

## SURVEY REPORT ON INSECT-PESTS OF COTTON IN HISAR, FATEHABAD AND SIRSA DISTRICTS

Date	Villages surveyed (No. of fields surveyed)
26.07.2019	<b>Hisar:</b> Kalirawan (2) and Sadalpur (5) <b>Fatehabad:</b> Ban Mandori (2), Pili Mandori (2) and Dhangar (2) <b>Sirsa:</b> Darba Kalan (3), Khairekan (1), Nezadela Kalan (2) and Haripura (2)

Twenty one fields of cotton from nine villages were surveyed for insect-pests incidence in Hisar, Fatehabad and Sirsa districts and following observations were recorded:

- Adult whitefly population was found to cross economic threshold (ET) (6-8 adults/leaf) in six fields (three fields of Sadalpur, one each field of Pili Mandori, Haripura and Dhangar). Mean population of whitefly adults ranged from 1.2 to 12.0 adults per leaf across the fields.
- Incidence of thrips was also observed in all surveyed fields and nine fields (one each field of Kalirawan, Sadalpur, Darba Kalan, Khairekan and Dhangar; two each fields of Nezaradela Kalan and Haripura) were found to crossed ET (10 thrips/leaf). Mean population of thrips ranged from 1.2 to 21.6 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 1.1 nymphs per leaf across the fields.
- Solenopsis mealybug (*Phenacoccus solenopsis*) infestation was not observed in surveyed fields.

### 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, an initial spray of neem based insecticide (Nimbecidine/Achook) @ 1 litre/acre in 200 litres of water may be sprayed followed by need based spray of 300 ml dimethoate 30 EC in 200 litres of water per acre.
- 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.