

SURVEY REPORT ON INSECT-PESTS OF COTTON IN HISAR AND JIND DISTRICTS

Date	Villages surveyed (No. of fields surveyed)
06.10.2020	Hisar: Barwala (1), Khedar (1) and Danoda (2) Jind: Kharak Bhura (1), Roj Khera (1), Ghoghadiya (2), Kucharna Khurd (2) and Chhatar (2)

Twelve fields of cotton from eight villages were surveyed for insect-pests incidence in Hisar and Jind districts and following observations were recorded:

- A severe infestation of pink bollworm (*Pectinophora gossypiella*) was observed in *Bt* cotton growing fields of **Barwala, Khedar, Kharak Bhura, Roj Khera and Ghoghadiya** villages which ranged from 55.00-100% on green boll basis and 19.28-72.50% on open boll basis.
- The infestation of pink bollworm was observed in traces in *Bt* cotton growing fields of Danoda, Khucharna Khurd and Chhatar villages which ranged from 0.00-5.00% on green boll basis and nil on open boll basis.
- The population of adult whitefly was found declining and the infestations of leafhoppers and thrips were observed in only in traces.

Predictions and suggestions

- The population of sucking pests including whitefly is declining and there is no need to use insecticides for their management in cotton crop. Farmers are advised to monitor the population of pink bollworm through pheromone traps (2-3 traps/acre) and infestation through green/open bolls (20 bolls/acre) on weekly basis and to apply control measures only at economic threshold level in cotton crop having more than 50% green bolls.
- In case any information regarding pink bollworm infestation in *Bt* cotton received from farmers you are requested to inform the Head, Department of Entomology, CCS HAU, Hisar. If the fruiting bodies damage exceeds 10%, need based spray of quinalphos 25 EC @ 800-1000 ml/ quinalphos 20 AF @ 900-1100 ml or thiodicarb 75 SP @ 250-300 g or profenophos 50 EC @ 800 ml with 175-200 litres water per acre can be given to the crop having more than 50% green bolls.
- The harvested cotton from infested fields should be handled carefully to prevent further spread/carryover of the pink bollworm population. Ginning of such infested seed-cotton is required to be done on priority basis. Such seed can be fumigated with aluminium phosphide @ 1 tablet (3 g)/m³ for 48-72 hours for killing the pink bollworm larvae. Seed-cotton movement from the pink bollworm infested areas should be prevented to the cotton ginneries operating in non-pink bollworm infested areas.
- The grazing animals like goat and sheep may be allowed for grazing to consume green bolls which further reduce the chances of carryover of the population. In order to reduce carryover of the population to next season, the cotton stalks from infested fields should be shed and the resulted material including unopened bolls, locules, leaves and seeds should be destroyed.
- The cotton stalks should not be stored in the fields and in case stored in the houses for fuel purpose, those should be utilized before the April. The stalks should not be stored horizontally rather vertical storage by making bundles is better. The cotton stalks from infested fields/area should be prevented from movement to new fields/area.
- Pheromone traps should be installed at the cotton ginneries and oil extraction units for the monitoring of pink bollworm population during the ginning period. The work of ginning should be completed by the end of March. The leftover material including seeds of the ginneries should be fumigated. Cotton ginneries be thoroughly cleaned before the start of cotton sowing season and the left over collected must be destroyed to prevent the larval carryover, if any.