

Key to the British species of tribe Lebiini

References

Adapted from Lindroth, C.H. (1974) Coleoptera, Carabidae. Handbooks for the identification of British insects, volume 4, part 2. London: Royal Entomological Society.

Reitter (1908) Die Käfer des Deutschen Reiches. (1908)

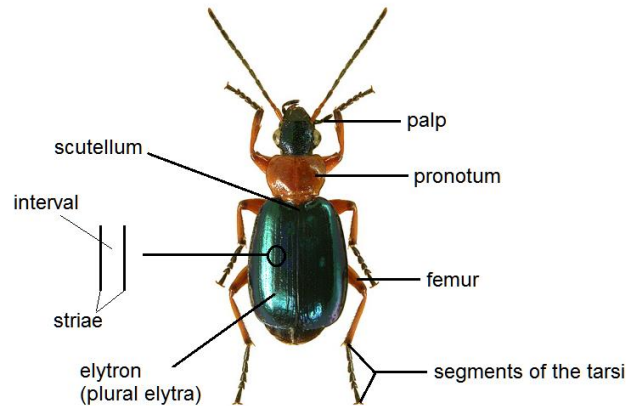


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Checklist

From the Checklist of Beetles of the British Isles, 2012 edition, edited by A. G. Duff.

Genus ***Calodromius*** Reitter, 1905

spilotus (Illiger, 1798)

Genus ***Cymindis*** Latreille, 1806

Genus ***Demetrias*** Bonelli, 1810

Genus ***Dromius*** Bonelli, 1810

Genus ***Lebia*** Latreille, 1802

Genus ***Lionychus*** Wissmann, 1846

quadrillum (Duftschmid, 1812)

Genus ***Microlestes*** Schmidt-Göbel, 1846

Genus ***Paradromius*** Fowler, 1887

Genus ***Philorhizus*** Hope, 1838

Genus ***Somotrichus*** Seidlitz, 1887

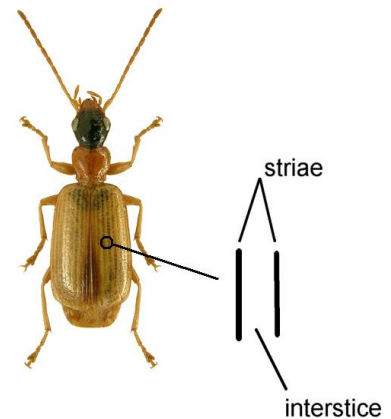
unifasciatus (Dejean, 1831)



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Genus ***Syntomus*** Hope, 1838

- 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.

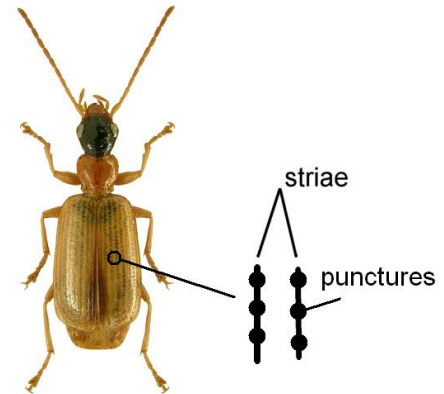


Elytra without hair (except for short bristles at the edge and/or isolated punctures bearing short bristles on interstices one to three) OR with only the outer interstices hairy.5



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- 2 Elytra with well-developed striae or rows of punctures.3



Elytra without regular striae or rows of punctures, though sometimes with shallow furrows without punctures. Body with head and pronotum dark contrasting with the golden-brown elytra which have a distinct transverse dark band. Eyes protruding and large occupying most of the space between the base of the antennae and the back of the head. Length 3.5-4.5 mm.

..... ***Somotrachus unifasciatus***

Photograph from U Schmidt. Introduced species.



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- 3 Elytra or entire body bright metallic, blue or green.
Pronotum contrasting clear reddish
..... ***Lebia cyanocephala***

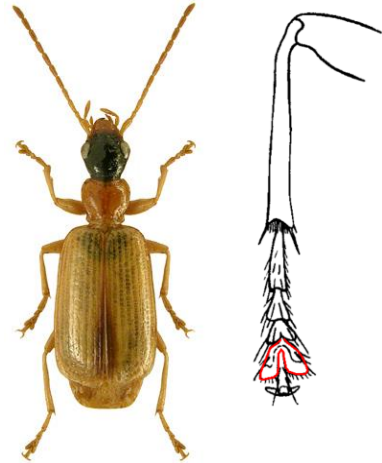


Entire body non-metallic.4



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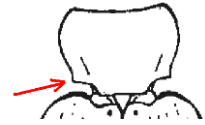
- 4 Less than 6 mm. Fourth tarsal segment lobed. ...
..... ***Demetrias atricapillus***



At least 8 mm. Fourth segment of the tarsus like the others.
..... Genus ***Cymindis***



5 Base of pronotum with a sharp incision at the side.6



Base of pronotum straight or slightly wavy towards the side.7



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- 6 Claws with comb-like teeth towards the base. Base of the pronotum lobed in the middle; pronotum tapering more or less equally from half way to the front and the back and with the back corners curving to a point and then curving again.
..... Genus ***Lebia***



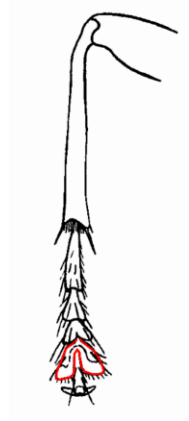
Claws smooth. Pronotum not lobed, tapering much more distinctly to the back.

..... ***Lionychus quadrillum***

A rare species through England from Cornwall to Yorkshire. On sand or gravel, sometimes dry, but often near water or near the shoreline. Length 3-4 mm.



- 7 Fourth tarsal segment strongly bilobed.
..... Genus ***Demetrias***



Fourth tarsal segment with sheared off or slightly notched apex8



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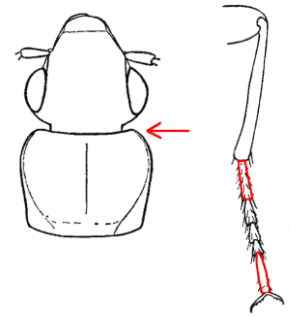
- 8 Last segment of the labial palps dilated and truncate. All interstices of the elytra with tiny punctures.
..... ***Cymindis axillaris***
Photograph from U Schmidt



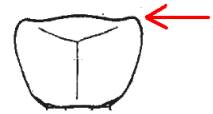
Last segment of the labial palps almost cylindrical. Not all interstices of the elytra are punctured.9



- 9 Front of pronotum straight or rounded. On the middle leg the last tarsal segment is equal in length to the first.
Length 3.5-7.0 mm.10



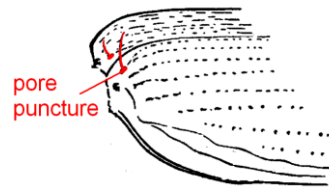
- Front of pronotum slightly wavy towards the sides. Last tarsal segment of the middle leg shorter than first segment. Length 2.5-3.8 mm.13



- 10 Length more than 5 mm. (except small specimens of *P. linearis*). Striae of the elytra distinct; seventh interstice with two or more coarse punctures touching the sixth stria; base without a pore-puncture.11



Length less than 5 mm. Striae of the elytra more or less absent (i.e. lines of punctures only and not slight ridges); seventh interstice without a puncture; base, on the level of apex of scutellum, with a small pore-puncture.12

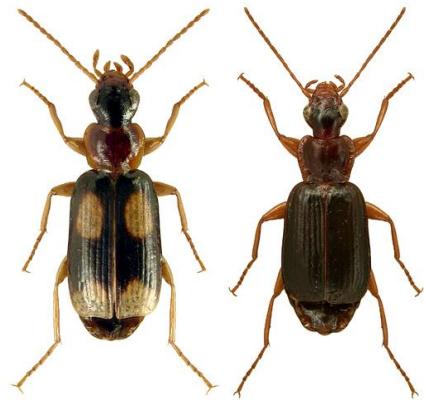


- 11 Base of elytra margined at the sides only (outside third entire stria). Head and pronotum narrower. Elytra pale, usually with a dark stripe along the suture.
..... Genus ***Paradromius***

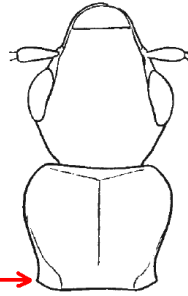


Elytra with a complete raised basal bead. Head and pronotum relatively more compact. Elytra differently coloured.
..... Genus ***Dromius***

The species of this genus are found in trees, so the description of ground beetle doesn't fit them!



- 12 Pronotum with sharp, protruding, almost right-angled hind-angles. Elytra with the raised basal margin reaching the scutellum. Dark brown species with the head black and pronotum usually dark red-brown. Elytra each with two yellow-brown spots, the smaller rear pair often joined across the suture and with darker brown colour extending round them at the tip. Length 3.8-4.6 mm.



..... ***Calodromius spilotus***

Usually on pine. England. Wales. Scotland. Ireland. Local.

Pronotum with blunt, obtuse hind-angles. Raised basal bead of elytra only developed at the sides. Apex of elytra almost always pale.

..... Genus ***Philorhizus***



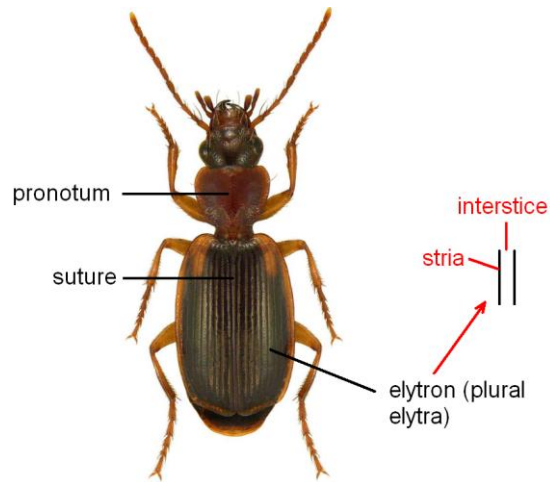
- 13 Elytra with apex obliquely truncate and somewhat wavy.
Third antennal segment without hair and only with the
normal short bristles towards the tip.
..... Genus ***Syntomus***



Apex of the elytra at right angles to the axis of the beetle.
Third antennal segment with sparse pubescence along with
the short bristles.
..... Genus ***Microlestes***



Genus *Cymindis*



Checklist

Genus ***Cymindis*** Latreille, 1806

Subgenus *Cymindis*

axillaris (Fabricius, 1794)

Subgenus *Tarsostinus* Motschulsky, 1864

macularis Mannerheim in Fischer von Waldheim, 1824

Subgenus *Tarulus* Bedel, 1906

vaporariorum (Linnaeus, 1758)



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- 1 Upper surface without hair, or any hair very indistinct. Interstices on the elytra very sparsely and finely punctured; striae quite deep. Pronotum brownish-red or yellowish-red; head dark reddish-brown. Elytra with a long narrow reddish-yellow marking near the shoulders. Antennae and legs yellowish-red. Length 8-11 mm.

..... ***Cymindis axillaris***

Photograph from U Schmidt (2009) at
<http://www.flickr.com/photos/coleoptera-us/3562746625/>



Upper surface distinctly hairy particularly on the elytra. Interstices on the elytra more strongly and densely punctured.2



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- 2 Pronotum slightly broader than long, convex at the sides and then curving out forming more conspicuous hind angles. Head and pronotum densely and coarsely punctured. Elytra with dense and very fine punctures. Black or blackish brown species. Elytra appearing more elongate, broadest beyond half way; narrowly reddish-brown along the sides or more broadly across the base. Antennae, mouth-parts and legs brownish-red. Length 7.5-9 mm.

..... ***Cymindis vaporariorum***

An upland species recorded from Shropshire northwards to Shetland; can be collected by sieving upland moss. Photograph from <http://www.hmyzfoto.cz/gcar.cym.html>



Pronotum broader than long, with more rounded sides which only curve outwards slightly at the base forming less distinct hind angles. Head and pronotum densely and quite finely punctured. Elytra more finely but much more densely punctured and hairy. Generally reddish brown species with the head blackish. Side margins of the pronotum rather paler. Elytra comparatively shorter and rounder, broadest at about half way; each elytron with a paler patch on the front, these sometimes merging across the suture. Antennae, mouth-parts and legs yellowish-brown. Length 7.5-10 mm.

..... ***Cymindis macularis***

A very localised species recorded only from the Breckland area of East Anglia. Photograph from www.eurocarabidae.de.



Genus *Demetrias*

Genus *Demetrias* Bonelli, 1810

Subgenus *Risophilus* Leach, 1815

imperialis (Germar, 1824)

Subgenus *Demetrias*

atricapillus (Linnaeus, 1758)

monostigma Samouelle, 1819

- 1 Temples hairy. Intervals between the striae of the elytra with a single row of erect bristles. Claws with three teeth. Elytra entirely pale or only indistinctly darker along the suture and, sometimes, at the tip and/or around the scutellum. Wings fully-developed length. Length 4.5- 5.6 mm.

..... *Demetrias atricapillus*

Among grasses, sedges, nettles etc., not necessarily near water; also in heaps of cut twigs. Common in England and Wales northwards to the Solway Firth.



Temples hairless. Only the interval of the elytra bears four punctures bearing bristles. Claws without teeth, or with a single tooth.2



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- 2 Wings reduced. Claws with a tooth in the inner surface. Darker markings on the elytra restricted to the tip and often along the suture. Length 4.2-5.1 mm.

..... ***Demetrias monostigma***

In tufts of *Elytrigia juncea* on sandy seashores, but also among reed and *Carex* near freshwater. Coast from North Wales round southern England to south Yorkshire. Inland records in East Anglia and elsewhere.



Wings fully-developed. Claws untoothed. Darker markings on the elytra more extensive. Length 4.9-5.6 mm.

..... ***Demetrias imperialis***

On reeds, bulrushes and other tall plants growing in or near water, often associated with *Odacantha melanura*. Most records south and east of a line from the Severn to the Humber.



Genus *Dromius*

The pie chart shows the proportion of each species out of just over 3000 records on the National Biodiversity Network website (checked 2019).

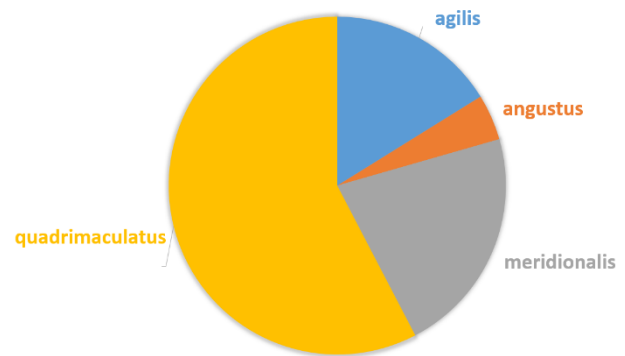
Genus ***DROMIUS*** Bonelli, 1810

agilis (Fabricius, 1787)

angustus Brullé, 1834

meridionalis Dejean, 1825

quadrimaculatus (Linnaeus, 1758)



- 1 Elytra black, each with two large paler patches which are sometimes joined to the one another; the rear patch covers the tip of the elytra. Frons with a surface sculpture of wrinkles. Length 5.2-6.4 mm.

..... ***Dromius quadrimaculatus***

On various deciduous trees, also on pine. Common and widely distributed as far north as the north of Scotland.



Elytra uniformly dark or each elytron with a pale spot in the front half. Frons with a surface sculpture of wrinkles only near the eyes (sometimes also with faint wrinkles in the middle).2



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- 2 Counting from the centre, the third interval on the elytra with at least 5 coarse, shallow punctures. Elytra dark, sometimes paler at base or with vaguely defined pale patches. Frons almost smooth in the middle. Length 6-6.8 mm.

..... ***Dromius agilis***

On all kinds of trees, including conifers. Widely distributed as far north as the north of Scotland but not common.



Third interval of the elytra with a single puncture at the tip. Flattened side section of the pronotum narrower, at least towards the front.3



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- 3 Frons with a surface sculpture of wrinkles only by the front part of the eyes, thus smooth in the middle. Flattened side section of the pronotum narrower towards the base. Narrower species with more slender antennae. Head and pronotum orange-brown with the elytra usually darker. Each elytron often with a pale base or with an ill-defined paler patch. Length 6-6.8 mm.

..... ***Dromius angustus***

Usually on pines. Far fewer records than the other species but still widespread as far as northern Scotland.



Frons with a surface sculpture of wrinkles along the whole length of the eyes and a hint of such sculpture in the middle. Pronotum broader with the hind angles rather more obtusely angled and with the flattened side border wider towards the rear. Length 6-7 mm.

..... ***Dromius meridionalis***

Mostly on deciduous trees. Widely distributed as far as northern Scotland but records are far more concentrated from Yorkshire southwards.



Genus *Lebia*

Genus *Lebia* Latreille, 1802

Subgenus *LAMPRIAS* Bonelli, 1810

chlorocephala (Hoffmann, J., 1803)

cyancephala (Linnaeus, 1758)

Subgenus *LEBIA*

cruxminor (Linnaeus, 1758)

marginata (Geoffroy in Fourcroy, 1785) (probably extinct)

scapularis (Geoffroy in Fourcroy, 1785) (probably extinct)

- 1 Elytra uniformly coloured, metallic green or blue (subgenus *Lamprias*).2



- Elytra partly black, partly orange-brown, non-metallic (subgenus *Lebia*).3



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- 2 Antennae with at least the two first segments paler. Femora entirely pale. Intervals between the striae on the elytra hairless and with the punctures fine. Strong metallic green or blue green. Pronotum, scutellum and legs, except the tarsi, clear orange-brown. Length 5.8-8.1 mm.

..... ***Lebia chlorocephala***

In meadows and grassland on light soils. The larva has been reared from pupae of *Chrysolina varians*. The only widespread member of the genus but even this species is classified as notable B.



Antennae with only the first segment pale (at least underneath). Tips of the femora black. Intervals between the striae on the elytra with coarser punctures, each with a small bristle. Length 5.7-7.8 mm.).

..... ***Lebia cyanocephala***

A local and rare species of open, dry, chalky hill-sides. South east England from Dorset to Norfolk with occasional records further north but recently recorded only from two sites in Surrey, possibly associated with *Hypericum* species (St John's Wort).



3 **Probably extinct in Britain**

Head and pronotum orange brown. Elytra black, pale only at the tip. Intervals between the striae on the elytra flat and very shiny, without a microscopic sculpture. Length 4-4.5 mm.

..... ***Lebia marginata***

Not recorded since the 19th century.



Head black, pronotum orange-brown. Elytra with some pale markings in the front half.4



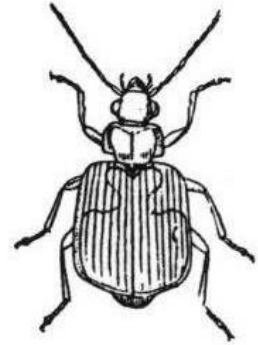
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4 **Probably extinct in Britain.**

Palps and scutellum pale. Intervals between the striae on the elytra somewhat convex and dull due to a net-like microscopic sculpture. Elytra black with large paler patch over the shoulders and sometimes with a small spot near the tip and paler along the extreme edge. Length 4-5.5 mm.

..... ***Lebia scapularis***

From Italy known as a larval parasite on the pupa of *Xanthogaleruca luteola*. Probably extinct; known from two 19th century records from East Sussex and Somerset.



Palps and scutellum black. Intervals between the striae of the elytra flat and very shiny, lacking a microscopic sculpture. Elytra orange brown with black markings consisting of a triangle over the scutellum, a broad transverse patch behind the middle, and the tip. These may be linked to one another. Antennae darkened except towards the base. Tips of femora and whole of tarsi darkened. Length 6-7 mm.

..... ***Lebia cruxminor***

In meadows, often in forest districts. On the continent repeatedly found associated with *Galeruca tanacetii*, which is probably its host. Very rare with very few records mostly in the south with outliers near the Solway Firth and Northern Ireland.



Genus *Microlestes*

Genus *Microlestes* Schmidt-Göbel, 1846

maurus (Sturm, 1827)

minutulus (Goeze, 1777)

Small, flattened species with shortened elytra. Differentiated from the very similar genus *Syntomus* by the absence of a tooth on the mentum and the tip of the elytra which are straight or obliquely angled inwards. The antennae are hairy from the third segment onwards (rarely the second). Sides of the pronotum usually straight, rarely convexly narrowing towards the rear.

- 1 On average much larger (2.5-3.5 mm) with a more parallel-sided appearance. The pronotum is almost always as long as wide, usually weakly narrowing towards the rear. Aedeagus longer, 0.58-0.79 mm, without an apical hook. Inner surface of the male middle tibia very distinctly and evenly concave in the apical half, with the tip extended as a tooth projecting inwards.

..... *Microlestes minutulus*



On average smaller (2.2-3.2 mm). Pronotum broader than long and tapering more clearly towards the rear. Aedeagus short, 0.35-0.5 mm with a sharp hooked tooth just before the tip, curving downwards. Inner surface of the male middle tibia with a few irregular curves, with the tip forming a blunt inwardly-directed tooth which is difficult to make out.

..... *Microlestes maurus*



Aedeagus (C) Lompe (2014)



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Genus *Paradromius*

Genus *Paradromius* Fowler, 1887

linearis (Olivier, 1795)

longiceps (Dejean, 1826)

- 1 Head very narrow with the temples (behind the eyes) much longer than the diameter of an eye. Elytra with the with striae shallow, with faint punctures. Elytra with a posterior dark spot, widening towards the tip and extending forwards along the suture. Frons almost smooth. Wings fully-developed. Length 5.3-6.5 mm.

..... ***Paradromius longiceps***

Among *Phragmites* and *Carex* in fens and marshes. On the continent also found among *Elymus* on sandy beaches. Eastern England: Cambridge to Lincoln. Very local.



Head much shorter with the temples not longer than the diameter of an eye. Striae of the eytra sharp with distinct punctures. Suture at most narrowly darkened. Frons densely wrinkled between the eyes. Probably always short-winged in Britain; a few fully-winged individuals have been found on the continent. Length 4.4-6 mm.

..... ***Paradromius linearis***

On dry, usually sandy soil, both inland and on the coast, climbing on plants. Common and widely distributed in the British Isles.



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Genus *Philorhizus*

Genus *Philorhizus* Hope, 1838

melanocephalus (Dejean, 1825)

notatus (Stephens, 1827)

quadrisignatus (Dejean, 1825)

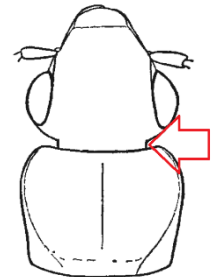
sigma (Rossi, 1790)

vectensis (Rye, 1873)

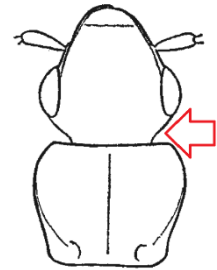
- 1 Head with distinctly narrowed neck. Elytra with the entire base dark and with two large pale spots on each elytron, the back ones covering the whole tip of the elytra. Head very dark brown, pronotum reddish brown. Fully winged species. Length 3.5-4 mm.

..... *Philorhizus quadrisignatus*

On various species of deciduous trees; also among dead branches and twigs on the ground. Rare species with widely scattered records.



Head behind eyes narrowing obliquely but without a neck. Base of elytra pale (except, rarely, in the middle). 2



- 2 Elytra entirely pale or with narrowly darkened suture. Fully-winged. This is the smallest species of the genus. Elytra more elongate and parallel-sided than in the three following species. Brownish with the head black and the pronotum reddish-brown, sometimes darker on top. Elytra pale brownish with a transparent dark triangle between the wings at the base. Abdomen often darker, sometimes as in *notatus*. Length 2.5-3.4 mm.

..... ***Philorhizus melanocephalus***

Found on the ground in dry meadows or grassland; also on the seashore among tall grasses. Common and widely distributed in the British Isles.



Elytra with an irregularly transverse dark band (rarely interrupted) just behind middle. Almost always short-winged.3



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- 3 Abdomen as pale as the rest of the underside or slightly darker towards the sides. Pronotum entirely pale. Elytra somewhat less shortened. Microscopic sculpture of the pronotum weaker, meshes of the sculpture in part approximately as long as wide. Tip of the aedeagus in side view more slender; internal sac with two weak, narrow sclerites and two broad plates. Head black, pronotum and elytra bright reddish brown; elytra with the well-defined transverse dark patch not reaching the side-margins and only exceptionally prolonged inside this to the tip. Length 3.2-4 mm.

..... ***Philorhizus sigma***

In fens and marshes on rather shaded ground, usually near water. On the continent also among dune grasses on the shore. S.E. England northwards to Suffolk, Yorkshire and Cumbria. Local and rare.



aedeagus

Abdomen rather darker than the front part of the underside. Pronotum often darkened on top with a strong microscopic sculpture with the meshes transversely elongate. Tip of the aedeagus, viewed from the side, more triangular; internal sac lacking sclerites and plates or the plates are narrow.4



- 4 Elytra pale towards the base with the scutellum the same colour; the pale areas are joined across the suture. Pale areas towards the tip also joined across the suture, thus there appear to be two paler areas one covering the front of the elytra and the other across the tips. In the male the aedeagus in side view, is very slender and the internal sac contains no sclerites.

..... ***Philorhizus vectensis***

Coastal species along the south coast and the Thames estuary.



aedeagus

Elytra with pale patches towards the base, but these are clearly separated by a black stripe extending along the suture with the scutellum also dark. Pale areas towards the tip also separated by a dark stripe along the suture, so that four distinct paler areas are present on the elytra. Aedeagus, in side view, much broader, the internal sac with two rod-like sclerites.

..... ***Philorhizus notatus***

On dry, sandy or gravelly soil with moderately dense vegetation, mostly on the coast. Widely distributed throughout Britain



These species are very difficult to separate and reference should be made to <http://markgtelfer.co.uk/2009/11/16/id-of-philorhizus-notatus-and-vectensis-col-carabidae/> for further characters to distinguish them.



Genus *Syntomus*

Genus **SYNTOMUS** Hope, 1838

foveatus (Geoffroy in Fourcroy, 1785)

obscuroguttatus (Duftschmid, 1812)

truncatellus (Linnaeus, 1761)

- 1 Each elytron dark brown with the shoulder indistinctly paler and usually with a slightly paler patch towards the tip, which may be continuous over both elytra; the pale patch on the shoulders may be linked by a pale line along the suture to the patch at the tip. Femora darkened; tibiae yellowish-brown. Head and pronotum darker than the elytra. Wings completely developed. Upper surface with at most a faint metallic shine, the elytra dull due to a dense granulate microscopic sculpture. Length 3.0-3.5 mm.

..... ***Syntomus obscuroguttatus***

Among moss, in hay stack refuse etc., usually in rather moist habitats on heavy soil. England, well recorded south of the Wash. Scattered records elsewhere.



Uniformly black to dark brown species, including legs. Wings usually much reduced.2



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- 2 Black or dark brown with faint bronze shine. Antennae and legs mostly black but with the first segment of the antennae and the tibiae slightly paler. Dorsal punctures of elytra small; microscopic sculpture of the elytra not granulate and consisting of an equal-sided mesh. Length 2.6-3.2 mm.

..... ***Syntomus truncatellus***

On open, firm and dry soil, usually with sparse vegetation of grasses. Records more scattered from the south coast of England northwards to south Yorkshire.



Upper surface with a distinct, bronze or brassy shine. Dorsal punctures in depressions. Elytra dull due to a microscopic sculpture of an elongate mesh with the area inside each mesh raised. Elytra almost parallel-sided. Legs almost black. Wings reduced. Length 3.1-3.8 mm.

..... ***Syntomus foveatus***

On dry, sandy fields with sparse vegetation of grasses, heather, etc. Northwards to the Moray Firth. Often abundant.

