

XXIII Workshop of AICRP on Biological Control of Crop Pests and Weeds Organized

28th June 2014, Bhubaneswar

The XXIII Workshop of AICRP on Biological Control of Crop Pests and Weeds was organized at Orissa University of Agriculture and Technology (OUAT), Bhubaneswar on 27-28th June, 2014. The objective of this workshop was to review the progress of work done by different AICRP centers during 2013-14 and to finalize the technical programme for 2014-15.



Dr. J.M. L. Gulati, Vice Chancellor I/C, OUAT inaugurated the workshop. In his presidential address, he suggested that the biocontrol technologies should be important components in IPM/Organic farming systems for management of crop pests and stressed the importance of improving biodiversity and conservation of biocontrol agents in nature.

In his address, Dr. P.K. Chakrabarty, Assistant Director General (PP&B), ICAR emphasized upon the importance of popularization and increase in uptake of biocontrol technologies among the farming community. He suggested eco-specific niche based biocontrol programmes under AICRP Biocontrol may be taken up.

Dr. Abraham Verghese, Director, NBAII reviewed the progress of research on biological control of insect pests, plant diseases and nematodes of various crops using parasites, predators, pathogens and antagonists.

Dr. B. Ramanujam, AICRP PC Cell I/c reviewed the Tribal Sub Plan proposals with reference to biocontrol technologies in eleven centers encompassing 120 tribal villages.

Dr. C.A. Viraktamath, RAC chairman, NBAII;; Dr. P.K. Das, Dean (Research), OUAT; Dr. C. Chattopadhyay, Director, NCIPM; Dr. B. Mishra, Dean, OUAT; and Project Coordinators of White grubs, Honeybees, Ornithology and nearly 80 scientists of AICRP on Biocontrol and NBAII and representatives from Biocontrol Industry participated in the workshop.

The recommendations and the technical Programme for 2014-15 were finalized on the occasion.

Significant Achievements during 2013-14

- Incidence of invasive Jack beardsley mealy bug, *Pseudococcus jackbeardsleyi* has been reported in Tamil Nadu and Karnataka. *Cryptolaemus montrouzieri* was identified as successful predator for this invasive mealy bug and the mass production technology has already been standardized for field application.

- Incidence of papaya mealy bug and sugarcane woolly aphid were very low in Maharashtra, Karnataka, Tamil Nadu, Kerala, Orissa, Assam and other parts of the country due to the intensive activities of the released parasitoids and as a result crop losses to a tune of Rs. 500 crores were avoided in these states.
- Biointensive pest management programme implemented in rice in Kerala led to complete avoidance of chemical pesticides in rice cultivation in kule lands and protecting the vulnerable aquatic systems in the state. Spider density were very high in these plots and the yields were on par with the chemical pesticide treated plots.
- Biocontrol technologies for management of sugarcane borers were implemented in large-scale (2200ha) in Punjab leading to a reduction of 60% of pest incidence. Large-scale demonstrations of biocontrol technology for management of coconut rhinoceros beetle in Kerala resulted in 70% reduction of pest incidence
- Oil formulations of *Metarhizium anisopliae* were found to be effective against mango hoppers in Maharashtra, Tamil Nadu, Karnataka and Andhra Pradesh resulting in a reduction of 65-75% pest incidence. This will be ideal for organic IPM.
- Soil application of *Metarhizium anisopliae* was found effective against apple root borer (*Doryctes hugelii*) that reduced infestation by 70% in Himachal Pradesh.

(Source: Crop Science Division, ICAR)