

BARK EATING CATERPILLAR: A SERIOUS THREAT TO SUBTROPICAL FRUIT CROPS AND MULTIPURPOSE FOREST TREE SPECIES IN INDIA

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The Bark eating caterpillars, *Inderbela quadrinotata* belongs to order lepidoptera and family Cossidae. It is a



polyphagous insect pest and infest on mango, Guava, Ber, Aonla, Pomegranate, Lime, Drumstick, Jackfruit, Custard apple, Ramphal, Blackberry, Loquat, Mulberry, Litchi, Teak, Sissoo, Siris (*Albizia* spp.), Golden Shower, Rinjha, Khamer etc. The pest is widely distributed in India and Madhya Pradesh. The freshly hatched larvae are dirty brown while the full grown caterpillars (50–60 mm) have pale brown bodies with dark brown head. The adults are pale brown moth with rufous head and thorax. The fore wings are pale rufous with numerous dark rufous bands. Their hind wings are fuscous.

The larvae bore into the bark or main stem. The larvae have the habit of making webs. The thick ribbon like, silken webs are seen running on the bark of main stem, especially near the forks extending from the bore hole. Only one larva is seen inside a hole which is used only as a shelter when it does not feed during day time. Numerous holes are seen on a tree. They enter through the bark into the wood and in cases of severe infestation, sap movement is interfered, so that affected branches turn yellow, dry up and the tree ceases to flush. The growth arrested and fruiting capacity is considerably reduced. Branches rarely broken from main stem during heavy wind.

The moth emerges and become active with the start of summer season. The female start laying eggs in cluster of 15 – 25 eggs each. Under the loose bark of the trees. The egg laying continuous throughout the summer. During

her life span, it deposits as many as 200 eggs. The eggs hatch in 8 – 10 days and the freshly hatched nibble at the bark and after 2- 3 days, bore in to the stem or main branches and feed within. The larvae have the habit of making webs along the feeding galleries and above the holes where they bore deeper into the wood. The galleries and the webs above them have a zig – zag shape and contain wooden frass and excreta. The larvae complete their development in 9-11 month and when full grown, they make hole in to the wood and pupate. The pupal stage last 3-4 weeks. The adult emerges in summer leaving a portion of empty pupal case protruding out of the bore hole and they are short lived. Only one generation completed in a year.



Management practices:

- Removable of alternate host plants and sanitation of orchard are essential to prevent / minimize the infestation of the caterpillars.
 - Timely removal of affected plant parts.
 - As soon as damage symptoms are seen, kill the caterpillars mechanically by inserting an iron spike into the holes made by these caterpillars.
 - During February – March, insert into the bore holes insecticide soaked cotton plugs (with the help of metallic spike) and plaster on the outside with mud. The insecticide for 1 liters of water are 40 g. Carbaryl 50 WP or 10 ml fenitrothion 50EC or 5 ml profenofos 50 EC or 10 ml chlorpyrifos 20EC these chemicals should be applied after removing webbing.
 - Treat all alternate host plants in the vicinity of the orchard.
- In case of severe infestation clean the affected portion of the trunk or main stem and insert into the holes swab of cotton wool soaked in Dichlorovos 100 EC @ 0.25 per cent.