



BARTLETT TREE

RESEARCH LABORATORIES

U.K. AND IRELAND



Plant Health Care Program



THE BROWN-TAIL MOTH (*Euproctis chrysorrhoea*)

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Was first reported as a pest species in 1720. Since then the numbers of the insect have fluctuated irregularly with epidemics occurring in urban and sub-urban areas in south-east England. Since 1986 the moth has declined dramatically and is, at present, of only local importance as a public health threat.



Fig 1. Female brown tail moth

Adults emerge in July and mate. Both sexes have bright white wings with a brown body, slight differences being females also have a bulbous mass of brown hairs (hence brown-tail) on the tip of the abdomen. Caterpillars, up to 40mm long, hatch about a week later and feed on the upper leaf surface until leaf fall. During this period they construct a conspicuous small white silk tent, which is usually found on an exposed branch of the food plant. Brown-tail moths cause two problems. 1) Larvae carry minute barbed hairs which can cause severe skin and eye irritation. 2) On re-emerging in the spring the larvae eat the buds and young leaves of most deciduous, (especially Rosaceous) trees and shrubs, causing complete defoliation in a matter of days or weeks depending on the density of the caterpillar population. They then disperse to find a new food

source. Damage caused to trees is mainly visual and temporary as a new flush usually occurs in July or August, however, defoliated trees over several years may die.



Fig 2. Brown tail moth larvae

CONTROL: Plant protection products available for control include; Spray Oil, Bandu and Dimlin Flo. Dimlin Flo is highly recommended due to its long persistence within the tree providing long term control. In addition Dimlin Flo kills only moths and caterpillars, having no effect against beneficial insects. A bacterial biological control agent, *Bacillus thuringiensis* is also available under the product name Dipel. Generally young larvae at the early larval stage in autumn are most susceptible to insecticides although spring applications are sometimes also recommended. Spraying with Bandu + spray oil will provide excellent control where the product comes into contact with the pest. Bandu and spray oil are not systemic. During winter the silk tents may be removed and incinerated which although labour intensive gives relative freedom from irritating hairs.