

New threaten pest to *Annona muricata* L.

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Abstract

Annona cultivation in some areas in North Western province found to be damaged by an unrecorded pest, bark eating caterpillar (*Indarbela quadrinotata*) (Lepidoptera: Metarbedelidae). The biology and ecology of this insect was studied by making regular larval samplings in the field and rearing them in the laboratory on true branches of *Annona* to identify the pest, 2015. It had a single generation per year in the host range of *Annona*, Guava, Pomegranate and Nelli in the observational period in Sri Lanka and it infested at highly bearing stage in trees causing young shoots dry and die away giving die-back symptoms. The infestation of the pest was clearly identified by small holes in the bark and irregular tunnels covered with silken web consisting of wooden particles and excreta on the bark of the main stems and branches. Eggs are laid in clusters on the bark of trees hatched after 8-10 days. Larvae with dark brown heads bore into the trunk or main branches and the larval period lasts for 7-9 months. The full grown larvae are 30-50 mm with sparse hairs and body has simple thoracic legs with the last segment ending in a curved claw. The pupa is light brownish, 1.5 cm in length and with 2 short pointed cephalic processes. Adult moths are 35-40 mm, pale brown or grey wavy markings on the wings and measures 15-18 mm across the wings. Forewing has a sub-apical brown spot and with several transverse rows of brown scales. Hind wing is light black in color. Antennae have strong and uniform pectination. The larval period was from July to March, pupal period in February - March and moth emergence during April to May. Maintaining the good sanitation, observe the field periodically for die-back symptoms, pruning the infested parts, removing the larvae mechanically by inserting a hooked metallic probe, removing the webs and sealing it with mud kills the larvae effectively.

Key words: *Indarbela quadrinotata*, *Annona* cultivation, New pest