Sesamia inferens Walker - A New Pest of Oil Palm Seedlings in India

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The pink borer of millet, Sesamia inferens *has been found to attack oil palm seedlings in India in the second stage nursery resulting in growth retardation or mortality of the affected seedlings.*

Oil palm (*Elaeis guineensis* Jacq.) is being introduced into areas in India having different cropping systems. As a result the indigenous pest species are sometimes adapting to the new crop. The pink borer moth of finger millet and other graminaceous host plants, *Sesamia inferens* Walker was observed damaging 8 to 10-month old oil palm seedlings in the Oil Palm Demonstration Project, Belimallur, Shimoga district, Karnataka state. Ramachandran Nair, Prakash and Nagarkatti (1972) listed 37 wild and cultivated plants including finger millet, pearl millet, sorghum, paddy, maize and sugarcane as host of the borer, hence it is not surprising that this polyphagous moth pest has adapted to oil palm as its new host.

On the infested seedlings, clusters of creamy white spherical eggs were found affixed on the freshly emerging tender spear as well as the leaf surface, rachis and petiole of the leaves. In captivity about 20 eggs were obtained. The newly hatched tiny caterpillars fed on the mesophyll and reached the rachis through the leaflet axils and the meristematic region. The infestation formed a cavity in the succulent white cabbage portion of the seedlings, resulting in typical dead heart symptoms. A longitudinal tunnel is made as the caterpillars feed on the rachis. The tunnel is plugged with frass.

Caterpillars became full grown in 55-62 days and were pink in colour with a few scattered setae on the body, which measure 25 to 30 mm. The full grown larvae came out of the cavity to pupate, making a silken cocoon enclosing dead plant tissues in the leaf axil of the oil palm seedlings. The prepupal and pupals periods were completed in the cocoon. In case of finger millet, pupating inside the tunnel or cavity has been reported (Ayyer, 1940). The pupal period was 12 to 14 days. The adult moth has brown earthy or straw coloured forewings with media nerve veins shaded with conspicuous dark lines. The hind wings are white.

The damage was seen only in the oil palm second stage nursery. In November 1993, about 1 per cent of the seedlings were affected. The feeding by the pest on the meristematic tissues or the cabbage often results in mortality of the seedlings because of dead heart formation. A partially affected seedling recovered showing little leaf or atrophied leaf symptoms. Such seedlings require prolonged maintenance in the nursery before they are suitable for field planting. Feeding on the leaf petiole or rachis and the tunnel made inside the tissues weakened the fronds and caused them to break.

This is the first report of pink borer moth infestation on oil palm seedlings in India.

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