

Brown tailed moth

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Identification, Biology & Management

Is an insect native to the UK and can be found throughout Europe. Numbers of this insect have fluctuated irregularly with epidemics occurring in urban and sub-urban areas in south-east England, (mainly on the coast, up the Thames Valley and London). Brown tail moth caterpillars produce urticating hairs that can cause skin irritation (rashes etc) if they come in contact with human skin.

Symptoms

In autumn and winter the most obvious signs of the presence of brown tailed moth (*Euproctis chrysorrhoea*) are the overwintering silk nests which can often be readily seen in the winter when trees have lost their leaves. In spring and early summer webbing is more extensive and the black and red caterpillars can cause some defoliation. Although occasionally found on oaks, brown-tail moth larvae are much more common on hedgerow trees such as blackthorn and hawthorn or on scrubby plants, such as bramble.

Causal Agent

Adult moths emerge in July and mate. Both sexes have bright white wings with a brown body. Eggs, (50-500), are laid in August in a single batch, 1-3 cm long, on a twig or the underside of a leaf, covered with a thick mat of brown hairs. Caterpillars, up to 40 mm long, hatch about a week later and feed on the upper leaf surface until leaf fall. These are at first highly gregarious, dark brown with two small orange/red spots at the end of the

abdomen. During this period they construct a conspicuous small white silk tent, which is usually found on an exposed branch of a tree. 50-2000 individuals overwinter in each tent. In spring the larvae are less gregarious, much brighter in colour, covered in light brown hairs with two white lines of hair tufts on their backs. After feeding on new growth they construct large white silk tents.

Figure 1: Brown tailed moth and nest



Control

Chemical control is limited by a number of facts. Infestation is usually close to urban areas thus limiting the number of safe insecticides for use. In the autumn only about

10% of the larvae leave the tent at any one time, reducing the effect of short lived contact insecticides such as oil or soap. Larvae at all stages of development retreat under leaves when disturbed or in the absence of leaves retreat into the nest for up to several weeks.

Products which are available for control include oil, soap, organic, synthetic pyrethroid insecticides and a insect growth regulator. The insect growth regulator has the advantages of long persistence within the tree and only moths and caterpillars are killed. One bacterial biological control agent, *Bacillus thuringiensis* is also available. Generally young larvae at the early larval stage in autumn are most susceptible to these products.

During winter the silk tents may be removed and incinerated which, although labour intensive, provides relative freedom from irritating hairs.

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