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RESEARCH ROUND-UP

Endoparasitoid Bracon lefroyi effectively contain the field population of Pink bollworm

(V. Chinna Babu Naik, S. Kranthi and K.R.Kranthi)

Endoparasitoid *Bracon lefroyi* Dudgeon & Gough (Braconidae: Hymenoptera) was recorded to effectively contain the field population of Pink bollworm (*Pectinophora gossypiella* Saundrs) infestation ranging from 25-81%. Parasitism was noticed on dissection of green bolls collected from various genotypes of non Bt cotton during last week of November to first week of December, 2013 at CICR Nagpur. During November parasitism was 81% while in December it was 25.71 %. Dead larvae were observed inside a large number of green bolls dissected. Early season pink bollworm populations suffered more larval mortality as compared to later season pink bollworm populations although pink bollworm infestation was higher later in the season. Collected larvae placed in vials showed braconid parasitoid developing to pupae and then adult. Few dead larvae of pink bollworm did not record parasitoids. This might be attributed to emergence of parasitoids prior to collection of pink bollworm larvae or mortality due to natural or other factors. Use of braconids has promise in biocontrol of pink bollworm. It has also been reported from Iran on *Earias insulana* in 1976.

(Dr.V.V.Ramamurthy Professior Entomology, IARI New Delhi is gratefuly acknowledged for identification of the specimen under report.)



Adult braconid



Dead pink bollworm larvae with parasitoid grubs



Dead pink bollworm larve inside green boll

SCIENTIFIC TALK



Dr. Rishi Kumar, Senior Scientist, Entomology, CICR Regional Station Sirsa delivered a talk on "Conventional and genetic methods for detection of insecticide resistance" on 28th December, 2013 as part of scientific talk series. Log-dose probit and diagnostic (discriminating) dose assays under conventional methods can detect any shift in insect susceptibility and status of population's susceptibility respectively. Immersion methods, topical application, residual coating assays, leaf or stem or whole plant dip method and diet incorporation or diet surface coating methods are the standard protocols for evaluation of resistance in different insect pests. F₂ screening, an another approach developed by Andow and Alstad (1998) involves sampling of either mated females or late instars larvae, rearing up to pupation, pairing of male and female adults to establish isofemale lines, rearing progeny from each isofemale lines and exposing offspring from sibmatings (F2 generation) to discriminating dose of Bt toxin. Resistance monitoring through

this method can provide information on early changes in resistance allele frequency to ensure the durability of Bt cotton technology.

MEETINGS

A meeting was held at CICR, Nagpur on 26/12/2013 during which Dr. K. R. Kranthi, Director, CICR, briefed the Scientists about the progress of activities related to Krishi Vasant being carried out in the Institute.

PUBLICATION

Wasnik S. M. (2013): Study on Antecedents of Cotton Growers Alienation from Land in Distress Vidarbha Region of Maharashtra. *International J. of Extn. Edu.* 9:56-60. ISSN: 2319-7188.



On the campus, crops that will be on live display

EXPRESS

Farm India heads for Nagpur

'Biggest ever' agri expo has Rs 45 cr budget, 50-acre stage, 65,000 farmers a day for 5 days

VIVEK DESHPANDE

NAGPUR

IT'S being tagged India's, possibly the world's, biggest and most ambitious farm expo ever. With a budget of about Rs 45 crore, Krishi Vasant is being staged on the premises of Central Institute for Cotton Research, Nagpur, for five days beginning February 9.

The 50-acre expo will include 20 acres for 747 stalls, 10 acres for live demonstration farms showcasing the 304 best varieties of 52 crops, and about five acres for demonstration of farm machines and implements. Staying and food arrangements are being made for about 65,000 farmers every day. Special farmers' trains are being run from various parts of the country to Nagpur. The who's who of the farm industry will display their technologies to farmers.

President Pranab Mukherjee will inaugurate the expo, organised in partnership by the Maharashtra government and CII, which has expertise in holding such events.

The brainchild of Agriculture Minister Sharad Pawar, Krishi Vasant coincides with the birth centenary of late Maharashtra CM Vasantrao Naik. Pawar had floated the idea at a press conference in Nagpur aftervisiting BJP leader Nitin Gadkari's annual Agrovision Expo, currently under way. The visit had raised political speculations.

HIGHLIGHTS

THE EXPO: Krishi Vasant at Central Institute for Corton Research, Nagpur, February 9-13

TOTAL AREA:

FARMERS EXPECTED: 65,000 every day

BUDGET:

Rs 45 crores, including Rs 20 crore on event organisation and the rest on farmers mobilisation and other expenses

SEMINARS: All 5 days, 2 topics a day, 750 participants in each

LIVE CROP DEMONSTRATIONS: More



OTHER FEATURES:

» Farmer-scientist interaction each day » Showcase of best practices and success stones of farmers

» Cattle show as a part of exhibition » Live fisheries demonstration » Cultural programmes for 5,000 visitors each day gramme, farmers are taken to various places to be shown agriculture practices and technologies. This event will bring lakes of them from across the country under one roof to learn about all the best technologies and practices in the country in crops and livestock, not just from static displays but from live demos, "says Sanjiv Gupta, joint secretary, agriculture, Government of India." This is on a massive scale, something not known to have taken place anywhere else in the world in agriculture."

"All wedding venues and other lodging facilities in Nagpur have been booked for the five days," says CICR director Keshav Kranthi, who volunteered to host the expo on the campus.

"The idea is to bring in farmers daily from allower the country with 50 per cent subsidised railway travel. They will stay for two days, making visits to preferred demos and talk sessions with experts and other stakeholders, both private and government, in their own language," Crupta says. Railways are being requested for special trains and bogies, apart from the travel charges subsidy.

Over 30 agriculture universities

and institutions, about 80 Indian Councilof Agriculture research institutions, and national and international agriculture companies will be participating.

The government will be spending about Rs 22 crore on travel, lodging and food for farmers. The rest of the budget is emant for raising the infrastructure and other logistical arrangements. The Maharashtra government is pitching in with Rs 5 crore.

"All events will be webcast live, Farmers will be assembled at various places across the country to see the event on LD screens. This way, an additional \$0,000 farmers per day will benefit from the event," says Sudhir Kumar Goel, principal secretary (agriculture), Maharashtra.

There will be 92 stalls of "farmer success stories", Special awards will be given to those with extraordinary achievements.

Farmers will be given printed and electronic contents on micro SD cards to carry home for future reference. "We have grown 304 varieties of 52 crops on 10 acres on our premises for the farmers to see," says Kranthi.

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Chief Editor: Dr. Nandini Gokte-Narkhedkar

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Post Bag No. 2, Shankar Nagar PO, Nagpur 440010

Phone: 07103-275536 Fax: 07103-275529; email: cicrnagpur@gmail.com