & B) addressing the participants of the Review Meeting



Dr.P.K.Chakrabarty, ADG (PP & B) releasing the folder on the invasive lepidopteran pest *Tuta absoluta*



Participants of the Review Meeting of the Network Project on Insect Biosystematics at NBAIR, Bengaluru (2nd and 3rd September, 2015)