

SURVEY REPORT ON INSECT-PESTS OF COTTON IN HISAR, BHIWANI AND ROHTAK DISTRICTS

Date	Villages surveyed (No. of fields surveyed)
17.08. 2019	Hisar: Nalwa (2) and Mujadpur (1) Bhiwani: Bohal (4), Paposa (2), Bawani Khera (2), Siwara (1), Talu (2) and Badesra (2) Rohtak: Sisar Khas (2) and Meham (2)

Twenty fields of cotton from ten villages were surveyed for insect-pests incidence in Hisar, Bhiwani and Rohtak districts and following observations were recorded:

- **Adult whitefly population was found to cross economic threshold (ET) (6-8 adults/leaf) in seven fields (three fields of Bohal, both the fields of Paposa, one each field of Nalwa & Mujadpur).** Mean population of whitefly adults ranged from 1.4 to 49.4 adults per leaf across the fields. Highest population of whitefly was found in the fields of **Paposa followed by Nalwa, Bohal and Mujadpur.**
- Incidence of thrips was also observed in all surveyed fields and none of the fields was found to crossed ET (10 thrips/leaf). Mean population of thrips ranged from 1.3 to 8.9 thrips per leaf across the fields.
- Leafhopper population was found below ET (2 nymphs/leaf) in all the surveyed fields. Mean population of leafhopper nymphs ranged from 0.1 to 1.6 nymphs per leaf across the fields.
- Solenopsis mealybug (*Phenacoccus solenopsis*) infestation was found to infest few plants in one field of Bohal.

Predictions and suggestions

- Farmers should be advised to monitor insect-pest populations on weekly basis and to apply control measures only at ET.
- Activity of spiders, coccinellids and *Chrysoperla* sp. which feed on sucking pests was observed in most of the fields. Therefore, farmers should refrain from unnecessary insecticide application in order to conserve beneficial insects.
- In case of long dry spell of 15 days or more, the population of whitefly on cotton may increase fast. The leafhopper population on the cotton may increase if rains occur frequently and mean relative humidity remains above 70 per cent. However, the thrips population is likely to remain below ET in the areas receiving rainfall.
- In case of whitefly population crosses ET in cotton during August-September, alternate spray of 300 ml of dimethoate 30 EC or oxydemeton methyl 25 EC and neem based insecticide (Nimbecidine/Achook) @ 1.0 litre with 250 litres of water per acre may be applied.
- In case of thrips population crosses ET, a spray of 250-350 ml dimethoate (Rogor) 30EC or 300-400 ml oxydemeton methyl (Metasystox) 25 EC with 120-150 litres of water is suggested.
- For the management of leafhopper in cotton, farmers are advised to apply 40 ml imidacloprid (Confidor) 200 SL or 40g thiamethoxam (Actara) 25 WG in 120-150 litres of water/acre.
- Farmers are suggested to spray only recommended insecticide in right dose and mixing of insecticides should be avoided.