David J. Carter
Pest Lepidoptera of Europe
with special reference to
the British Isles

Dr W. Junk Publishers
surface with tufts of reddish yellow secondary setae arising from reddish brown verrucae.

**Pupa.** Reddish brown; cremaster bluntly rounded, with two robust, curved spines.

**Adult** (Pl. 32:5,10). ♂️ 34 mm, ♀️ 43 mm. Forewing of ♂️ grey, suffused with white; fasciae and other markings dark grey; forewing of ♀️ white, suffused with pale grey; fasciae and other markings grey, sometimes indistinct. Hindwing white, with grey tornal patch. Head and thorax grey; abdomen ochreous brown; antennae of ♂️ bipectinate, of ♀️ weakly pectinate.

**Biology. Ovum.** June–July; ova laid together in large numbers, forming a 'sleeve' around a pair of needles, covered with scales (fig. Montoya & Robredo, 1972); hatch in 35–40 days.

**Larva.** July–March (June); in a communal silken nest amongst branches; leaves nest at dusk to feed and returns at dawn; larvae overwinter in the nest emerging in a procession when the temperature is high enough. In Spain, larval processions are seen from February to mid-June (Montoya & Robredo, 1972).

**Pupa.** February–July; in a cocoon below ground; may go into diapause for 1–3 years.

**Adult.** June–August; flies at night.


178. *Thaumetopoea processionea* (Linnaeus)  
Oak Processionary

**Hostplants.** *Quercus* (Oak), *Juglans* (Walnut).

**Damage.** The larvae are defoliators and in cases of serious attack may weaken trees to secondary attack by other pests. This species seldom builds up sufficiently large populations to cause significant damage but the urticating hairs of the larvae may be a nuisance (Maksymov, 1978). The larvae have also been recorded on coniferous trees (Gómez Bustillo, 1979).

**Distribution.** Range extends through central and southern Europe to Asia Minor. This species does not occur in the British Isles.

**Description. Ovum.** Spherical, yellow; covered with grey scales.

**Larva.** Head blackish brown; body bluish grey, light greenish grey below spiracular line; dorsal band dark grey; numerous, long, white secondary setae arise from red verrucae; abdominal segments each with velvet-black dorsal patch bordered by red verrucae.

**Pupa.** Ochreous yellow to brown; cremaster bluntly rounded, with two short spines (fig. Maksymov, 1978).
Adult (Pl. 32:8,9). ♂ 30 mm, ♀ 32 mm. ♂ Forewing grey, suffused with white; markings darker grey. Hindwing white with diffuse, grey postmedian fascia. Head and thorax grey; abdomen greyish brown; antennae bipectinate. ♀ Wings greyish white; forewing markings darker grey, indistinct. Head and body as ♂; antennae bipectinate, but less strongly than ♂.


Larva. April–June; in a communal nest, leaving to feed at night and returning at dawn.

Pupa. June–July; in cocoons within the nest; a few pupae diapause for 1–2 years.

Adult. July–August; flies at night.


179. Calliteara pudibunda (Linnaeus) Pale Tussock, Hop Dog

Hostplants. Humulus (Hop), Malus (Apple), Pyrus (Pear), Prunus (Apricot), Juglans (Walnut), Rosa (Rose), Fagus (Beech), Betula, Corylus, Quercus, Salix, Ulmus and other deciduous trees and shrubs.

Damage. The larvae are defoliators of a wide range of orchard and forest trees. In central and northern Europe, this species is regarded as a forest pest, particularly of beech trees (Sylven, 1943; Wellenstein, 1978). At one time, larvae were common in hop gardens in England (Theobald, 1925; Massee, 1954) but, even when they occurred in large numbers, defoliation was caused too late in the year to affect the yield of hops. The hairs of the larvae are reported to be urticating (Busvine, 1980).

Distribution. Range extends throughout central and northern Europe to central Asia and Japan. This species occurs throughout England and Wales and locally in Ireland but is absent from Scotland (map, Worms, 1979).

Description. Ovum. Oblate spheroid, with circular depression around micropyle; surface punctate; white, shaded with olive-green dorsally and pale greenish grey basally (fig. Sylven, 1943; Stokoe & Stovin, 1948; Döring, 1955).

Larva (Pl. 30:9). Head green, greyish green or light brown, with numerous fine secondary setae; body yellow, pale green or brown; ventral surface dark grey; intersegmental bands between abdominal segments 1–5 broad, black; vestigial black bands present between abdominal segments 5–8; abdominal segments 5–7 with black subdorsal dashes, more extensive on brown larvae, sometimes forming double subdorsal lines; spiracles white, peritreme dark brown; numerous long secondary setae present on slightly raised verrucae; median dorsal pencils of yellow, brown or greyish setae present on abdominal segments 1–4; an elongate
Hardwoods (8, 43), see also Seedling Trees, Polyphagous (on trees and shrubs).

*Arctiidae*  *Hyphantria cunea*  Webbing foliage.
*Cossidae*  *Cossus cossus*  Boring in trunks.
*Cossidae*  *Zeuzera pyrina*  Boring in branches.
*Geometridae*  *Eranis defoliaria*  On foliage.
*Geometridae*  *Operophtera brumata*  On foliage.
*Geometridae*  *Operophtera fagata*  On foliage.
*Lymantriidae*  *Lymantria dispar*  On foliage.
*Sesiidae*  *Sesia apiiformis*  Boring in trunks of *Populus*.
*Thaumetopoeidae*  *Thaumetopoea processionea*  In web on foliage of *Quercus*.
*Tortricidae*  *Archips crataegana*  In rolled leaves, particularly of *Quercus*.
*Tortricidae*  *Tortrix viridana*  In buds of *Fraxinus*.

*Yponomeutidae*  *Prays fraxinella*  Haricot see Bean (French)

**Hazel Corylus maxima** (27, 36)
*Arctiidae*  *Hyphantria cunea*  Webbing foliage.
*Gelechiidae*  *Parachronistis albiceps*  In buds. (1)
*Geometridae*  *Abraxas grossulariata*  On foliage.
*Geometridae*  *Alsophila aescularia*  On foliage.
*Geometridae*  *Eranis defoliaria*  On foliage.
*Geometridae*  *Operophtera brumata*  On foliage.
*Gracillariidae*  *Phyllonorycter coryli*  Making blister mines on leaves.
*Lymantriidae*  *Euproctis similis*  On foliage.
*Notodontidae*  *Phalera bucephala*  On foliage.
*Pyralidae*  *Plodia interpunctella*  On stored nuts.
*Tortricidae*  *Epinotia tenerana*  On catkins, buds and leaves.
*Tortricidae*  *Gypsonoma dealbana*  In buds and on leaves. (1)
*Tortricidae*  *Hedyra pruniana*  On spun shoots and leaves.
*Tortricidae*  *Pandemis corylana*  On spun shoots and leaves.

*Helianthus* see Artichoke (Jerusalem), Sunflower.

**Hemp Cannabis sativa**
*Hepialidae*  *Hepialus humuli*  Cutworm and on roots.
*Pyralidae*  *Ostrinia nubilalis*  On stems and foliage.
*Tortricidae*  *Cydia delineana*  In stems. (40)

**Holly Ilex aquifolium**
*Tortricidae*  *Rhopobota naevana*  In spun leaves and shoots.

**Hollyhock Althaea spp.**
*Arctiidae*  *Arctia caja*  On foliage.
*Gelechiidae*  *Pexicopia malvella*  On developing seeds.