

Family Dermestidae

Source Material

Translation and adaptation of the German key by Arved Lompe, with permission (his key derived from those of G.A. Lohse, V. Kalik). The original can be accessed online at <http://www.coleo-net.de/coleo/texte/dermestidae.htm>.

Parts of the key for genus *Dermestes* and most of the key for genus *Attagenus* are derived from Peacock (1993), Handbooks for the Identification of British Insects, Volume 5, Part 3, Adults and Larvae of Hide, Larder and Carpet Beetles and their Relatives (Coleoptera, Dermestidae). This work should be consulted for further information.

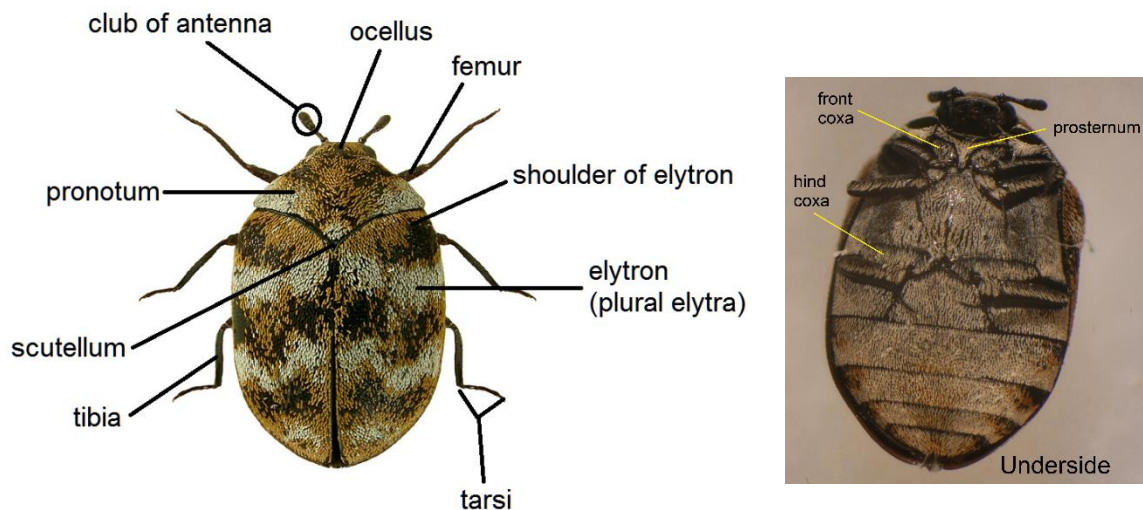


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Checklist of species

From the Checklist of Beetles of the British Isles, 2012 edition, edited by A. G. Duff (available from www.coleopterist.org.uk/checklist.htm). This lists 40 species in 13 genera.

Subfamily THYLODRIINAE

Genus *Thylotrias* Motschulsky, 1839
contractus Motschulsky, 1839

Subfamily THORICTINAE

Genus *Thorictodes* Reitter, 1875
heydeni Reitter, 1875

Subfamily DERMESTINAE

Genus *Dermestes* Linnaeus, 1758
ater De Geer, 1774
carnivorus Fabricius, 1775
frischii Kugelann, 1792
haemorrhoidalis Küster, 1852
lardarius Linnaeus, 1758
leechi Kalik, 1952
maculatus De Geer, 1774
murinus Linnaeus, 1758
peruvianus Laporte, 1840
undulatus Brahm, 1790

Subfamily ATTAGENINAE

Genus *Attagenus* Latreille, 1802
brunneus Faldermann, 1835
cyphonoides Reitter, 1881
fasciatus (Thunberg, 1795)
pellio (Linnaeus, 1758)
smirnovi Zhantiev, 1973
trifasciatus (Fabricius, 1787)
unicolor (Brahm, 1791)

Subfamily ANTHRENINAE

Genus *Anthrenus* Geoffroy, 1762
coloratus Reitter, 1881
flavipes LeConte, 1854
fuscus Olivier, 1789
museorum (Linnaeus, 1761)
olgae Kalik, 1946
pimpinellae Fabricius, 1775
sarnicus Mroczkowski, 1963
scrophulariae (Linnaeus, 1758)
verbasci (Linnaeus, 1767)

Subfamily MEGATOMINAE

Genus *Trogoderma* Dejean, 1821
angustum (Solier, 1849)
glabrum (Herbst, 1783)
granarium Everts, 1898
inclusum LeConte, 1854
variabile Ballion, 1878
Genus *Reesa* Beal, 1967
vespulae (Milliron, 1939)
Genus *Globicornis* Latreille, 1829
rufitarsis (Creutzer, 1796)
Genus *Megatoma* Herbst, 1792
undata (Linnaeus, 1758)
Genus *Anthrenocerus* Arrow, 1915
australis (Hope, 1843)
Genus *Orphinus* Motschulsky, 1858
fulvipes (Guérin-Méneville, 1838)
Genus *Ctesias* Stephens, 1830
serra (Fabricius, 1792)

Subfamily TRINODINAE

Genus *Trinodes* Dejean, 1821
hirtus (Fabricius, 1781)



Family Dermestidae

Keys to British subfamilies, genera and species

- 1 Pronotum broadest in the middle and narrowing towards the base. Body strongly hardened. Length 1.3-1.5 mm. Subfamily Thorictinae.
..... ***Thorictodes heydeni***
Photo by Andreas Herrmann



Pronotum broadest at the base, tapering towards the front. Length 1.5-11 mm.[2](#)



- 2 Antennae thread-like, narrow with the last three or four segments elongate. Males with a weakly pigmented elytra, semi-transparent, similar to some species of Malachiidae. Female wingless, looking like a larva. Subfamily Thyloidiinae. ...
..... ***Thylotrias contractus***

Photo by Andreas Herrmann



female



male

Antennae thickened towards the tip or clubbed.[3](#)



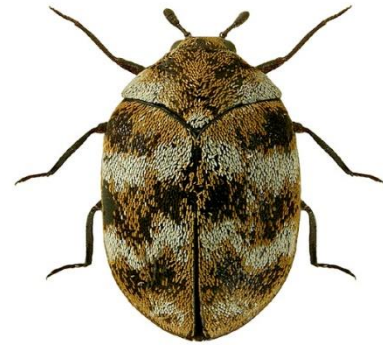
- 3 Frons without an ocellus. Club of the antennae shortly oval or rounded. Body shape characteristic. Length mostly between 6-11 mm. Subfamily Dermestinae.
..... [Genus *Dermestes*](#)



Frons with an ocellus. Length from 1.5-6 mm.[4](#)



- 4 Upper surface covered with scales which lie on the surface. Viewed from the side or below, the margin of the pronotum has a long sharply defined furrow into which the antennae can be placed. Length 1.8-5 mm. Subfamily Anthreninae.
..... [Genus *Anthrenus*](#)



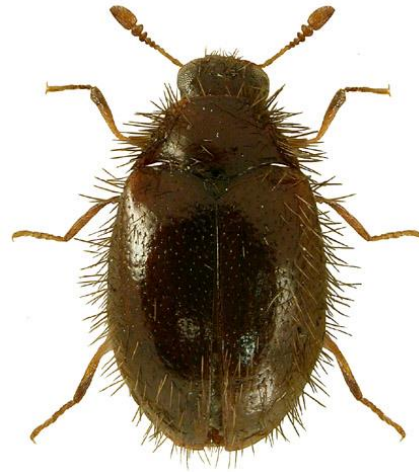
Upper surface with hairs, but often with pale patches or stripes of scale-like hairs.5



- 5 Base of pronotum on each side with a longitudinal furrow bordered with a keel. Upper surface with very long outstanding pubescence. Length 1.5-2 mm. Dark coloured, shining species with antennae and legs pale brown. Subfamily Trinodinae.

..... ***Trinodes hirtus***

S and E England, rare, among spiders' webs under loose bark.



With hairs flat against the surface or with scales or hairless. Base of pronotum without a longitudinal furrow each side.[6](#)



- 6 The head is downwardly pointing and is only partly covered on the underside by the prosternum. The sides of the prosternum do not have furrows to accommodate the antennae. Hind coxae with a tooth-like projection. Length 4-5.5 mm. Subfamily Attageninae.

..... [Genus *Attagenus*](#)

The head is angled towards the rear and is covered by the prosternum up to the mandibles. Prosternum with or without furrows to accommodate the antennae. Front coxae broader than long and more or less sunken into the underside of the beetle. Subfamily Megatominiinae.7



7 Antennae, at least in males with more than three enlarged segments or with more than three segments making up a club.8

Antennae otherwise.9



- 8 More compact species. Upper surface with patches or bands of pale hairs. Prosternum with sharply bordered furrows to accommodate the antennae. Enlarged tip of the antennae more or less grading into the rest of the antennae.
..... Genus *Trogoderma*



- More elongate species. Elytra with a paler band behind the shoulders. Antennae with a distinct club composed of four segments.
..... ***Reesa vespulae***



- 9 Antennae composed of ten segments, the last three of which form a club. Prosternum without sharply bordered furrows to accommodate the antennae.
..... ***Globicornis rufitarsis***



Antennae composed of eleven segments.[10](#)



- 10 Antennae with a distinctly enlarged terminal segment which is at least as long as the three segments before it.

..... ***Orphinus fulvipes***

Photo by Andreas Herrmann

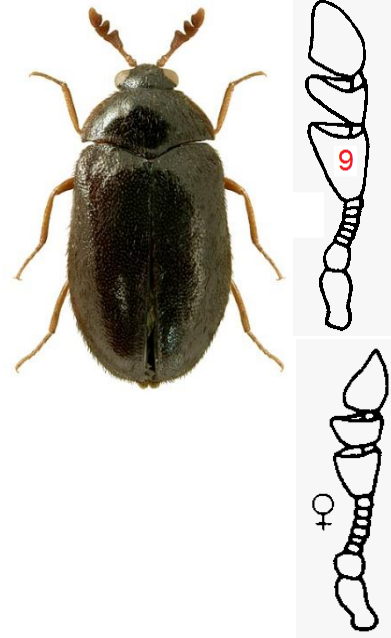


The last segment of the three-segmented club is not conspicuously enlarged.

.....[11](#)



- 11 Elytra without markings produced by varying hair colour. Upper surface shining black with very short curved black hairs. Prosternum with a sharply bordered furrow to accommodate the antennae each side. Club of the antennae asymmetrical; segment nine triangular. Length 3.8-5 mm.
 ***Ctesias serra***



Elytra with markings due to variations in the colour of the hair. Ninth segment of the antennae not triangular.[12](#)



12 Sides of the prosternum only bluntly pressed in. Body elongate oval or cylindrical. Elytra with two bands of white hair (sometimes interrupted) and white patches around the hind angles of the pronotum. Length 3.6-6.5 mm.

..... ***Megatoma undata***

England northwards to Yorkshire; local; in skins, old wool, etc., and bees' nests.



Prosternum with distinct grooves each side to accommodate the antennae. Body more rounded. Elytra with three bands of white hair along with patches at the front around the scutellum and at the extreme tip.

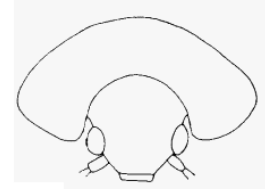
..... ***Anthrenocerus australis***

Photo by Andreas Herrmann



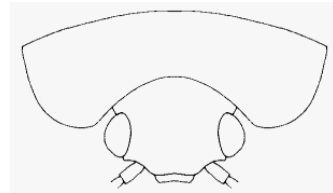
Genus *Dermestes*

- 1 Pronotum strongly domed; front corners projecting so that, viewed from in front the front border approaches a semi-circular shape. Front angles of the pronotum (viewed from in front) appearing right-angled. Underside with dense chalky white hairs which lie on the surface and conceal the cuticle below (in one species densely yellow hairy). Underneath the abdomen, the black patches on the outer border of the segments are always distinct. Subgenus *Dermestinus*.[2](#)



front view

Pronotum gently curved. Viewed from directly above the sides are completely visible (ensure that the front and rear margins are level). Viewed from in front the front margin of the pronotum forms an even curve and then front angles are rounded and obtuse. Underside never chalky white hairy.



Underneath the abdomen, the black patches on the outer border of the segments are indistinct or absent. Subgenus *Dermestes*.[6](#)



2 Sides of the pronotum to a large extent with white hairs which are angled obliquely towards the middle.3

Sides of the pronotum with hairs directed towards the back or otherwise coloured.5



- 3 Tips of the elytra sharply pointed at the suture. Border at the ends of the elytra finely toothed. Variable in colour - black or reddish-brown; antennae reddish-brown. The upper surface has individual pale hairs mixed in with the dark hairs. Hairs denser on the hind margin of the pronotum, shoulders and scutellum; scutellum with yellowish hairs. Length 5.5-10 mm.

..... ***Dermestes maculatus***

The commonest pest species of the genus found on imports to Britain; a serious pest, mainly on animal products (e.g. bones and hides) in commercial premises in England and Wales. Quite rare outdoors, mainly in southern England breeding in carrion. One form (*senex* Germar, 1824) has the paler hairs developed to a much greater extent so that the entire upper surface appears densely grey hairy



- Apex of elytra by the suture without a sharp point. Apical margin more or less smooth.4



- 4 Black species. Antennae and legs reddish brown. Shoulders often also pale reddish-brown. Upper surface with dark and pale hairs intermixed. Head with patches of golden and white hairs. Scutellum with yellowish hairs. Viewed from below, the last segment of the abdomen has black hair at the tip. Length 6-10 mm.

..... ***Dermestes frischii***

One form occurs (*uniformis* Rey 1889) which has dense pale hair. A pest species which is quite often imported on animal material such as bones and dried fish. Sometimes in commercial premises in England, but not a household pest. Very rarely outdoors, mainly in southern England, associated with carrion.



Black species with the basal half of the elytra usually, but not always, reddish brown (referring to the surface under the hair). Antennal club red-brown. Elytra dark hairy with distinct transverse bands of golden-yellow or white scale-like hairs; usually a somewhat broader curved band in the front quarter and 2-3 thin hairy narrow bands, which are often reduced to patches. Exceptionally darker hair replace of the pale golden-brown hairs and then the upper surface appears to be uniformly hairy. Head with whitish hairs like those at the sides of the pronotum. Viewed from below the last segment is uniformly white hairy. Length 6.5-8.5 mm.

..... ***Dermestes carnivorus***

Infrequently imported species. A pest of animal and plant products e.g. skins and nuts. Not recorded outdoors in Britain.



- 5 Club of the antennae velvety black. A black species with the upper surface with patches of dense white hair. The only areas with golden yellow hairs are the scutellum, the rear border of the pronotum and a small spot each side of the middle of the pronotum towards the front. Length 7-9 mm.

..... ***Dermestes murinus***

In Europe the commonest species in the wild, found in dry pastures as well as birds' nests. Common and widespread throughout England as far north as County Durham. On carrion.



Antennae dark reddish brown. Black species with the head and pronotum with reddish-brown to golden-yellow mixed with white and black hairs. Scutellum and a narrow border along the base of the elytra with pale golden-brown hairs; rest of elytra with black and white patches of hairs (as in *murinus*). Length 5-7 mm.

..... ***Dermestes undulatus***

Rare in southern and south-east England, mostly near the coast; on carrion. Not a pest species.



- 6 Hairs on the front half of the elytra forming a broad yellow or greyish band, the hairs so dense that they obscure the black surface underneath. In this band there is a brown wavy line at the extreme front and three small dark spots on each elytron. Back half of the elytra covered with dark hairs. The junction between the two coloured areas is wavy. Length 7-9.5 mm.



..... ***Dermestes lardarius***

Widespread in Britain, but commonest in the south, particularly in the London area. Only a minor household pest, but a nuisance in warehouses and food premises. Prefers animal material, but can survive on vegetable. More rarely found out-of-doors in carrion, wasps' nests, wet birds' nests etc. A native of Britain but occasionally imported.

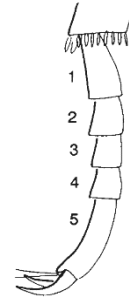
Upper surface covered with the same colour hairs throughout. Hairs not as dense as to obscure the shining surface underneath.7



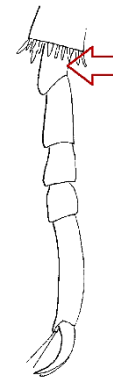
- 7 First segment of the middle and hind tarsi about twice as long as the second segment. Upper surface uniformly dark red-brown to black, with short fine, greyish-yellow hair which extends just beyond the tips of the elytra to form a fringe. Length 7.0-8.5 mm. .

..... ***Dermestes leechi***

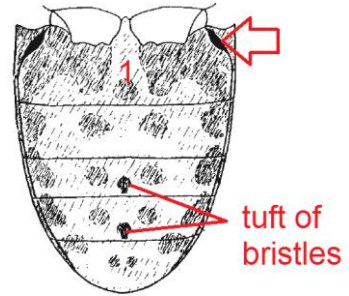
Only found indoors. A single specimen imported to Scotland, in bone grist. Also several found in inner wrappings of an Egyptian mummy in England.



First segment of the middle and hind tarsi shorter than, or about the same length as the second segment.8



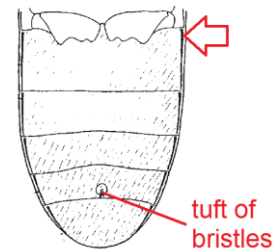
- 8 Base of the pronotum without a border in the middle. Underneath the abdomen, the first visible abdominal segment distinctly curving inwards at the front corners towards the base of the back legs (arrow). Underside mainly with light golden bristles but abdomen with regular patches of darker bristles towards the sides and sometimes each side of the midline. Males with visible abdominal segments 3 and 4 with a tuft of bristles in the middle. Upper



surface with dark hairs with scattered paler yellowish hairs in between, these being denser and more numerous on the scutellum (always), on the pronotum (usually) and on the elytra (sometimes). Length 7-9 mm.
 ***Dermestes ater***

Indoors only. England, Wales and Ireland. A pest on vegetable products such as cocoa beans. Also on animal material e.g. bones and skins.

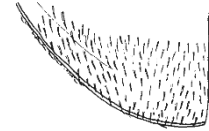
Base of the pronotum completely bordered. Elytra with hairs uniformly pale yellow or with a mixture of dark and lighter ones. Underneath the abdomen, the sides of the first visible segment are almost straight. Underside with the bristles uniformly golden or light brown. Male with a tuft of bristles on abdominal segment 4 only.[9](#)



- 9 Black or blackish-brown species. Pronotum flatter, the sides forming a broad flattened rim; front border very densely punctured and with a fine leathery texture; base only narrowly bordered. Elytra without longitudinal stripes. Hair on the upper surface uniformly grey or yellowish-grey, smooth, lying almost flat on the surface and laterally not extending as a fringe beyond the sides of the elytra so that the border of the elytra is clear; hairs not extending beyond the tip of the elytra. Length 7-10 mm.

..... ***Dermestes peruvianus***

An imported species from South America. Introduced, but has become the commonest pest species of the genus throughout England in domestic premises. First authentic record, 1954. Usually associated with animal products but can live on vegetable material. Very few outdoor records - only in pigeons' nests in London. Photograph by Andreas Herrmann.



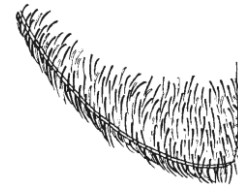
tip of elytron



Dark brown or reddish-brown species. Pronotum convex, with a narrow rim along the sides; without a leathery texture behind the front margin; distinctly bordered at the base. Elytra with distinct longitudinal stripes. Hairs on the upper surface fine and dark reddish-brown or black with isolated thickened pale yellowish hairs in between. Hairs extended at the margin of the elytra to form a thick fringe which obscures the edge of the elytra; fringe also extends beyond the tip. Length 6.5-9.5 mm.

..... ***Dermestes haemorrhoidalis***

Introduced in 1905 and imported at intervals since. Fairly widespread throughout England, but commonest in the south-east, particularly around the London area. Mainly in domestic premises, associated with animal products. Rare out-of-doors in southern England, in carrion, in wet and dry birds' nests.



tip of elytron



Genus *Attagenus*

- Ocellus present on top of the head
- Hind tarsi with the first segment at most half the length of the second
- Club of the antennae composed of three segments with the last segment more distinctly elongate in males than females

- 1 Elytra dark with a distinct band or with spots of pale hair.[2](#)
Photos by Andreas Herrmann.



Elytra appearing uniform in colour; hairs variable in colour but if light coloured ones are present they are scattered and do not form a distinct band or spots.[3](#)



- 2 Elytra with a transverse band of paler hair just before half way, usually extending across the suture.

..... ***Attagenus fasciatus***

A pest of stored animal and vegetable products, e.g. furs, skins and seeds.
Photo by Andreas Herrmann.



- Elytra with three transverse bands of paler hairs along with a few hairs at the extreme base and tip.

..... ***Attagenus trifasciatus***

Image by U Schmidt, http://www.kaefer-der-welt.de/attagenus_trifasciatus.htm



- Elytra with two distinct rounded or oval spots of white hair in the middle near the suture and with two or three white spots on the side nearer the front. Pronotum also with white patches of hair. Length 3.7-6.0 mm.

..... ***Attagenus pello***

The commonest species of the genus; widespread but commonest in the south. Outside on flowers and also indoors as a pest in houses and commercial premises on wool, fur, cereals etc.



- 3 Lower surface of the middle femur with a very sharp keel along the front edge, but without a distinct keel along the back edge. Prosternum either narrow in front of the front coxae, or wide but with posterior part very strongly vertical. Upper surface yellowish to reddish-brown + black or uniformly yellowish to dark brown. Length 2.3-4.2 mm.4

Lower surface of the middle femur with keels along the front and rear edges of equal strength (like those on the front femora). Prosternum wide in front of fore coxae, the posterior part only weakly vertical. Upper surface yellowish or reddish brown to black, sometimes with the pronotum darker than the elytra. Length 2.8-5.0 mm.5



- 4 Body surface uniformly yellowish-brown to dark brown; antennae and legs paler brown. Prosternum (the plate between the head and front legs under the pronotum) broad with the back section bent vertically to form a transverse, razor-like edge in front of the front coxae. Second segment of the front tarsus in males about equal to the fifth segment. Length 2.5-4.2 mm.



male

female

..... ***Attagenus cyphonoides***

Imported species. A pest of stored products such as furs, skins, bones, cereals etc. Photo by Andreas Herrmann.

Elytra yellowish brown in females to reddish brown in males. Head, pronotum, scutellum and underside black to very dark brown; antennae and legs light brown. Prosternum narrower, not bent to form a razor-like edge in front of the front coxae. Second segment of the front tarsus in male about half as long as the fifth. Length 2.3-4.0 mm.



..... ***Attagenus smimovi***

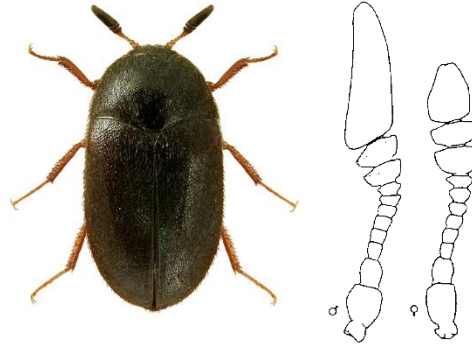
Rare in SE England; first recorded in 1978 but now established in a small area in and around London. Recorded from domestic premises and a museum. Found out-of-doors in the same area, on or near privet.



- 5 Last segment of the male antenna 2.8-3.4 times length of the two segments below it; last three segments in male and last segment in female darker than the rest of the antenna. Male body 7.9-11.8 times longer than the last segment of the antenna. Upper surface reddish brown to black. Length 2.8-5.0 mm.

..... ***Attagenus unicolor***

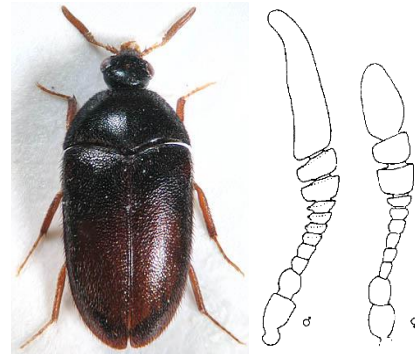
Few British records from domestic and commercial premises in the north, south and midlands of England on wool, fur and skins etc.; also in mills and bakeries etc. Scotland. Sometimes imported on flour, oilcakes, bones etc.



Last segment of the male antenna more elongate, 3.0-4.2 times the length of the two segments below it; last three segments sometimes the same colour as the rest of the antenna (yellowish brown to dark brown, but last segment may occasionally be darker). Male body 5.7 to 8.4 times longer than the last segment of the antenna. Upper surface yellowish or reddish brown to black. Length 2.9- 5.0 mm.

..... ***Attagenus brunneus***

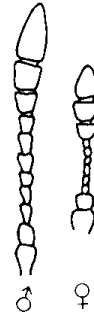
Recently introduced into southern England in the London area – in commercial premises, infesting felt and carpets. Photo by Andreas Herrmann.



Genus *Trogoderma*

Easily distinguished by the form of the antennae. Antennae (at least in males) with more than three enlarged segments often united as a club. Sides of the prosternum with well-defined grooves to accommodate the antennae. Upper surface with hairs of two or more colours, usually with bands of paler scale-like hairs. Length 1.8-5 mm.

- 1 Pronotum with a dull leathery texture. Hairs on the upper surface strong. Body twice as long as broad or longer. Male: eyes almost hemispherical; antennae without a spindle-like club. Female usually noticeably larger than the male.
..... *Trogoderma angustum*



Upper surface shining, especially the pronotum, thinly hairy. Body shorter oval, less than twice as long as broad. Male: eyes less bulging; antennae paler, at least at the base with the last segments forming a spindle-like club.

.....[2](#)



2 Elytra mottled with black and golden-brown areas, sometimes forming bands. Head and pronotum black.3

Photos by Andreas Herrmann.



Head, pronotum and elytra uniformly coloured, either black or orange brown. Pale hairs on the elytra sometimes dense enough to form indistinct patterning.4



- 3 Underneath the beetle the first visible segment of the abdomen has a distinct line running from each coxa to the back of the segment (the postcoxal line).

..... ***Trogoderma inclusum***

Usually on imported produce such as rice, flour, dried fruit etc. Only a minor pest. Photo by Andreas Herrmann.



Underneath the first visible segment of the abdomen lacks a postcoxal line.

..... ***Trogoderma variabile***

First found in England in 1978 (Thompson, 1778) associated with manufacturing premises dealing with milk powder, grain and cereals. Reported by Holloway & Turner (2019) from indoors in North Devon. Now probably distributed all round the world but appears to require temperatures of around 30°C to thrive, so unlikely to be that common in Britain. Photo by Andreas Herrmann.



- 4 Completely pale or (more commonly) two-coloured. Head and pronotum brown. Elytra pale yellowish-brown or reddish-yellow with rather indistinct darker patches. Upper surface almost completely covered with yellowish hairs with small areas of black hairs. Antennae composed of 11 segments (exceptionally 9-10 segmented, particularly in females), with the last 4-5 segments enlarged and united to form a spindle-like club (some females may be more indistinctly clubbed with only three segments). Length 1.7-3 mm.



..... ***Trogoderma granarium***

According to Handel almost cosmopolitan. Known as the Khapra Beetle, it is a notorious pest of stored products, particularly the malt silos of breweries. Because a temperature of above 17°C is required for larval development it is only found indoors.

Black species. Elytra paler only at the tip and behind the shoulders. Upper surface with a mix of black and white hairs, the paler hairs forming indistinct transverse bands. Tibiae, tarsi and antennae reddish yellow; club of the antennae sometimes darkened. Length 2-4.2 mm.



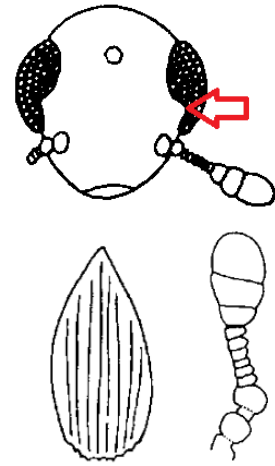
..... ***Trogoderma glabrum***

Holarctic species. Widely distributed in central Europe in warm locations. Commonly developing in the nests of solitary bees. Adults found sunning themselves on walls and on flowers.



Genus *Anthenus*

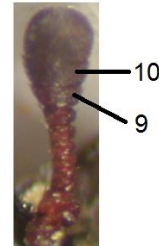
- 1 Front inner margin of the eyes curved inwards. Antennae with 11 segments. Scales shorter and broader. Subgenus *Anthrenus*.[2](#)



Eyes oval, evenly rounded. Antennae with 5-11 segments. Scales longer. Subgenus *Florilinus*.[4](#)



- 2 Sides of the pronotum viewed from above evenly narrowing towards the front, not flattened in the area behind the antennal furrows. Ninth segment of the antennae clearly shorter than the tenth. Scales black, brownish-yellow and white, very similar in coloration to *verbasci*. There is usually a small patch of white scales on the front angle of the pronotum and two patches on each side in the posterior half which sometimes run into one another. Each elytron has about nine white patches of scales, one at the base, three patches further back which are sometimes joined to form a transverse band and five in the posterior half. Length 2.0-3.5 mm.
 ***Anthrenus flavipes***.



Almost worldwide in distribution, common in the Mediterranean basin and transferred with imported produce to central Europe. Larvae feed on keratinous substances.
 Photo by Andreas Herrmann.

Sides of the pronotum more gently narrowing towards the front and somewhat angled, flattened in the area around the antennal furrows.[3](#)



- 3 First segment of the antennal club as long as the second. Elytra with a broad pale transverse band of scales in the front half and with orange scales extending no more than half way up the suture. Length 2.0-4.5 mm.

..... ***Anthrenus pimpinellae***

Bought in with imported products such as dried fish, woollens.



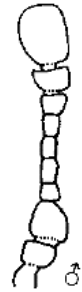
First segment of the antennal club much shorter than the second. Elytra without a broad pale transverse band but tending to have a strip of orange scales right up the suture to the pronotum. Length 2.0-3.8 mm.

..... ***Anthrenus scrophulariae***

A rare import, mainly on animal products.

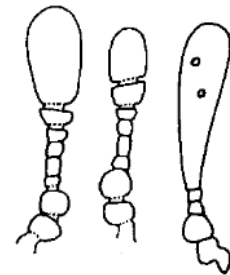


- 4 Antennae with a club composed of three segments; the last two segments are sometimes indistinctly divided.5



Antennae with a club composed of one or two segments.

.....7



- 5 Antennae with nine segments. Underneath the first visible abdominal segment has no line running from the hind coxa. Elongate oval more reddish brown species. Antennae and legs often yellowish. Scales about 1.5 times as long as wide.6



Photos by Andreas Herrmann.

Antennae with 11 segments, the club of three segments. Underneath the first visible abdominal segment has a black oblique line each side running from the hind coxa to the back of the segment (shown by orange arrow). Scales relatively longer. Sides of the pronotum only very weakly rounded, narrowing almost straight towards the head. Upper surface with black, brownish-yellow and white scales, the brownish-yellow ones being most abundant and the black scales covering only small areas. White scales present along the sides and hind angles of the pronotum and a small cluster over the scutellum. Elytra with three white transverse bands of which the middle (and occasionally the front one) may be split into two or three separate patches. Length 1.7-3.5 mm.

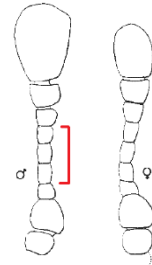


..... ***Anthrenus verbasci***

Found outside and indoors. The most common species in Britain occurring as a pest in insect collections and of woollen goods, particularly in SE England. In the wild larvae are found in the nests of birds and mammals while adults may be seen feeding on pollen and nectar.



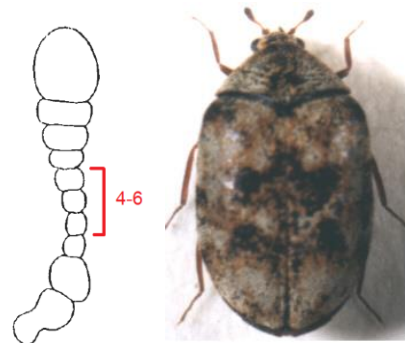
- 6 Antennae with nine segments with segments 4-6 elongate. Underneath the abdominal segments are not uniform in colour, being whitish on the first segment and segments 2-5 with the front scales yellow and the back scales white and with small patches of dark scales at the sides. Length 1.8-2.5 mm. Upper surface with white, golden and often dark brown scales. Middle part of the pronotum golden (rarely dark brown), white scaly on the hind corners, more or less spreading up the sides. Scales on the elytra golden with three more or less complete white zig-zag bands; the golden scales on the elytra may be intermixed with brown ones. Length 1.8-2.5 mm.



..... ***Anthrenus coloratus***

Occasional records since 1944, but not established. Photo by Andreas Herrmann.

Antennae usually with ten segments (in some males appearing nine-segmented as segments 6 and 7 may be partly joined); segments 4-6 less elongate. Underneath the abdominal segments are uniformly covered with greyish-white scales. Length 2.6-3.2 mm. Upper surface with the scales usually mainly light grey, but with some black ones forming a marking across the suture.



..... ***Anthrenus sarnicus***

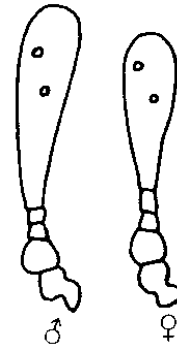
First recorded in 1963 with a few scattered records since from private houses, commercial premises and museums. A pest on woollens and on collections of birds, mammals and insects. Has been recorded outdoors at flowers and in nests of sparrow and pigeon. Photo by Andreas Herrmann.



- 7 Antennae composed of eight segments, including a club of two segments.
The antennal furrow occupies half of the side of the pronotum.8

Antennae composed of only five segments with the last segment greatly elongate. Scales shortly triangular. The antennal furrow takes up half the length of the side of the pronotum in males and up to two-thirds the length in females.

..... ***Anthrenus fuscus***



- 8 Predominantly black species with the antennae, tibiae and tarsi yellowish red. Last segment of the antennae in males and two last segments in females clearly darkened. Pronotum with large black scaly area in the centre. Upper surface with black, brownish-yellow and white scales. The white scales are quite extensive on the hind angles and base of the pronotum. On the elytra there are three narrow and often incomplete pale transverse bands, with isolated pale scales in the areas in between. Scales on the elytra mainly short and almost triangular. Length 2.2-3.6 mm.



..... ***Anthrenus museorum***

Widely distributed in the Holarctic. Common in central Europe. Mainly in south-eastern England but a few records from further north and west. Found on accumulations of dead insects near spiders' webs. Very rarely as a pest in museums.

More of a brown species. Pronotum uniformly pale or somewhat darker in the middle, but without black scales. (Note that if the scales are rubbed off the central area, it can look like it has a central dark patch). Antennae usually completely pale. Transverse bands on the elytra white with the areas in between with yellow-brown scales. Scales on the elytra longer before tapering to a point. Elytra with three bands of scales of which the front one is broadest; behind these is a small pale apical spot. The middle and posterior bands may be interrupted. Smaller species, 1.7-2.9 mm.



..... ***Anthrenus olgae***

First found in SE England in 1984 at two localities – a house and a museum. Abroad often confused with *museorum* and there sometimes occurring as a pest of insect collections.

