

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

Date	Villages surveyed (No. of fields surveyed)
22.08. 2019	<p>Hisar: Fransi (1), Kalirawan (3), Mahalsra (1), Ladwi (2), Meengni Khera (2), Chaudhriwas (1), Kanwari (2) and Bhojraj (2)</p> <p>Bhiwani: Khera Siwani (2), Miran (2), Kharkari Jhanwari (1) and Khanak (1)</p>

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

- Adult whitefly population was found to cross economic threshold (ET) (6-8 adults/leaf) in six fields (both fields of Khera Siwani & Bhojraj and one each field of Khanak & Kanwari). Mean population of whitefly adults ranged from 1.9 to 21.5 adults per leaf across the fields. Highest population of whitefly was found in the fields of Khanak followed by Khera Siwani and Bhojraj.
- Incidence of thrips was also observed in only twelve fields and none of the fields was found to crossed ET (10 thrips/leaf). Mean population of thrips ranged from 0.0 to 3.4 thrips per leaf across the fields.
- Leafhopper population was found below ET (2 leafhoppers/leaf) in all the surveyed fields except one field in Kanwari. Mean population of leafhoppers ranged from 0.0 to 2.1 leafhoppers per leaf across the fields.
- Solenopsis mealybug (*Phenacoccus solenopsis*) infestation was found to infest few plants in one field of Kanwari.

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 is avoided.