

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

Date	Villages surveyed (No. of fields surveyed)
06.07.2019	Hisar: Fransi (2), Kalirawan (2), Kohli (2), Sadalpur (2) and Daroli (1) Fatehabad: Khabra Kalan (2), Bhattu Kalan (2), Dayor (2), Jandwala (2) and Pili Mandori (2); Sirsa: Chaharwala (2)

Twenty one fields of cotton from 11 villages were surveyed for insect-pests incidence in Hisar, Fatehabad and Sirsa districts and following observations were recorded:

- Adult whitefly population was below economic threshold (ET) (6-8 adults/leaf) in all the surveyed fields. Mean population of whitefly adults ranged from 0.5 to 5.2 adults per leaf across the fields. The maximum whitefly adult population was found in one each field of Kohli (5.2 adults/leaf) and Kalirawan (4.17 adults/leaf).
- Leafhopper population was also found below ET (2 nymphs/leaf) in all the surveyed fields. Mean population of leafhopper nymphs ranged from 0.1 to 1.3 nymphs per leaf across the fields.
- Incidence of thrips was also observed in all surveyed fields which was below ET (10 thrips/leaf).
- Solenopsis mealybug (*Phenacoccus solenopsis*) infestation was observed on the few plants only in one field of Sadalpur (Hisar).

Predictions and suggestions:

- Farmers should be advised to monitor insect-pest populations on weekly basis and to apply control measures only at ET (whitefly: 6-8 adults/leaf, leafhopper: (2 nymphs/leaf and Thrips: (10 thrips/leaf).
- 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 neem based spray of 300 ml dimethoate 30 EC in 200 litres of water per acre.
- 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.