

Night-flying Beetles, *Adoretus compressus* – Pests of Oil Palm

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Adoretus compressus are small night-flying beetles, and also known as cockchafer beetles. *A. compressus* beetles are about 10-15 mm long, brown in colour and elongate and oval shaped. Adults usually eat by chewing and forming small holes in the foliage. The larvae or grubs live in the soil, generally under grass and almost exclusively feeding on plant refuse or decaying vegetable matters of the top soil. Life history of *A. compressus* is not well known and the life cycle of the insect is roughly complete in three months. *A. compressus* is polyphagous and feeds on leaves of many species of plants including several plantation based crops of tea, coconut, cocoa, rubber and oil palm. It is the most common insect pest in oil palm nurseries. Occasional outbreaks cause serious defoliation in immature plantings. During serious outbreaks, large number of *Adoretus* beetles can cause 80 to nearly 100 per cent defoliation of newly planted seedlings within two weeks. Almost all the fronds become badly damaged and skeletonised; and finally total drying of leaves occurs. Yield recording started when fruit bunches production commenced for a period of 27 months. Even though the affected palms recovered after effective chemical control, immature palms with severe damage (more than 50% defoliation) recorded 27 per cent reduction in fresh fruit bunch (FFB) yield and 18 per cent reduction in bunch number. Various aspects of management and control are discussed. In dealing with occasional outbreaks, spraying of insecticides like trichlorfon, carbaryl, carbosulfan and cypermethrin at intervals of 7 to 14 days is effective. In southern Thailand, spraying of carbaryl 85 per cent wettable powder (WP) 60 g per 20 litres water + application of carbosulfan 5 per cent granules (G) at 200 g per palm gave 100 per cent effectiveness after three rounds of treatments at weekly intervals.

Keywords: *Adoretus compressus*, cockchafer beetles, night flying beetles, leaf-eating pest, oil palm, control.