

BIO-ECOLOGY AND MANAGEMENT OF MANGO MEALY BUG (*Drosicha mangiferae*); A RECENTLY INFESTING SERIOUS MANGO PEST IN BANGLADESH

Dr. Mohammed Ali¹

Extended Summary

The experiment was conducted at Sher-e-Bangla Agricultural University, Sher-e-Bangla Nagar, Dhaka during the period from December 2010 to May, 2012 to study the bio-ecology, host preference and management of mango mealy bug. The experiment was laid out in randomized complete block design (RCBD) with three replications. The insect has a single generation/year. Eggs started hatching from mid December continue up to January. Male emerged during March to April. Life cycle completed in May to June. The major hosts of the pest recorded are mango, jackfruit, banana, red gram, papaya, cotton, mulberry, guava, tomato, brinjal, teak, berry, chilli, marigold etc. Major part of the plant in where infestation occurs are inflorescence, succulent leaf, lower surface of leaf mid rib, petiole, apex of plant, leaf etc. Maximum infestation occurred in mango, jackfruit, banana and papaya with 100 percent infestation rate followed by brinjal, strawberry, chilli and marigold. The treatments comprised six chemical insecticides viz. Lambda cyhalothrin 2.5EC (Filter), Chlorpyrifos 20EC (Dursban), Cypermethrin 10EC (Ripcord), Imidacloprid 200SL (Bamper), Dimethoate 40EC (Dimetheon), Thiamethoxam 25WG (Aktara). Highest number mortality percentage (100) was found in Thiamethoxam 25 wg (Aktara) treated insect of first instars of mango mealy bug in both field and laboratory condition. In 2nd and 3rd instars larvae, Chlorpyrifos 40EC (Dursban) was most effective. In adult stage, it was more difficult to control mealy bug by chemical treatment. In field condition 53.33 percent mortality was found in Chlorpyrifos 40EC (Dursban) treated insect and 46.67 percent mortality was found in Cyhalothrin 2.5EC (Faiter) treated insect in laboratory experiment.

¹ Professor, Dept. of Entomology, Sher-e-Bangla Agricultural University, Dhaka