

## Keys to the British species of Tribe Harpalini (Coleoptera, family Carabidae)

Head with a distinct bristle above each eye (supra-orbital seta). The mandibles lack a seta in the outer furrow. Antennae inserted on the side of the head, between the eyes and the base of the mandibles; antennae with fine hairs from the third or fourth segment onwards and with segments 1-2 or 1-3 with only an apical ring of setae. Last two segments of the labial palps unequal in size. Upper surface smooth or hairy. Epipleura of the elytra simple. Abdomen with six visible sternites.

A world-wide group with a very wide range of forms – more than 2500 species classified in around 250 genera and subgenera. The arrangement of the Palaearctic genera into five subtribes has been recognised by many authors

### Checklist

The checklists through the key are from the Checklist of Beetles of the British Isles, 2012 edition, edited by A. G. Duff (available from [www.coleopterist.org.uk/checklist.htm](http://www.coleopterist.org.uk/checklist.htm)).

- Genus **ACUPALPUS** Latreille, 1829
- Genus **ANISODACTYLUS** Dejean, 1829
- Genus **ANTHRACUS** Motschulsky, 1850
- Genus **BRADYCELLUS** Erichson, 1837
- Genus **DIACHROMUS** Erichson, 1837
- Genus **DICHEIROTRICHUS** Jacquelin du Val, 1855
- Genus **HARPALUS** Latreille, 1802
- Genus **OPHONUS** Dejean, 1821
- Genus **SCYBALICUS** Schaum, 1862
  - oblongiusculus*** (Dejean, 1829)
- Genus **STENOLOPHUS** Dejean, 1821
- Genus **TRICHOCELLUS** Ganglbauer, 1892

### Source Material

Lindroth, C.H. (1974) Coleoptera, Carabidae. Handbooks for the identification of British insects, volume 4, part 2. London: Royal Entomological Society.  
Wrase D.W. (2004) and Jaeger, B. (2004) in Die Käfer Mitteleuropas, Volume 2, Spektrum Akademischer Verlag.

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## Key to the British genera of tribe Harpalini

### Species keys

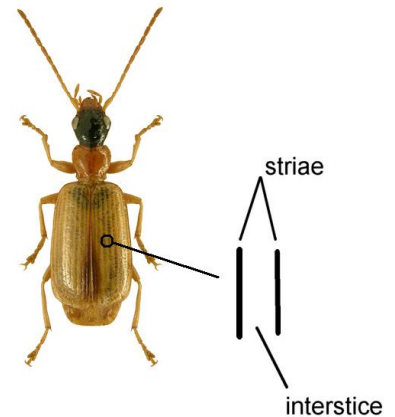
- Genus **ACUPALPUS** Latreille, 1829  
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## Key to the subtribes of tribe Harpalini



## Key to the British genera of tribe Harpalini

- 1 All interstices on the elytra hairy, containing at least a row of punctures with a short bristle from each. ..2  
Check this carefully as the bristles in the interstices may be very short.  
The striae are sometimes not well developed. If the elytra appear generally hairy follow this lead.



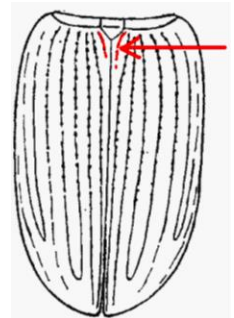
Elytra without hair (except for short bristles at the edge and/or isolated punctures bearing short bristles on interstices one to three) OR with only the outer interstices hairy. ....6



- 2 Elytra without abbreviated scutellar stria. ....  
..... Genus *Dicheirotichus*



- Elytra with clear abbreviated scutellar stria. ....3



- 3 Elytra with a distinct pattern of dark and pale.  
Pronotum metallic, darker than the head, rear part of  
the elytra with a darkened, rather heart-shaped  
patch. ....  
..... *Diachromus germanus*



Elytra uniform in colour, dark (or slightly paler along the suture). .....4

- 4 Head hairless (except for supra-orbital setae - above the eyes). .....  
..... Genus *Harpalus* (subgenus *Pseudophonus*)



Frons and temples densely hairy; hairs tending to lie on the surface. ....5



- 5 Basal margin of elytra curved level with the third stria.  
Elytra with transverse microscopic sculpture. ....  
..... ***Scybalicus oblongiusculus***

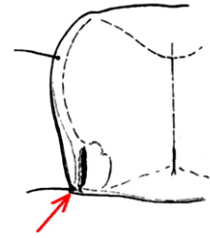
Old records from the Dorset coast but considered extinct until it turned up in the Thames estuary in 2002.



- Basal margin of elytra straight, their microscopic sculpture net-like or more or less absent. ....  
..... Genus *Ophonus*



- 6 Pronotum with a bristle at hind angle (if broken off the point of attachment is still visible, though sometimes difficult to see. Eyes hairy. ....  
..... Genus *Trichocellus*



Pronotum without a bristle at the hind angle. Eyes without hairs. ....7



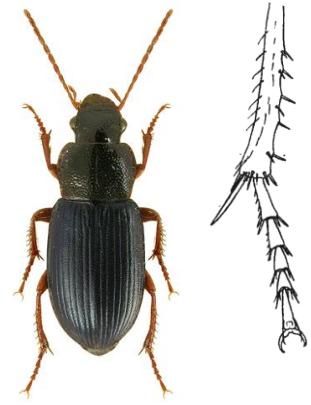


7 Base of pronotum with a raised bead (sometimes fading in the middle).  
Length 5.3 mm. or more. Elytra not iridescent. ....7

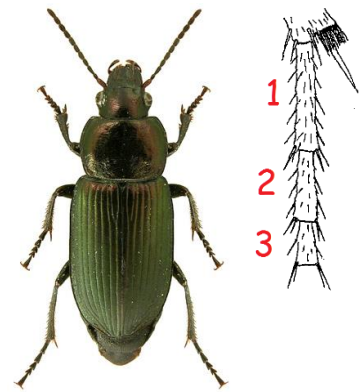
Pronotum with basal bead absent or developed towards the sides only. If  
longer than 5.2 mm. then with the elytra strongly iridescent. ....8



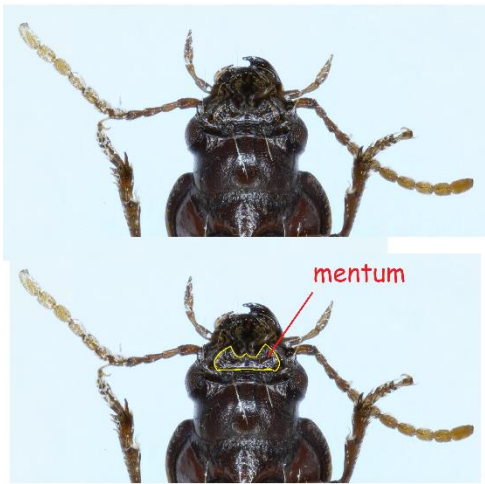
- 7 First segment of hind-tarsi clearly shorter than the second and third segments combined. Frons without a differently coloured marking. Males with segments 1-4 of the front and middle tarsi indistinctly to clearly broadened with two rows of scale-like hairs on the underside. ....  
 ..... Genus *Harpalus*



- First segment of hind-tarsi as long as the second and third segments combined. Frons sometimes with a reddish-purple marking which may be divided in the middle. Males with at least segments 2-4 of the front and middle tarsi moderately to distinctly broadened with a dense brush-like “sole” of scales on the under-surface. ....  
 ..... Genus *Anisodactylus*



- 8 Antennae entirely pale. Viewed from below the mentum has a central tooth. Elytra without a coherent microscopic sculpture and not iridescent. Body convex. ....  
 ..... Genus *Bradycellus*



- Antennae dark with the base pale. Mentum without a tooth. Elytra more or less iridescent due to transverse microscopic sculpture (except in *Acupalpus meridianus*, which has the base of the elytra abruptly pale). Body flatter. ....9



- 9 Length 5 mm. or more. The row of marginal elytral punctures with pronounced gap posteriorly. ....  
..... Genus *Stenolophus*



- Length 4.5 mm. or less. Marginal row of punctures on the elytra more or less continuous near the tip. ....10



- 10 Pronotum with the sides curving outwards towards the base; hind angles sharp to right angled. Antennae long and slender. Abdomen conspicuously hairy. Head black. Pronotum often paler, reddish, or with pale margins. Elytra orange-brown, elongate, parallel-sided, each with oblong dark patches which may expand so as to leave only shoulders and margins pale. Length 3.8-5 mm. ....

..... ***Anthracus consputus***

Among grass and leaves in shaded places at the margin of ponds; also on the coast. England northwards to Yorkshire. Locally abundant. This species may possibly be confused with *Badister sodalis* but that species has asymmetric mandibles.



Pronotum shorter with the sides curving more or less evenly from the front to the hind angles; hind-angles rounded. Abdomen only with short, sparse hair. ....

..... ***Genus Acupalpus***



## Genus *Acupalpus*

Placed in subtribe Stenolophina with genera *Dicheirotichus*, *Trichocellus*, *Stenolophus*, *Bradycellus* and *Anthracus*. This genus differs from the others in this group by the absence of a tooth on the mentum, the upper surface lacking hairs and their small size (< 4.7 mm). It differs from *Stenolophus* through the lack of a keel on the outer surface of the first three segments of the hind tarsus and that males have the fourth segment of the front tarsus much more weakly dilated and not particularly bilobed. The rounded hind angles of the pronotum differentiate it from genus *Anthracus*.

Worldwide the genus is divided into eight subgenera and includes about a hundred species. 36 species have been described in the Palaearctic with eleven known from Central Europe and eight from the British Isles. The central European species belong to subgenus *Acupalpus* s.str. except for *A. interstitialis* which is in subgenus *Ancylostria*.

All species overwinter as adults and mating takes place in the spring.

Genus **ACUPALPUS** Latreille, 1829

***brunnipes*** (Sturm, 1825)

***dubius*** Schilsky, 1888

***elegans*** (Dejean, 1829)

***exiguus*** Dejean, 1829

***flavicollis*** (Sturm, 1825)

***maculatus*** (Schaum, 1860)

***meridianus*** (Linnaeus, 1761)

***parvulus*** (Sturm, 1825)



## Key to British species of genus *Acupalpus*

- 1 Very shiny dark species, the elytra without microscopic sculpture. Pronotum with punctures right across the base and with the mid-line marked by a distinct groove along its whole length. Striae of the elytra with small, fine punctures in the basal half. Pronotum often dark reddish-brown; elytra with a long, oblique reddish patch on each shoulder; reddish along the suture; femora and tip of tibiae often slightly darkened. Pronotum more constricted towards the rear than in all other species. Length 3.2-3.8 mm. ....

..... ***Acupalpus meridianus***

In open, often agricultural country on clay or sandy soils. A spring species. England northwards to Yorkshire. Wales. Common in the south.



Elytra more or less iridescent due to very dense transverse microscopic sculpture. Pronotum with punctures at the base only at the sides or without punctures altogether. Striae of the elytra smooth. ....2



2 Elytra without a dorsal puncture. ....3

Elytra with a dorsal puncture on the third interstice beyond the middle which touches the second stria. ....4





- 3 Body more or less uniform in colour, very dark brown to black. The following areas may be a little paler: suture (at least towards the tip), extreme edges of pronotum and elytra, sometimes elytra generally, particularly at the tip. First segment of the antennae alone pale. Basal depressions of the pronotum rather deep and covered with punctures. Length 3.0-3.5 mm. ....

..... ***Acupalpus brunnipes***

Among moss and other vegetation near water. Rare in England: Dorset and SW Hampshire, Surrey, Hertfordshire, south Wales.



Black species with the pronotum dark reddish-brown; elytra dark brown with the base and suture reddish. Antennae with the first two segments pale. Pronotum with shallow basal depressions without punctures. Length 2.6-3.5 mm.

..... ***Acupalpus flavicollis***

Near fresh, often running water on fine, moist sand with short, sparse vegetation; also on cliffs. Rarely on peat. Local. Cornwall to Kent, Surrey and scattered records northwards to Yorkshire.



- 4 Pronotum bright reddish, sometimes with a dark spot in the middle, strongly contrasting against the black head and the dark markings of the elytra; elytra 2-coloured. ....5



Pronotum from black to brown, often with paler margins, not distinctly contrasting against the head and the background colour of the elytra; elytra uniformly coloured or with paler patches at the shoulders. ....6



- 5 Pronotum sometimes darkened in the middle. Sometimes with a black streak along the ninth interval of the elytra. Eyes moderately bulging. Pronotum rounded equally towards the front and back. Male front tarsi more distinctly broadening, the fourth segment more distinctly lobed. Male internal sac of the aedeagus contains 12-15 chitinous prickles. Length 3.5-4.7 mm. ....



..... ***Acupalpus elegans***

Confined to saline habitats on the coast. Saline lagoon margins on the Isle of Sheppey. Rare **probably extinct** (last certain record 1875, though a possible record in 1952 exists). Note that the external characters given here do not separate these species with any certainty and they are only securely differentiated by dissection of males. Aedeagus photographs from Lompe (2010)

Head and middle of the pronotum black. Middle of the elytra with a black marking which often extends onto the shoulders over the fifth and sixth interval; suture pale. Pronotum broadest at about the front third and from there narrowing almost straight to the hind angles thus not equally narrowing to front and rear. Male with the fourth segment of the front tarsus only notched at the tip. Male internal sac of the aedeagus with 7-9 chitinous prickles which are relatively larger. Length 3-4 mm. ....



..... ***Acupalpus parvulus***

At the margin of all kinds of fresh, sometimes acidic waters, where the soil is moist and the vegetation lush. Northwards to southern Scotland. Locally abundant.



6 Length 3-4 mm. Elytra with clearly delimited pale shoulder patches. Pronotum much broader than the head, with margins more or less narrowly pale. Rather flat. Much varying in colour; pronotum from entirely reddish to black with narrowly pale margins; antennae with first, rarely also second, segment pale. Pronotum usually with the hind angles somewhat distinct; depressions at the base of the pronotum at most very sparsely punctured. ....7



Length 2.5-2.7 mm. Elytra more uniform in colour without paler shoulder patches, but usually with suture paler (rarely the entire base paler). Pronotum narrower without pale margins. ....8



- 7 Pronotum black in the centre with quite a broad pale margin. Legs yellowish-brown. Male inner aedeagal sac with 7-9 large chitinous prickles. ....

..... ***Acupalpus parvulus***

At the margin of all kinds of fresh, sometimes acidic waters, where the soil is moist and the vegetation lush. Northwards to southern Scotland. Locally abundant.

*Acupalpus maculatus* (Schaum, 1860) added in Telfer (2003) will probably key to here (*Acupalpus maculatus* Schaum, 1860: another carabid new to Britain from Dungeness. The Coleopterist 12: 1-6).



- Pronotum mostly black with only a narrow pale border. Legs mostly dark brown-black. Male inner aedeagal sac without prickles. ....

..... ***Acupalpus maculatus***



- 8 Entire body brown, the head and abdomen somewhat darker; legs pale or with tibiae faintly darkened at the tip. Pronotum often indistinctly darker at the middle and base; elytra usually darker apically, except pale along suture. Pronotum with rather deep basal depressions. Length 2.5-2.7 mm. ....

..... ***Acupalpus dubius***

On moist and shady places, e.g. among leaves and moss in marshes and at the margin of forest pools. Widely distributed but much commoner to the south. Locally abundant.



Body almost black, uniformly coloured except narrowly reddish along the suture; tibiae largely dark. Head in comparison to the pronotum, wider than in any other species. Depressions at the base of the pronotum shallow. Length 2.2-2.8 mm. ....

..... ***Acupalpus exiguus***

In moist, somewhat shady places, on sand, mud and clay among debris near water; often coastal. England northwards to Cumbria. South Wales. Local and not common.



## Genus *Anisodactylus*

A holarctic genus with about 55 species in ten subgenera; about 17 Palearctic species. Pronotum without a bristle in the hind angle. Frons with a transverse or forked reddish marking on the frons which is usually distinct.

Genus ***ANISODACTYLUS*** Dejean, 1829

***binotatus*** (Fabricius, 1787)

***nemorivagus*** (Duftschmid, 1812)

***poeciloides*** (Stephens, 1828)

- 1 Upper surface with a metallic, usually green or brassy shine (rarely bluish). Apical spur of front tibia divided into three. Legs and antennae dark, except the first segment of the antennae which is reddish, at least underneath. Front femora swollen in the male.

Length 10-13.5 mm. ....

..... ***Anisodactylus poeciloides***

In coastal salt-marshes from Cornwall along the south coast and north to Essex. Local.



Upper surface non-metallic black. Spur at the tip of the front tibia undivided. ....2



- 2 Elytra with punctures and hairs on only the outermost 2-3 interstices. Shoulders angled. Legs completely reddish. Legs pale. Flattened area along the side margin of the pronotum becoming much narrower towards the front; hind angles less prominent. Elytra with the side margin curving near the tip rather more distinct. Length 8-10 mm. ....

..... ***Anisodactylus nemorivagus***

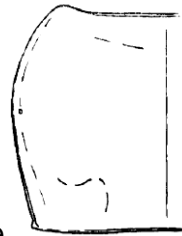
In drier places, on dry sandy heaths. England: Dorset to Middlesex, Norfolk. Wales: Glamorgan. Rare.



Elytra with punctures and hair over all interstices at least towards the tip. Shoulders rounded. Legs usually dark (rarely pale). Head with two distinct reddish spots. Antennae with the first 1 or 2 segments reddish; palps and tarsi pale. Pronotum with the depression along the side margin hardly narrowing in the front half; hind-angles with a small tooth. Length 10-12.8 mm. ....

..... ***Anisodactylus binotatus***

Rather moisture demanding, occurring in open grassland on clay soils, mostly near water; also on arable land. Only common towards the north, but widely distributed.





## Genus *Anthracus*

Characterised within subtribe Stenolopina by the absence of a tooth on the mentum, hairless underside, small size (2.2-4.7 mm) and the sharply-angled hind angles of the pronotum. Differentiated from *Acupalpus* by the sharply-angled hind angles of the pronotum, the prosternum with long hairs and the distinctly hairy last sternite of the abdomen.

The genus includes 28 species from the Palaearctic, Nearctic, Afrotropical and Oriental regions. 15 species are found in the Palaearctic of which three are found in Central Europe and only one in Britain.

### *Anthracus consputus* (Duftschmid, 1812)

Eyes distinctly semi-circular. Head not particularly broad. Pronotum distinctly broader than long (at least 1.25 times broader). Sides of the pronotum shortly concave immediately in front of the hind angles. Head black or brownish-black except for the paler reddish mouthparts. Pronotum brownish red, usually with the middle darker. Elytra pale reddish or yellowish-brown with an elongate oval blackish-brown marking which extends over the first interval and the sides (usually over the seventh or eighth interval). Underside dark with the sternites and rarely the pronotum paler reddish. Antennae distinctly darkened from the second or third segment onwards. Legs yellow or pale reddish brown. Front tarsi in males not dilated, scarcely different from females. Last sternite with four longer bristles on the hind margin in both sexes. Length 3.8-5.1 mm.



## Genus *Bradycellus*

Distinguished from the other genera in subtribe Stenolophina by the hairless underside and the presence of a tooth on the mentum. Like the related genera *Dicheirotrichus* and *Trichocellus* males have a densely hairy depression on the second and third sternite. A Holarctic genus with around 125 species grouped into nine subgenera. A few Nearctic species have been included but their taxonomic status has not been properly checked. In the Palaearctic there are around 52 known species of which seven are found in Central Europe. All these belong to subgenus *Bradycellus*, although some authors have suggested that *ruficollis* is placed in its own subgenus (*Tetraplatypus* Tschitschérine). A few of the species cannot be safely distinguished using external features and a cleared preparation of the male aedeagus needs to be made in order to examine the inner sac which is species-specific – compared below.

Genus **BRADYCELLUS** Erichson, 1837

***caucasicus*** (Chaudoir, 1846)

***csikii*** Laczó, 1912

***distinctus*** (Dejean, 1829)

***harpalinus*** (Audinet-Serville, 1821)

***ruficollis*** (Stephens, 1828)

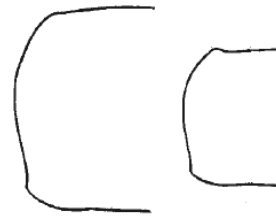
***sharpi*** Joy, 1912

***verbasci*** (Duftschmid, 1812)



© Mike Hackston (2019) adapted from Lindroth (1974), Wrase (2004) and Baehr (2004)

- 1 Hind angles of the pronotum more or less obtuse and rounded at the extreme tip but always well defined, sides in front of them curving inwards, though often faintly so. ....2



Hind-angles of the pronotum entirely rounded, virtually obsolete; sides not concave just in front of the hind-angles. ....5



- 2 Length 2.5-3.4 mm. Elytra almost black with suture distinctly reddish. Front and middle tarsi moderately dilated in the male with scale-like adhesive hairs on the underside. Dark brown to black with the pronotum often paler. Pronotum with deep basal depressions which are more or less punctured. Elytra with the scutellar stria complete.



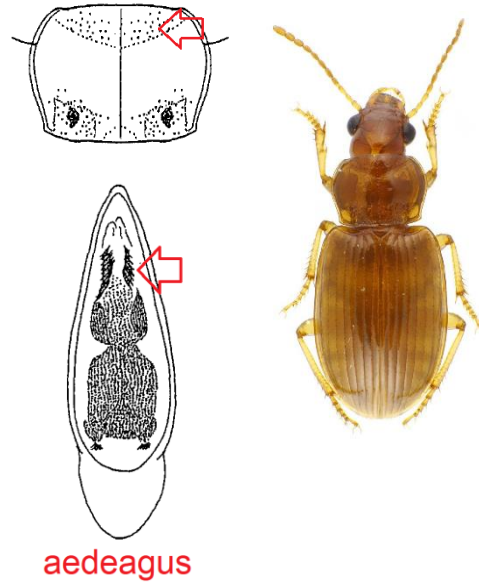
..... ***Bradycellus ruficollis***

Under *Calluna* on sand, gravel or peat. Often together with *B. caucasicus*.  
Common and widespread.

Length at least 4 mm. Elytra uniform in colour or with the suture indistinctly paler. Only the front tarsi are dilated in males. ....[3](#)



3 Pronotum with fine but distinct punctures near the front margin which are only slightly smaller than those in the basal depressions. Elytra without a dorsal puncture. Dark brown-reddish, usually slightly paler on the head, pronotum and along the suture. Pronotum and elytra very convex. Pronotum less constricted towards the rear than in *sharpi*; pronotum with rather strong punctures near the rear margin all along. Occurs in a short-winged or normal-winged form, but British specimens investigated have been short-winged. Length 4-4.5 mm. Aedeagus with a toothed structure in the internal sac. ....



..... ***Bradycellus distinctus***

Seems to prefer sandy soil often coastal. Scattered records in England and Wales from the south coast to South Yorkshire. Very local.

Pronotum smooth towards the front margin although sometimes clearly wrinkled (see couplet 4b) or with a few punctures. Elytra with a dorsal puncture just beyond half-way on the third interval, adjoining the second stria (not very obvious – needs searching for and in rare cases it is missing).

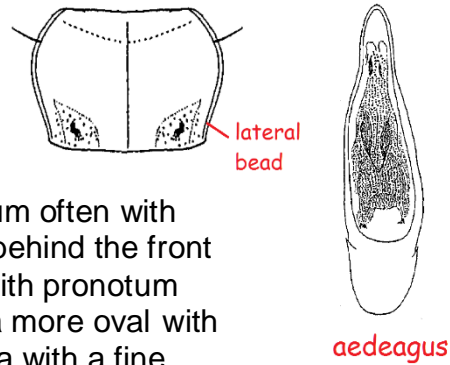


Aedeagus lacking a toothed structure in the internal sac - if with a faint indication then the aedeagus is longer and more tapered. ....4

Photograph Mike Hackston



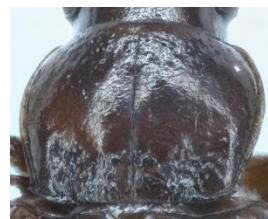
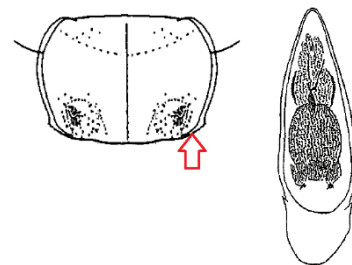
- 4 Wings quite reduced. General colour dark brownish-black (darker than in *distinctus*). The lateral bead running parallel to the side margin of the pronotum does not continue around the hind angle; transition from the sides to the base more angular. Pronotum often with isolated coarse punctures on each side behind the front margin. Head and pronotum narrower with pronotum more narrowed towards the base. Elytra more oval with narrower shoulders; intervals of the elytra with a fine meshed microscopic sculpture orientated at right angles to the axis of the beetle. Suture indistinctly pale. Metepisterna shorter. Male aedeagus comparatively large and more tapered, the internal sac with a characteristic fine structure Length 4.0-5.5 mm. ....



..... ***Bradycellus sharpi***

Under leaves and moss in shaded places, usually near water. Locally very common in the south of England, but with records extending to northern Scotland.

Wings always complete. General colour more reddish-brown. Lateral bead of pronotum extends around the hind angle onto the rear edge; transition from the sides to the base more rounded. Pronotum often with a few isolated coarse punctures on each side behind the front margin. Elytra often darkened towards the tip, except along the suture. Elytra more parallel-sided at middle and broader over the shoulders; intervals of the elytra smooth, without a fine microscopic sculpture even at 50x magnification. Metepisterna much longer than their width at the front. Male aedeagus squatter, the internal sac with a different fine structure. Length 4.5-5.2 mm. ....



..... ***Bradycellus verbasci***

Usually on sandy or gravelly soil. Often attracted to light. Common and widely distributed throughout Britain. The front half of the pronotum is sometimes wrinkled – photograph on the left by Mike Hackston.



5 Pronotum dark brown to almost black, more or less clearly pale all around the edge. ....6

Pronotum uniformly reddish-brown to brown or with a quite indistinct darker area in the middle or towards the rear. ....7



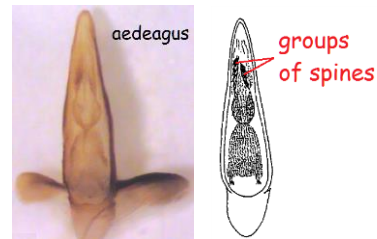


6 Eyes strongly protruding, virtually hemispherical. Depressions near the rear angles of the pronotum rather deep. Intervals of the elytra a microscopic sculpture of punctures. Male aedeagus with comparatively narrower, pointed tip; internal sac ventrally near apex with a group of slender spines. Very variable in colour, from almost as pale as *verbasci* to the dark pattern of *csikii*. Hind-angles of pronotum as a rule not entirely absent; punctures are usually restricted to the basal depressions and their nearest surroundings. Length 3.8-4.2 mm. ....



..... ***Bradycellus harpalinus***

Very common and distributed throughout the UK. Usually on sandy soils, often under heather together with *caucasicus*. Attracted to light.

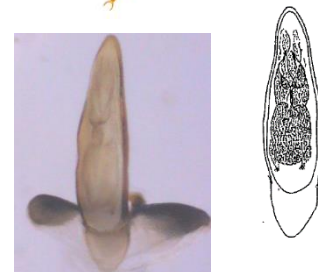


Eyes somewhat flatter. Depressions near the rear angles of the pronotum shallower. Elytra with very sparse, irregularly arranged, shallow microscopic punctures on at least some of the inner intervals. Male aedeagus with a relatively blunter tip, the internal sac lacking spines. Elytra always dark brown but with the suture pale. Basal punctures of the pronotum usually more expanded and hind-angles almost obsolete. Length 3.5-4.3 mm. ....



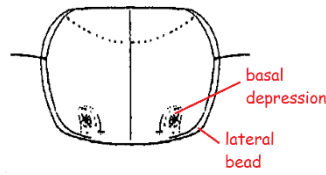
..... ***Bradycellus csikii***

On the continent mostly on clay soils. Lindroth only listed a single record from Surrey. The NBN map has a number of records, mostly from the Fens.



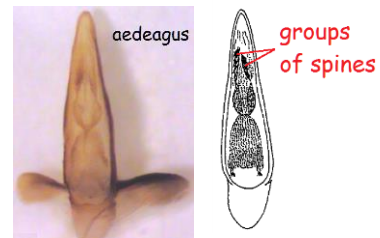


7 Often 4 mm. or more. Pronotum smaller and narrower relative to the elytra. Sides of pronotum less rounded with marginal bead prolonged around the hind angle, extending along the base, reaching the depression. Reddish brown with the head and elytra often darker. Wings usually full-sized. Male aedeagus with a comparatively narrower, pointed tip; internal sac ventrally near apex with a group of slender spines. ....

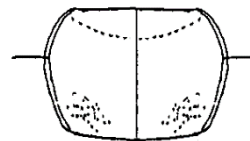


..... ***Bradycellus harpalinus***

Very common and distributed throughout the UK. Usually on sandy soil, often under heather together with *caucasicus*. Attracted to light.



Length 3.0-3.9 mm. Pronotum larger relative to the elytra. Basal bead of pronotum (outside the depression) weakly developed or almost absent. Pronotum sometimes with a faint darkening in the middle or towards the rear. Wings usually quite reduced. Male aedeagus comparatively broader compared to its length and without spines in the internal sac. ....



..... ***Bradycellus caucasicus***

On sand and gravel, often under *Calluna* associated with *ruficollis* or *harpalinus*. Scotland and England mostly in upland areas, southwards to the Wash, upland Wales, Dartmoor and Exmoor and scattered records elsewhere e.g. in East Anglia.





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## Genus *Diachromus*

A monotypic genus founded on its unique colouration. Pronotum with a bristle in the hind angle. Segments 2-4 of the front and middle tarsi in males only moderately dilated, and densely hairy on the upper surface in both sexes.

***Diachromus germanus*** (Linnaeus, 1758)

The whole upper surface is covered with short upright bristle-like hairs; hairs on the pronotum and elytra slightly directed forwards. Pronotum with the hind angles sharply right-angled and weakly concave in front of the hind angles; pronotum blue or blue-green with reddish sides. Head and elytra reddish-yellow; elytra with a bluish heart-shaped marking towards the tip which varies in size and may be divided into two a paler stripe along the suture. Underside and scutellum pitchy-brown; scutellum sometimes pale. Legs and antennae yellowish red or antennae with the middle segments darkened. Head and pronotum moderately and densely punctured; punctures on the elytra dense and fine with a bristle-bearing pore in the third interval on the sloping part towards the rear.



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## Genus *Dicheirotrichus*

Genus **DICHEIROTRICHUS** Jacquelin du Val, 1855

***gustavii*** Crotch, 1871

***obsoletus*** (Dejean, 1829)

Distinguished from the other genera in the subtribe by the complete covering of hair on the underside, the hind angles of the pronotum which are nearly right-angled and have a long bristle and the lack of a scutellar stria. As in *Bradycellus* and *Trichocellus* a tooth is present on the mentum and the males have a densely hairy depression on the second and third sternite. Very similar to *Trichocellus* in appearance but distinguished by the hind angle of the pronotum and the more extensive hair on the upper surface.

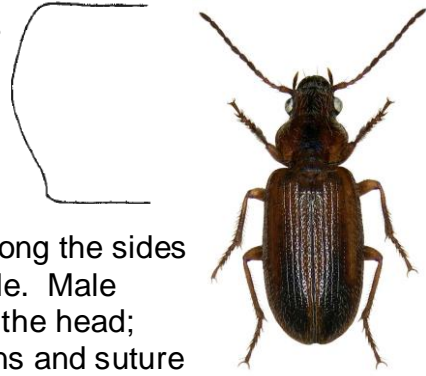
The main distinguishing feature of the genus is the hair arrangement on the underside of segments 2-4 on the front tarsi of males. In *Dicheirotrichus* these are randomly arranged whereas in *Trichocellus* they are in two rows (as in the other genera in the subtribe)

According to Kataev (1995), who attaches little importance to the arrangement of hair on the tarsi, these two genera should be regarded as subgenera, distinguished by the bristles on the elytra. In *Trichocellus* there is a single bristle-bearing pore in the third interval, or none at all, whereas in *Dicheirotrichus* there are a row of pores in the middle of the third interval and sometimes some in the fifth interval.



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- 1 Punctures on the upper surface coarse, those on the elytra forming only 1 or 2 rows on each interval. Sexes usually differently coloured: female completely reddish brown or with a dark spot on the head, pronotum and each elytron. These spots are sometimes more extensive but the extreme margins of pronotum and a broad border along the sides and apex of elytra are always pale; legs pale. Male entirely black or, usually, with two spots on the head; margins of pronotum, shoulder, side-margins and suture of elytra reddish; legs more or less darkened. The palest males are similar to the darkest females. Narrower with the pronotum narrower at the base. Length 5.2-7.5 mm. ....



..... ***Dicheirotichus gustavii***

On clay soils just above the tidal zone. Often abundant; widespread.

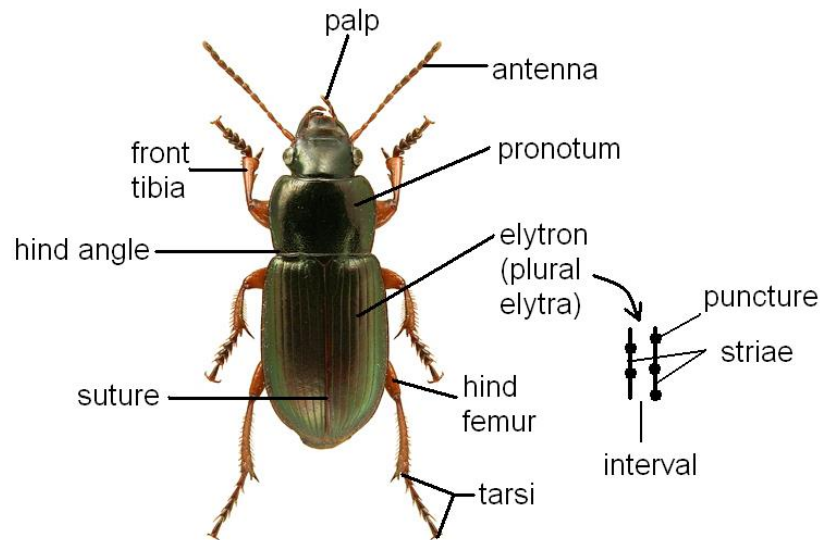
Punctures on the upper surface denser and hair shorter, with about three rows of punctures on each interval of the elytra. No sexual difference in colour: reddish brown with the head sometimes slightly darker and each elytron with a dark longitudinal band of varying extent, rarely indistinct. Striae on the elytra finer and with less distinct punctures. Length 5.5-7.5 mm. ....

..... ***Dicheirotichus obsoletus***

On clay soils just above the tidal zone. Local species. England: south and east coast from Cornwall to Lincoln. Western Lowland Scotland.



## Genus *Harpalus*



Genus **HARPALUS** Latreille, 1802

***affinis*** (Schrank, 1781)

***anxius*** (Duftschmid, 1812)

***attenuatus*** Stephens, 1828

***calceatus*** (Duftschmid, 1812)

***cupreus*** Dejean, 1829

***dimidiatus*** (Rossi, 1790)

***froelichii*** Sturm, 1818

***griseus*** (Panzer, 1797)

***honestus*** (Duftschmid, 1812)

***laevipes*** Zetterstedt, 1828

***latus*** (Linnaeus, 1758)

***melancholicus*** Dejean, 1829

***neglectus*** Audinet-Serville, 1821

***pumilus*** Sturm, 1818

***rubripes*** (Duftschmid, 1812)

***rufipalpis*** Sturm, 1818

***rufipes*** (De Geer, 1774)

***serripes*** (Quensel in Schönherr, 1806)

***servus*** (Duftschmid, 1812)

***smaragdinus*** (Duftschmid, 1812)

***tardus*** (Panzer, 1796)

***tenebrosus*** Dejean, 1829

This genus contains about 400 species distributed in the Holarctic and Afrotropical regions. The following characteristics distinguish *Harpalus* from other closely related genera in the subtribe:

- first segment of the hind tarsus distinctly shorter than the second and third combined
- segments 1-4 of the front and middle tarsi in males clearly dilated
- tarsal segments bare or hairy on the upper surface
- hind femora with at least three bristles along the posterior surface
- hind coxae without posterolateral bristle-bearing pores
- paraglossa hairy
- lateral lobes of the mentum slender towards the front
- basal segment of the labial palps without an oblique keel
- no suture running towards the eyes from the suture between the clypeus and frons but with two depressions

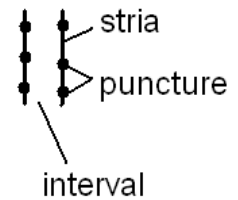


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Pronotum without a bristle in the hind angles. Elytra hairy or not with one or more bristle-bearing pores in the third interval (occasionally absent) and sometimes with a complete row of punctures in the fifth and seventh intervals, which may just be in the apical half. A few species have a few pores in the eighth interval. Small to medium-sized species, 4.3-17 mm. Colour reddish brown to black, rarely pale. Upper surface often metallic.

Palaeartic species are arranged in seven subgenera with five in Central Europe and two in Britain.

- 1 All intervals of the elytra with punctures and yellowish hairs, though the inner ones are sometimes less densely so. Subgenus *Pseudoophonus* (part). .....2



At least inner elytral intervals are entirely smooth and without hair. ....3

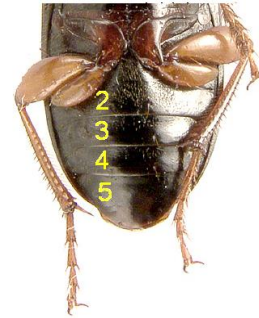


2<sup>1</sup> On the underside, the last three abdominal segments have punctures and hairs towards the sides, but are smooth and hairless in the middle. Pronotum with the sides slightly curving inwards just short of the hind angles, which therefore look sharper.

.....7

.....***Harpalus rufipes***

In open country, often in cultivated fields and waste places. Recorded as a pest e.g. on strawberries. Very common and widely distributed.



On the underside, the last three abdominal segments have a stripe of hair down the mid line only. Pronotum with the sides rounded in the front half and then running to the hind angles more or less straight; hind angles therefore more blunt. ....

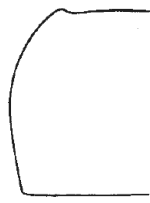
..... ***Harpalus griseus***

First recorded in Wimbledon in 1995 and then in 2008 found at Thetford, Norfolk.





3<sup>1</sup> Tarsi with short hairs on the upper surface. Third elytral interval without a dorsal puncture. Almost black above, extreme sides of pronotum, antennae and of legs at least tarsi paler. Base of pronotum with large punctures that run into one another. Eighth and ninth elytral intervals with very fine, easily overlooked pubescence. Length 10.5-14 mm. ....



..... ***Harpalus calceatus***

With the beetles in couplet two make up subgenus *Pseudoophonus*. Known in Britain only from single specimens taken in Sussex, Essex and Yorkshire, apparently stragglers. It is known as migratory on the continent.

Tarsi without hair above. Third elytral interval with a dorsal puncture (except *pumilus* which is only up to 6.2 mm. in length. ....4



4<sup>3</sup> Outer elytral intervals with punctures and hair, along with the apical part of the inner ones (rarely also basal) and hairy. Extremely variable in colour, from strongly metallic, green, brassy, coppery, bluish, to almost black, rarely more or less reddish; female with dull elytra. Legs and antennae paler than the body, the legs from clear reddish to dark brown. Dorsal punctures of elytra from 1 to 3; side margin with deep curves near the apex in females. 5.5-12 mm. ....



..... ***Harpalus affinis***

Very common in all kinds of open country.

All elytral intervals without punctures or hair (not counting the bristle-bearing punctures along the margins. ....5



5<sup>4</sup> Elytra without dorsal punctures along the third interval. Small species, length 5.3-6.2 mm. Short-winged. Dark brown to black, with the margins of the pronotum and usually the elytral suture paler. Legs and antennae reddish brown, except the femora and the tip of the tibiae are darkened. Pronotum with the hind-angles entirely rounded and basal depressions very small. ....

..... ***Harpalus pumilus***

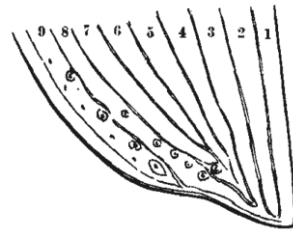
In open places with sand or gravel, usually on the coast. South and eastern England from Devon to Kent and northwards to Norfolk. Very local. -



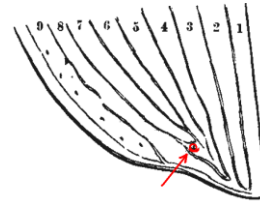
Third elytral interval with at least one dorsal puncture in the apical half. Wings usually full-size. ....6



6<sup>5</sup> Eighth or seventh elytral interval (sometimes also fifth and third) with a short row of punctures (rarely reduced to 2) near the tip. ....7



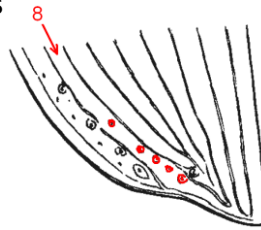
Only a single puncture apically, adjoining seventh stria. ....11



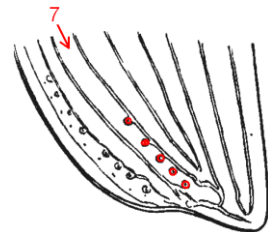
7<sup>6</sup> Eighth elytral interval with punctures towards the tip. Pronotum obliquely flattened inside hind-angles, as in *smaragdinus*. Black or dark brown. Antennae and tarsi dark reddish but antennal segments 2-4 often darker. Underneath the abdomen, the fourth and fifth segments bear several extra bristle-bearing punctures (as in *froelichi*). Length 10-11 mm.

..... ***Harpalus melancholicus***

In subgenus *Cryptophonus*. On open sand with sparse vegetation, usually near the sea. England northwards to Norfolk. Wales. Rare.



Seventh elytral interval (sometimes also fifth and rarely the third) with punctures towards the tip, exceptionally reduced to 2 on seventh interval. Pronotum less flattened laterally. ....8



8<sup>7</sup> Length 12-14 mm. Sides of pronotum rounded throughout, hind angles obtuse and rounded. Fifth elytral interval with apical punctures as well as seventh. Underneath the abdomen the fourth and fifth segments bear several bristle-bearing punctures at the side. Black, the pronotum usually with a bluish hue, particularly at the base. Antennae yellowish brown with at least the basal segments reddish. Entire base of pronotum with irregular punctures. ....

..... ***Harpalus dimidiatus***

In open, dry country, probably confined to chalky soil. Southern England: Devon eastwards to Kent and northwards to Oxfordshire. Locally abundant.



Length 8-12.2 mm. Sides of pronotum straight or somewhat curving in front of the hind angles; hind angles right angled or moderately obtusely angled and less rounded. Fifth elytral interval very rarely with punctures towards the tip. Underneath the abdomen the fourth and fifth segments are without extra punctures or with a very few. ....9



9<sup>8</sup> Antennae entirely pale. Legs pale or with femora (very rarely tibiae) darkened. Base of pronotum densely and continuously punctured, at least between the depressions and hind angles. Black, with the margin of pronotum often paler. Female dull, but upper surface in males with a blue or green sheen. Sides of pronotum straight or faintly curved in front of the hind angles; hind angles about 90 degrees, little rounded at tip. Length 8.5-12.2 mm. ....



..... ***Harpalus rubripes***

On dry, gravelly or sandy soil with sparse vegetation. Somewhat local but widespread

Antennae darkened from the second segment. Legs dark brown to black with tarsi and sometimes the tibiae, brown. Punctures on the pronotum almost restricted to the basal depressions. ....[10](#)



10<sup>g</sup> Upper surface (at least elytra) green or bluish, brilliant in the male, opaque in the female. Pronotum more constricted towards the base, before which the sides are clearly curved. Penis more slender, almost straight, the tip not bent with the disc rounded at the tip (also in lateral view). (Seventh elytral interval, on the continent, sometimes with only the normal apical puncture). Probably always with highly reduced wings. Length 8-11 mm. ....

..... ***Harpalus honestus***  
 On chalk. Kent and Berkshire. Very rare.



penis

Upper surface black or with faint steel-blue hue. Pronotum less constricted towards the base with the sides less curved near the hind angles (often almost imperceptibly so). Penis stouter, broader in the middle with the tip bent ventrally and with the tip more pointed.

Seventh elytral interval with 2 or more apical punctures. Wings probably always full-sized. Length 8-11 mm.

..... ***Harpalus rufipalpis***

On open sandy soil. England northwards to Norfolk and Lancashire. Locally abundant.





11<sup>6</sup> Base of pronotum with an expanded area of more or less wrinkled punctures. This is sometimes absent in the middle (notably in *attenuatus*) but always present in the basal depressions and between this and the side-margin. ....[12](#)



Base of pronotum smooth, or with punctures in the basal depressions only, sometimes with a few additional punctures close to the side-margin. ....[17](#)



12<sup>11</sup> Viewing the abdomen from underneath the fourth and fifth segments have fine hairs at or near the middle. Pronotum obliquely flattened inside the hind angles. Upper surface metallic (except in the females of some species). .....[13](#)

From below the fourth and fifth abdominal segments only bear a pair of long bristles. Pronotum not flattened towards the base at the sides. Upper surface non-metallic or with a very faint steel-blue hue. ....[14](#)



13<sup>12</sup>Entire upper surface metallic green or coppery in both sexes. Antennae darkened from second segment. Hind angles of pronotum somewhat obtuse, rounded at tip. Body black, legs dark brown. Oblique depression near the base at the side of the pronotum little pronounced. Elytra with a weak shoulder-tooth; sides only indistinctly curved near the apex. Viewed from below, the segments of the abdomen are not hairy on the mid line, but more to the sides. Length 12-14 mm. ....

..... ***Harpalus cupreus***

Ecology not recorded. England. Established only on the Isle of Wight, where it has been found repeatedly about the edges of a field at Sandown. One old record from Kent. Possibly originally introduced.

Elytra of male with a strong metallic bluish or greenish shine; female only faintly metallic. Antennae entirely reddish brown. Hind angles of the pronotum almost right angles, sharp. Dark brown, with the upper surface darker but with margins of the pronotum and usually the elytral suture more or less pale. Legs pale. Oblique depression at the base of the pronotum towards the sides strong. Shoulder tooth of elytra protruding and sides of elytra clearly curved near the apex. Viewed from below, the segments of the abdomen are hairy on the mid line. Length 9-11.4 mm. ....

..... ***Harpalus smaragdinus***

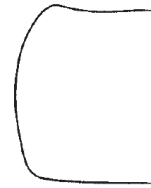
In open, dry country on sandy soil. During the daytime often at the roots of *Calluna* etc. England northwards to Nottinghamshire. Wales. Local, but sometimes abundant.



14<sup>12</sup>Third interval of the elytra with 2 or 3 dorsal punctures. Sides of pronotum more rounded in the posterior half. Black species, with even the margins of the pronotum dark; elytra of the male often with a slight steel-blue reflection. Legs and antennae usually reddish but very rarely the legs are dark. Length 9.5-12 mm. ..

..... ***Harpalus laevipes***

Among moss and leaves under bushes and trees, usually on gravelly substrates (e.g. moraine). Northumberland northwards. Local.



Third interval of the elytra with a single dorsal puncture. ....[15](#)



15<sup>14</sup> Legs and antennae reddish brown. Head large. Sides of pronotum almost parallel-sided in the basal half, sometimes slightly curved. Black species with the margins of the pronotum pale. Hind-angles of the pronotum almost right angled but broadly rounded at the tip. Sometimes with a metallic hue. Length 8.2-11 mm. ....

..... ***Harpalus latus***

On all kinds of open or slightly shaded ground. Common and widespread.



At least the femora black. Head rather narrower than usual. Pronotum somewhat narrowing towards the base. .... [16](#)



16<sup>15</sup> Length 8-11 mm. Hind-angles of the pronotum obtuse, rounded at tip. Middle antennal segments somewhat darkened. Black, elytra sometimes with slight steely blue tinge. Legs dark with paler tarsi. Pronotum with punctures at the base which spread right across; depressions shallow. ....

..... ***Harpalus tenebrosus***

In subgenus *Cryptophonus*. On open, rather dry, gravelly, sandy or chalky soil. Coastal from South Wales around the south coast and north to Durham. Local and rare.



Length 7-9 mm. Hind angles of the pronotum right angled or slightly acute, protruding as a small tooth. Antennae entirely reddish brown. Body black. Femora black, tibiae and tarsi dark reddish. Depression at the base of the pronotum deep, well delimited externally; punctures at the base absent or very much reduced in the middle. ...

..... ***Harpalus attenuatus***

In open, sandy or chalky country, usually in dunes on the coast. Locally abundant and widespread.



17<sup>11</sup>Underneath the abdomen, the fourth and fifth segments have several bristle-bearing punctures, along with the normal single pair of long bristles. ....18

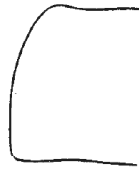
Fourth and fifth segments of the abdomen with only the normal pair of bristles. ....20



18<sup>17</sup>Antennae entirely reddish brown. Hind femora with more than 10 bristle-bearing punctures along outside margin. The spines just before the tip of the front tibiae on the outer side form a continuation of the row of spines on the lower surface of the tibia. Dark brown to black. Mouth parts and tarsi pale. A broad, convex species with short but rather narrow pronotum. Length 8.5-10.4 mm. ....

..... ***Harpalus froelichi***

In open, sandy fields. Rare and very local in southern and eastern England from Dorset northwards to Durham.

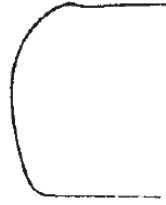


At least segments 2-4 of the antennae distinctly darkened. Hind femora with less than 10 marginal bristles. The 3-6 external spines before the tip of the front tibia are isolated from the other spines. ....[19](#)





19<sup>18</sup> Length 7-9 mm. Sides of pronotum narrowing in the basal half. Three spines on the front tibia before the tip. Viewing the underside of the abdomen, the fourth and fifth segments have many long bristles. Black species with the first and outer segments of the antennae pale. Tarsi pale. Hind angles of the pronotum entirely rounded. Wings either full-sized or strongly reduced. ....



..... ***Harpalus neglectus***

On sandy soil with sparse vegetation, especially in sand-dunes near the sea. Nationally scarce but locally common from Cornwall to Hampshire, Cheshire to Yorkshire, Wales, southern Scotland and Ireland.

Length 8-11 mm. Sides of pronotum rounded but not narrowing in the basal half. Four spines on the front tibia before the tip. From below, the fourth and fifth segments of the abdomen bear only a few extra bristles.....



..... ***Harpalus serripes***

On dry, sandy or gravelly ground, usually near the coast. Cornwall, along the south and east coast to Norfolk; Cheshire. South Wales. Locally abundant.



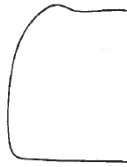
20<sup>17</sup>Antennae entirely pale or very little darkened from second segment ...[21](#)

Antennae distinctly darkened from second segment onwards. ....[23](#)



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21<sup>20</sup> Base of pronotum almost straight; hind angles broadly rounded. Front tibia with 4-6 spines along the outer margin near the tip. Black species with the margins of the pronotum somewhat translucent. Antennae and palps reddish brown. Tarsi and at least the base of the tibiae brown. Pronotum almost rectangular with little rounded sides and about right angled hind angles; base without punctures or with a few punctures in the basal depression and near the hind angles. Length 8.4-11 mm. ....  
 ..... ***Harpalus tardus***  
 In sandy and gravelly, rather dry soil. Common, except in the north.



Base of the pronotum more or less concave; hind angles less rounded. Front tibiae with three spines near the tip.  
 .....<sup>22</sup>



22<sup>21</sup> Upper surface dark to mid brown. Antennae always entirely pale. Base of pronotum strongly produced to the side, hind-angles more acute. Broad and flat species. Margins of the pronotum and often elytra reddish, if so, the latter sometimes with suture darker. Legs with at least the tarsi pale. Length 7.5-8.5 mm. .



..... ***Harpalus servus***

On fine sand, especially in coastal dunes, with sparse vegetation; in burrows during the day. Local. South Wales, Cornwall, from Hampshire round to Norfolk; Yorkshire.

Background colour black. Antennae slightly darkened with at least the second segment not quite as pale as the first. Base of the pronotum less concave, hind-angles almost right angled. ....

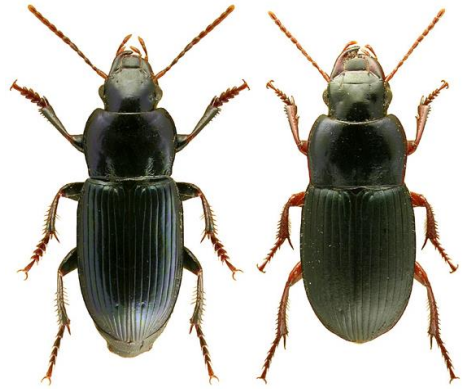


..... ***Harpalus anxius***

On sandy soil, usually on the coast. From Cornwall round to Lincolnshire; Cheshire, Lancashire, Cumbria. S. Wales. Common in the South.



23<sup>20</sup> Upper surface green or bluish (though dull in the female). Pronotum with the sides curved towards the base; hind angles sharp, about right angled. ....  
..... ***Harpalus honestus***  
On chalk. Kent and Berkshire. Very rare.



Upper surface black or with a very indistinct metallic tinge. Sides of pronotum not curved; hind angles obtuse, more or less rounded at the tip.  
.....[24](#)



24<sup>23</sup> Length 9.3-11.5 mm. Pronotum with the base straight and the sides evenly rounded. Front tibia with 4-6 spines externally near the tip. Black species with the upper surface rarely with a faint bluish tinge. Palps somewhat darkened. Segments 2-4 of the antennae black. Tarsi and sometimes tibiae dark brown. Underside of the abdomen with the segments rarely with a few extra bristle-bearing punctures. ....



..... ***Harpalus serripes***

On dry, sandy or gravelly ground, usually near the coast. Cornwall, along the south and east coast to Norfolk; Cheshire. South Wales. Locally abundant.

Length 6.6-8.2 mm. Base of pronotum somewhat concave; sides less rounded in the basal half. Front tibia with 3 spines towards the tip. Antennae almost always darkened from the second segment onwards. ....

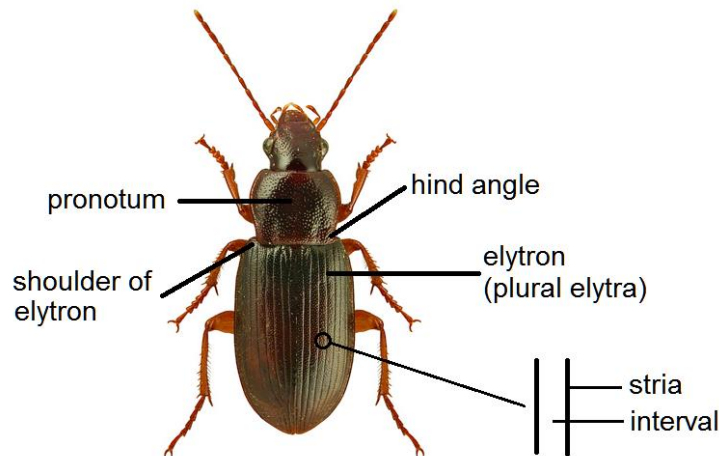


..... ***Harpalus anxius***

On sandy soil, usually on the coast. From Cornwall round to Lincolnshire; Cheshire, Lancashire, Cumbria. S. Wales. Common in the South.



## Genus *Ophonus*



Genus *OPHONUS* Dejean, 1821

Subgenus *OPHONUS* Dejean, 1821  
*ardosiacus* (Lutshnik, 1922)  
*azureus* (Fabricius, 1775)  
*sabulicola* (Panzer, 1796)  
*stictus* Stephens, 1828

Subgenus *METOPHONUS* Bedel, 1895  
*cordatus* (Duftschmid, 1812)  
*laticollis* Mannerheim, 1825  
*melletii* (Heer, 1837/8)  
*parallelus* (Dejean, 1829)  
*puncticeps* Stephens, 1828  
*puncticollis* (Paykull, 1798)  
*rufibarbis* (Fabricius, 1792)  
*rupicola* (Sturm, 1818)  
*schaubergerianus* (Puel, 1937)

*Ophonus subsinuatus* Rey, 1886 was added to the British List in 2001 on the basis of historical specimens from Portland. It is likely to be extinct in Britain. For further details see <http://carabidredlist.blogspot.co.uk/2014/02/ophonus-subsinuatus.html>

A Palaearctic genus with over seventy species, much more common in the Mediterranean Basin. Two species have been introduced to the Nearctic. Distinguished by the following characteristics:

- upper surface with upright hairs, leaning slightly forwards
- paraglossa smooth
- depression on the frons small
- lateral lobes of the mentum broadening towards the front
- pronotum without a bristle in the hind angle
- hind coxae with posterolateral bristles
- basal segment of the labial palps with a distinct oblique keel

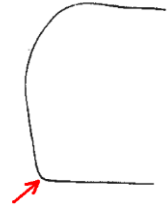
Reddish to pitchy black or blackish species. Pronotum and elytra often with a metallic shine.



© Mike Hackston (2019) adapted from Lindroth (1974), Wrase (2004) and Baehr (2004)

This genus is quite a difficult one and often identification must be confirmed using the male genitalia. These are shown for some species.

- 1 Pronotum with the sides evenly curved, not curving outwards just before the hind angles (or very indistinctly so); hind angles forming an obtuse angle or entirely rounded. Upper surface usually (at least the elytra) with a strong metallic shine. Shoulder of elytra without a tooth. (Subgenus *Ophonus*). .....[2](#)



- Pronotum with sides more or less concave just before the hind angles, forming angular hind angles (at least as illustrated). Upper surface bright metallic only in *laticollis*, which has a strong tooth on the shoulders of the elytra. Subgenus *Metophonus*). .....[5](#)



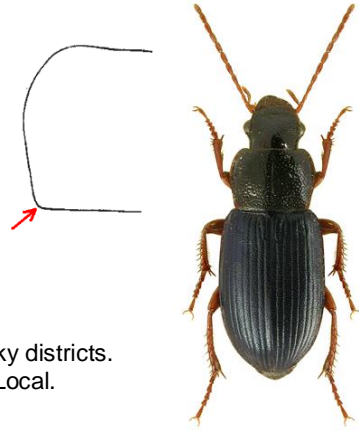


2<sup>1</sup> Length at least 9.5 mm. Pronotum with the hind angles entirely rounded or forming a distinctly obtuse angle, thus poorly marked; base of pronotum not margined. Shoulders of the elytra rounded. ....3

Length 6.2-9.2 mm. Pronotum with well-marked, obtuse hind angles which are rounded at the tip; basal margin marked with a raised bead. Shoulders of elytra forming an obtuse angle. Upper surface most often shiny, the shine usually green, but sometimes violet or bluish. Legs and antennae reddish brown. ....

..... ***Ophonus azureus***

In open, quite dry country with short vegetation, mainly in chalky districts. England, northwards to Nottinghamshire. Wales: Glamorgan. Local.



3<sup>2</sup> Pronotum with the sides in the basal third almost straight, though oblique; hind angles very obtuse and rounded but quite evident. Black species, head and pronotum often with a faint blue or greenish reflection; elytra with a strong reflection. Hair of the upper surface brownish. Length 12-17 mm. ....

..... ***Ophonus sabulicola***

On dry, sandy ground, often chalk, near the coast. Southern England northwards to Cambridgeshire and Suffolk. Wales: Glamorgan. Very rare.

Pronotum with the whole sides rounded, the hind-angles quite or virtually absent. ....4



4<sup>3</sup> Elytra becoming slightly broader beyond half way and the margins not evenly rounded to the tips but with a concave section; hair blackish. Metallic reflection of head and pronotum more obvious than in related species. Hind-angles of pronotum barely suggested. Length 13-17 mm.

..... ***Ophonus stictus***

On chalk or limestone in southern England. Very local, but sometimes numerous.



Elytra not becoming broader and without a distinct concave section near the tip; hair brownish. Head and pronotum often not metallic. Hind-angles of pronotum completely obsolete. Length 9.5-13 mm. ....

..... ***Ophonus ardosiacus***

In open fields with limestone or chalk, also on clay in saline habitats. England northwards to Norfolk; Yorkshire, south Wales. Locally abundant.



5<sup>1</sup> Entire upper surface metallic blue-black or green-black. Elytra with a strong tooth on the shoulders. Black species, paler underneath with dull elytra. Pronotum broad with sharp, right-angled hind angles and base completely without a margin. Punctures on the elytra fine and dense. Length 8.5-11 mm. ....

..... ***Ophonus laticollis***

On open, dry, often slightly shaded ground, usually on chalky soils. England northwards to Nottinghamshire; south Wales. Very local.



With at most a faint metallic tinge on the elytra. Shoulders of elytra rounded or with a small tooth. ....[6](#)



6<sup>5</sup> Pronotum without any trace of a raised basal margin running parallel to the rear margin. ....[7](#)

Pronotum with a raised basal bead running parallel to the rear margin, though often incomplete (best seen from in front with light from behind). ....[11](#)



7<sup>6</sup> Shoulders of the elytra rounded, not clearly angled. Pronotum narrower, the curve near the hind angles short but rather deep, often reddish. Elytra usually with a bluish or greenish tinge; microscopic sculpture unclear in the female and virtually absent male. Body slender and parallel. Punctures on the pronotum and elytra sparse but very distinct. Length 7-9 mm. ....



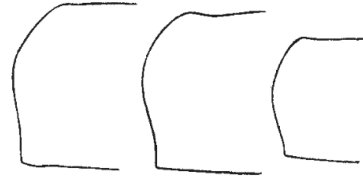
..... ***Ophonus ruficornis***

On open, gravelly ground, often chalk, with sparse but often tall vegetation. England northwards to Yorkshire.

Shoulders angulate, often protruding as a tiny tooth. Pronotum with the incurved section between the widest point and the hind angles longer or shallower. Entire body non-metallic. Microscopic sculpture of the elytra clear in both sexes. ....[8](#)

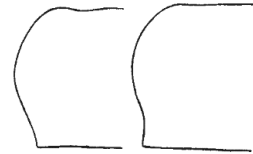


8<sup>7</sup> Pronotum less clearly broad compared to its length, usually with the sides less rounded at the front and less incurved in basal half; sides with a single longer bristle just before middle (rarely a second in front of this). Aedeagus with an apical disc (illustrated by next couplet).



.....[9](#)

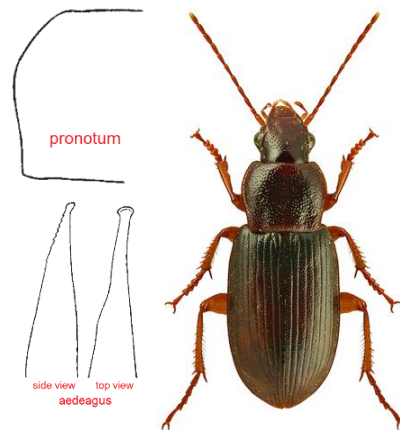
Pronotum more distinctly broad compared to its length with 2-4 bristles in the front half (care – these can often be broken off). Aedeagus without a disc at the tip. ....[10](#)



9<sup>8</sup> Pronotum narrower compared with the elytra, sides obliquely flattened inside the hind angles and the base usually slightly oblique towards the sides. Elytral intervals densely punctate (as in *schaubergerianus*). Microscopic sculpture of the pronotum more distinct. ....

..... ***Ophonus puncticeps***

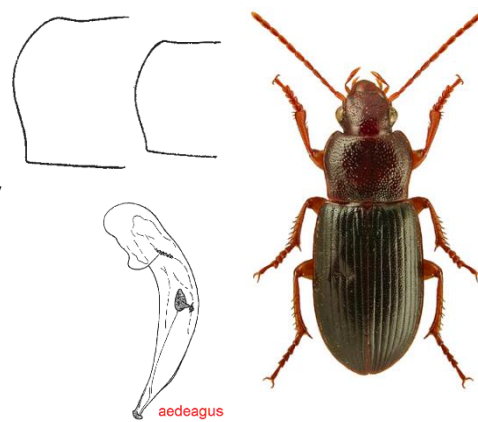
On open, often cultivated ground, under weeds, etc. England northwards to Norfolk; Yorkshire. Wales: Pembroke. Ireland. Often abundant.



Pronotum with the sides not flattened and with the base straight. Pronotum and elytra more sparsely punctate. ....

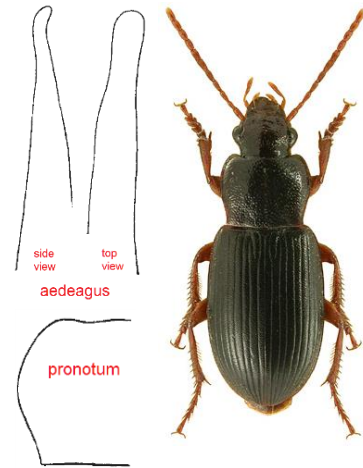
..... ***Ophonus melletii***

In open country, e.g. on chalk, sometimes in slightly shaded places; often associated with *O. azureus*. Southern England from Dorset to Kent. Rare.





10<sup>8</sup> Entire upper surface with denser and usually stronger punctures. The punctures on the pronotum are not markedly sparser on the top than at the sides. Inner intervals of the elytra with four rows of punctures in most places. Ground-colour more blackish-brown, the head and pronotum slightly paler; legs and antennae usually more clear reddish-brown. Pronotum with the curve between the widest point and the hind angles more shallow. Aedeagus more slender, with lower side somewhat curved and the tip twisted. Length 7.6-10 mm. ....



..... ***Ophonus schaubergerianus***

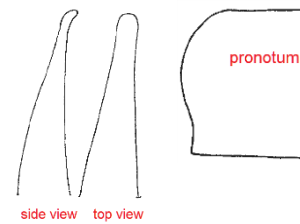
On chalk and sand. England northwards to Cambridgeshire. Generally in more open country than *rufibarbis*

Punctures on the pronotum much sparser towards the middle than the sides. Punctures on the elytra only 2-3 rows, or less, on each interval. Blackish-brown with the head and pronotum rarely paler; legs and antennae usually brownish. Pronotum comparatively shorter, with the curve between the widest point and the hind angles usually deeper. Aedeagus almost symmetrical, viewed from the top; lower surface virtually straight. Length 6.2-9.5 mm. ..



..... ***Ophonus rufibarbis***

In open or somewhat shaded places with humus-mixed soil. England northwards to Yorkshire. Wales: Pembroke. Scotland. Ireland. Often abundant.



11<sup>6</sup> Pronotum similar to that of *rupicola* (couplet [7](#)) with strongly rounded sides and very short incurved section near the base, but still more constricted basally with the hind angles right-angled or slightly obtuse; punctures of the middle of the pronotum coarse and dense. Striae of the elytra with fine punctures; shoulders without tooth. Very dark brown to brown or dark reddish-brown. Femora sometimes slightly darkened. Length 7.5-10 mm.) .....



..... ***Ophonus cordatus***

In dry, open country, usually on coastal sand dunes. England: Dorset to Kent; Gloucester. Rare.

Pronotum less constricted, with the incurved section near the base longer. Striae of the elytra smooth or with slight indication of punctures; shoulders with a small protruding tooth. ....[12](#)



12<sup>11</sup> Pronotum distinctly broad relative to the elytra, with the sides strongly rounded towards the front and the incurved section between the widest point and the hind angles long and deep. Punctures in the middle of the pronotum sparse but very coarse. Almost pure black with the legs and antennae more reddish brown than in all following species. Basal bead running parallel to the base of the pronotum strong and continuous. Length 7-10 mm. ....

..... ***Ophonus puncticollis***

In open country, probably always on chalk or limestone. Local species with scattered records in England from the south coast to north Yorkshire.



Pronotum narrower with the punctures in the middle denser. Basal bead running parallel to the basal margin of the pronotum often incomplete. ....

.....[13](#)



13<sup>12</sup> Pronotum comparatively narrow with the widest part usually clearly narrower than elytra across the shoulders. Pronotum with a faint, angled depression just inside the hind angles. Dark brown, the pronotum with rather paler margins. Legs and antennae brownish. Pronotum with the basal bead running parallel to the rear margin very fine and often incomplete or lacking; rear margin usually slightly oblique towards the sides. Elytra proportionally longer than in any other *Ophonus* species. Intervals of the elytra with dense punctures as in *schaubergerianus* (this species has the depressions inside the hind angles of the pronotum stronger). Length 6.5-9 mm. ....



..... ***Ophonus puncticeps***

On open, often cultivated ground, under weeds, etc. England northwards to Norfolk and Yorkshire. Wales: Pembroke. Often abundant.

Pronotum comparatively shorter and as wide as elytra across the shoulders. Pronotum without a depression inside the hind angles. Elytra comparatively much shorter. ....[14](#)



14<sup>13</sup> Hind angles of the pronotum right-angled or slightly obtuse, not rounded at tip; basal bead running parallel to the rear margin incomplete or lacking. Elytra dark brownish black; head and pronotum usually paler; legs and antennae reddish-brown. Sides of pronotum approximately parallel in the back half before hind-angles. Elytra with the shoulders with a small but sharp tooth; intervals of the elytra somewhat more densely and regularly punctured than in *rufibarbis*. Length 5.5-8.6 mm. ....



..... ***Ophonus melleti***

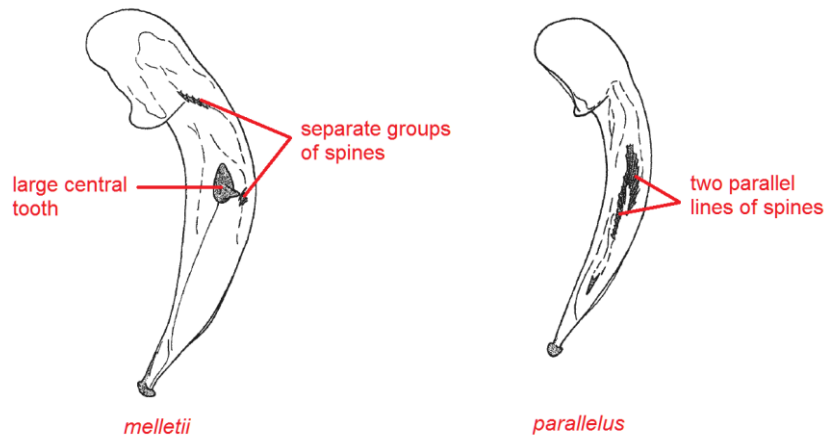
In open country, e.g. on chalk, sometimes in slightly shaded places; often associated with *azureus*. Southern England from Dorset to Kent. Rare. Separated from small specimens of *schaubergerianus* by the sides of the pronotum

Hind angles of pronotum clearly obtuse, rounded at the extreme tip; basal bead running parallel to the rear margin always evident, though sometimes briefly interrupted at middle. Usually smaller than *melleti*. Sides of pronotum clearly diverging forwards from hind-angles, base somewhat curving forwards towards the hind angles. Elytra with the shoulder-tooth very small. Punctures of the pronotum and elytra usually denser and the microscopic sculpture more evident. 5.7-7.3 mm.



..... ***Ophonus parallelus***

Often on chalk. Southern England from Dorset to Kent and northwards to Bedfordshire. Confusion with the non-metallic form of *azureus* is possible but, in that species, the sides of the pronotum are very weakly incurved between the widest point and the hind angles and the punctures on the centre of the pronotum are sparser.



Comparison of aedeagus



## Genus *Stenolophus*

Genus **STENOLOPHUS** Dejean, 1821

***mixtus*** (Herbst, 1784)

***skrimshiranus*** Stephens, 1828

***teutonus*** (Schrank, 1781)

From other genera in subtribe Stenolophina distinguished by the lack of a tooth on the mentum, the hairless underside, the lack of a bristle in the hind angle of the pronotum, the body length (5-7 mm) and the presence of a fine keel on the outer surface of the first three segments of the hind tarsi. This keel also distinguishes the genus from the otherwise similar genera *Acupalpus* and *Anthracus* as well as the strongly dilated front and middle tarsal segments in males which have the fourth segment distinctly bilobed.

This is a world-wide genus with about 165 species with greatest diversity in the Palaearctic, Afrotropical and Nearctic regions. All Central European species belong to subgenus *Stenolophus*.

- 1 Pronotum entirely reddish-brown. Depressions near the hind angles of the pronotum lacking punctures or with only a few ones. Antennae with 2 pale basal segments. ....2

Pronotum dark, with only the extreme margins pale. Depressions near the hind angles with more or less distinct punctures. Antennae with only the first segment pale. Elytra almost black to brown with the extreme margins and the suture pale and often with the base extensively pale. Pronotum narrower with the sides less rounded. Length 5.1-5.6 mm. ....

..... ***Stenolophus mixtus***

At the margin of ponds, pools and streams on moist, muddy, vegetated soil. England northwards to County Durham. Wales. Ireland. Locally abundant.



- 2 Lateral border of the pronotum continuing past the hind angles on to the base. Elytra entirely pale or indistinctly darker in apical third. Reddish-brown with black head. Elytra with intervals less convex at apex, which is more produced. Length 5-6 mm. ....

..... ***Stenolophus skrimshiranus***

In marshy places, often near the coast. S.E. England, northwards to Norfolk. Local and rare.

Raised lateral border of pronotum ceases at the hind-angles. Elytra with a well-defined black patch, extending from the tip to before middle. Somewhat stouter. Colour more clear reddish-brown. Elytral intervals very convex at apex. Length 5.5-6.2 mm. ....

..... ***Stenolophus teutonius***

On moist ground, sometimes in open country, e.g. in clay pits. Southern England northwards to Gloucester and Cambridge. Doubtfully in Wales. Mostly single specimens.



## Genus *Trichocellus*

Genus *Trichocellus* Ganglbauer, 1892

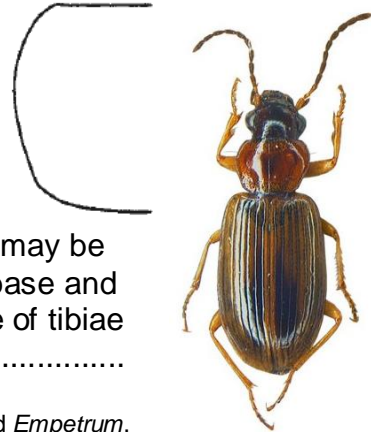
*cognatus* (Gyllenhal, 1827)

*placidus* (Gyllenhal, 1827)

- 1 Only first segment of the antennae is paler, reddish. Legs more or less darkened. Punctures and hair of the outer intervals of the elytra distinct; sparse hair sometimes also on the inner intervals. Dark brown to black; side margins and base of the pronotum reddish brown; elytra reddish brown but with a large dark longitudinal patch on each (these patches may be so extensive as to leave only the margins, the base and the suture paler). Legs often with only the base of tibiae pale. Length 3.5-4.2 mm. ....

..... ***Trichocellus cognatus***

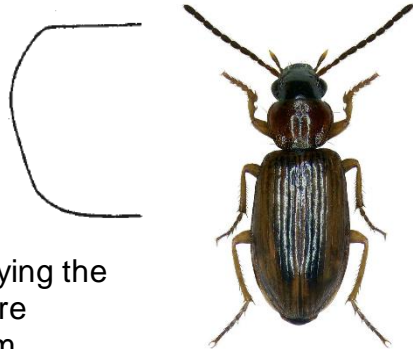
In open country, both on sand and peat, e.g. under *Calluna* and *Empetrum*. Usually in hilly and mountainous areas. Scotland and Wales; England southwards to Warwickshire and Cambridgeshire (isolated records further south),



Antennae almost always with the first two or three segments pale. Legs entirely pale. Punctures and hair of the outer intervals of the elytra very fine (best visible near the tip). Dark brown; pronotum reddish or yellowish brown with a central dark spot of varying size (not reaching any margin). Longitudinal darker patch on the elytra usually only occupying the third interval. Pronotum flatter, somewhat more widening towards the front. Length 4.5-5.5 mm. ....

..... ***Trichocellus placidus***

In shaded places under deciduous trees and bushes, often in fenland habitats e.g. in reed beds. Local but sometimes abundant; widespread. Photograph from Wikipedia.

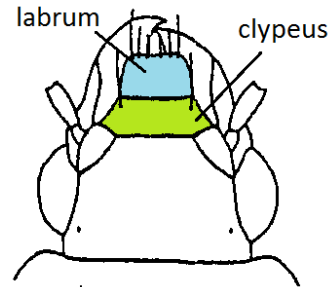




# Key to the Palaearctic subtribes of tribe Harpalini

Subtribes with British representatives are in red

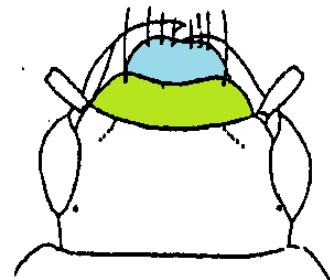
- 1 Clypeus and labrum symmetrical on their front edge. Striae of the elytra distinct. ....2



Clypeus and labrum asymmetrically concave on their front edge. Elytra with the striae very fine or partly absent. ....

..... **Subtribe Amblystomina**

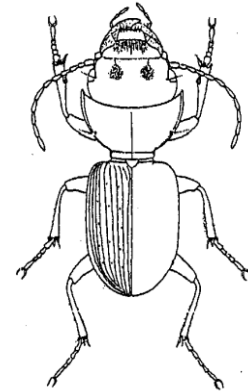
Only contains genus *Amblystomus*, which is not recorded from Britain



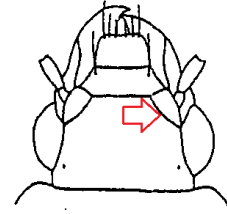
2 Base of the elytra with a complete border. ....3

Border along the base of the elytra extending inwards at most to the third stria. Head very large and about as wide as the pronotum. Pronotum with the front angles extended forwards in a sharp tooth; base of the pronotum strongly narrowed. ....

..... **Subtribe Ditomina**  
One European species *Dixus clypeatus*



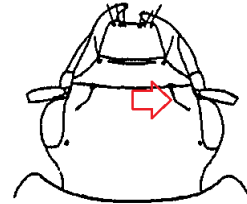
- 3 Second-to-last segment of the labial palps with only three two setae on the inner surface (exceptionally with three). Small, slender species, up to 8 mm with a distinct furrow which runs from the suture dividing the frons from the clypeus to the upper edge of the eye. ....



..... **Subtribe Stenolophina**

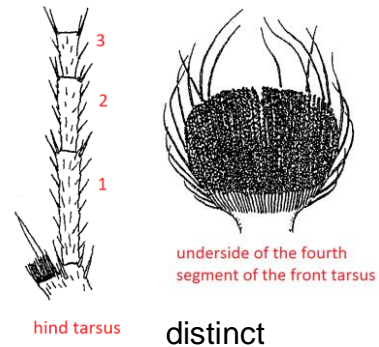
Genera *Dicheirotichus*, *Trichocellus*, *Stenolophus*, *Bradycellus*, *Acupalpus* and *Anthracus*, all with British representatives.

- Second-to-last segment of the labial palps with three or more setae on the inner surface. Usually larger and more robust species, either lacking a furrow running from the suture between the frons and clypeus or with one that stops before reaching the eye. ....4



Two subtribes differentiated on the basis of the very different front and middle tarsi in males. The first part of the couplet is to accommodate females.

- 4 First segment of the hind tarsi as long as the second and third segments combined. Elytra with fine hairs all over or with hairs at least in the two last elytral intervals; third interval with or without a bristle-bearing puncture. **Males** with segments 2-4 of the front and middle tarsi strongly dilated or segments 1-4 moderately dilated with a lobe underneath densely covered with bristle-like scales. Genus *Anisodactylus* usually has a transverse or forked reddish marking on the frons. ....



..... **Subtribe Anisodactylina**

Three genera *Anisodactylus*, *Scybalicus* and *Diachromus*, all recorded from Britain

**EITHER:** First segment of the front tarsi distinctly shorter than the second and third segments combined. Elytra hairy or not, without a bristle-bearing puncture in the third interval or with one or more such punctures (if the elytra are hairy there are often numerous additional bristle-bearing punctures in the fifth and seventh intervals). Frons without a furrow running towards the eyes but only with two impressions behind the suture that divides the frons and the clypeus.

**OR:** first segment of the front tarsi as long as the second and third segments combined, in which case, **either** the elytra lack hair and have a single bristle-bearing puncture in the third interval and the tarsi are bare on their upper surface **or** the elytra are hairy, with numerous bristle-bearing pores in the third, fifth and seventh intervals, the tarsi are hairy on their upper surface and there is a furrow running towards the eye from the suture between the frons and clypeus but it never actually reaches the eye.

**IN ALL CASES:** **Males** have segments 1-4 of the front and middle tarsi strongly or weakly dilated with two rows of scale-like hairs on their underside. (In exceptional cases - genera *Cryptophonus* and *Pangus*) the first segment of the middle tarsus is not dilated or only weakly so and lacks the rows of hairs.) Never with reddish markings on the frons (at most with an indistinct paler area over the clypeus. ....



..... **Subtribe Harpalina**

Genera *Harpalus* and *Ophonus* occur in Britain. Further Palaearctic genera are *Trichotichnus*, *Parophonus*, and *Pangus*.





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