4/30/2021

Weekly Report for the Management of Important Cotton Insect Pests on Alternate Host Plants in Cotton Zone

Management of Whitefly, Mealy Bug, Dusky Bug

Directorate General Pest Warning & Quality Control of Pesticides, Punjab, Lahore

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Total Area Visited: Total 8382 km were surveyed in 14 districts while in case of ornamental plants 61 Kanals were surveyed. (Table 2).

Dusky Cotton Bug: It was observed on 80 trees, 51 weeds and 12 ornamental plants in districts of Multan, Lodhran, Bahawalpur, Bahawalnagar and R.Y.Khan. Farmers were advised to adopt plant protection measures as under;

- 1. Bury infested plants and weeds carefully.
- 2. Keep cotton sticks away from the water channels.
- 3. Keep field crops, vegetables, ornamental plants, orchards, field bunds and water channels free from weeds.
- 4. Eradicate weeds at their early stage.
- 5. Remove alternate host plants.
- 6. Use effective insecticides at recommended doses (Table 1).

Mealy Bug: It was observed on 1 tree, 13 weeds and 5 ornamental plant in district Khanewal, Vehari, Bahawalpur, R.Y.Khan and Layyah. Farmers should monitor its population on every host plant and adopt appropriate control measures in consultation with local field staff of Pest Warning or Extension Wings of Agriculture Department.

- 1. Apply Mineral Oil (diver) along with recommended insecticides on ornamental plants, field crops and vegetables for its effective control (Table 1).
- 2. Bury infested plants and weeds carefully.
- 3. Keep cotton sticks away from the water channels.
- 4. Keep field crops, vegetables, ornamental plants, orchards, field bunds and water channels free from weeds.
- 5. Eradicate weeds at their early stages.
- 6. Uproot carefully the mealy bug infested plants and bury them.
- 7. Prune the shrubs and trees infested with Mealy bug.

Whitefly: It was observed on 17 weeds and 17 ornamental plants in district Multan, Khanewal, Lodhran and Bahawalpur. Eradicate weeds which are acting as alternate host plants of Whitefly.

- 1. Motivate farmers to keep whitefly on alternate hosts at the lower ebb.
- 2. Avoid excessive use of Nitrogen in vegetables and other crops.

- 3. Install cards of green lacewing (*Chrysoperla*sp.)in the field crop as biological control agent.Farmers may get cardsfrom Biological Control Labs of Agri. Extension Wing at Vehari, Sahiwal, Faisalabad, T.T.Singh, Jhang, M.Garh, Layyah, Pakpattan and Okara.
 - Table 1: Pesticides recommended against Dusky Bug, Mealy **Bug and Whitefly of Cotton** S# **Common Name** Dose/Acre **Dusky Cotton Bug** 400 ML 1 Fipronil Lambda Cyhalothrin 2.5EC 2 330 ML Mealy Bug Profenofos 50 EC 800 ML 1 Profenofos + Cypermethrin 500 ML 2 3 Malathion 500 ML Whitefly 1 Flunicamid 50% WG 80-120 g 2 Diafenthuron 500 SC 200 ML 3 Acetameprid 125-150 g 4 Pyriproxifen 10.8 EC 500 ML
- 4. Apply pesticides as last resort as given in the table 1.