

An identification guide to weevils. Part 6. Typical weevils

Draft 1.01



This guide covers 229 species of typical weevils: those with elbowed antennae, but excluding the flea weevils, the broad-noses, and the Ceutorhynchids. It includes all the native British and Irish species and most of the established non-natives (the missing species are only established in one or two places). It is largely complete, but there are still some accounts to finish or check. Missing information, and statements that I have not checked against enough specimens are preceded with ??; and there are three groups that are yet to be done:

Bagous. I need to spend more time with museum collections so I can understand the species.

The three extremely rare *Dorytomus*: *rubrirostris*, *salicis*, and *majalis*. I have seen so few genuine specimens, and most of those have been poorly mounted or are so dirty that I have not been able to get a good idea of the characters.

Thryogenes. When fresh, these are not so difficult. But so often the scales are worn, and then I find them confusing. I do not yet understand how to tell them apart.

I need to spend more time with museum collections before I can complete these. There are also a few species that have no illustration, but these are all uncommon or rare. I would rather make this guide available without those species and with its imperfections than wait for yet another year to pass by.

You should read the *Introduction to the guides*, which explains the parts of a weevil and how to use the identification guides. In this guide to the species, the species are arranged by genus or other similar groups. Each group has a brief summary of its main identification features, followed by a [Compare](#) section that lists groups or species that might be confused with it, and tells you how they differ. The species are arranged in tables, with a brief summary of their important features, and another Compare list. **You should check both Compare lists**: some confusable species will not be included in the list for the species if they have already been dealt with in the list for the genus or group.

Many of the features are comparative: darker, paler, wider, narrower, more pointed, blunter. The illustrations will show you what the differences mean. Some of the features are not easy to see on an illustration of a whole weevil. If you want more detail, you can see or download the original high resolution photos in the Typical weevils album at <https://tinyurl.com/weevilalbums>. The originals may be particularly useful for differences in scales or surface sculpture. A few of the species are illustrated by photos by Udo Schmidt or Lech Borowiec: the originals of those can be found by searching Udo Schmidt's photostream <https://www.flickr.com/photos/30703260@N08/> or visiting the Curculionidae pages of Lech Borowiec's collection at <http://cassidae.uni.wroc.pl/Colpolon/lista%20rodzin.htm>.

As ever with weevils, size is measured from the front of the eyes to the tip of the wing-cases.

Identifying weevils from specimens is so much easier if they are set neatly. I cannot emphasise this strongly enough. **Do not pin, point, or pickle weevils.** Set them on card, with the head, legs, and antennae in standard positions. This makes it easy to compare them with each other. I have seen many specimens that are unidentifiable or difficult because the features are obscured or at an odd angle. **Do not make things difficult for yourself.** Weevils are often stiff when they are dead, and you will not be able to set them in a good position. You can relax them by placing them in a sealed tube or container with a tissue soaked in clear vinegar. After a day or several they should be relaxed and easily manipulated into a standard position. The scales can become dark or discoloured if they get covered in vinegar, so try to keep the weevil away from the tissue and any condensation.

Asterisks indicate rarity of native species in Britain: * Scarce B (found in 31-100 10 km squares); ** Scarce A (found in 16-30 10 km squares); *** Rare (found in 1-15 10 km squares). Maps show distribution in Britain in 50 km squares, from the weevil recording scheme database, courtesy of Adrian Fowles. ○ Last recorded before 1930. ● Last recorded before 1970. ● Last recorded before 2000. ● Recorded since 2000. This is not a complete picture of distribution but it gives you a good idea of how widespread a species is. An apology to anyone using this guide in Ireland: this guide covers all the species found in Ireland, so you can use it to identify Irish weevils, but the maps, statuses, and comments on abundance and habitat refer only to Britain. I am afraid do not know enough about weevils in Ireland to include the same information for Ireland.

How you can help improve this guide

The Compare lists include those species or groups that I think might be confused with a species. If you find that you cannot tell whether your weevil is one species or another that I have not included in the Compare lists, please let me know and I can include them in Compare lists in future updates.

Thanks to everyone who has shared their records with the weevil recording scheme. The scheme and others will be pleased to accept your records via [iRecord](#).

Thanks to Peter Hodge and James McGill for the loan of some of the specimens illustrated here. The research for this guide was done mostly in the Insect Room at the Cambridge University Museum of Zoology, in the Angela Marmont Centre for UK Biodiversity, and at the Oxford University Museum of Natural History. Thanks to the staff at Cambridge, Oxford, and the Natural History Museum for allowing me such free access to their superb collections: especially to Russell Stebbings, Ed Turner, Max Barclay, Florin Feneru, and Darren Mann.

Thanks to Udo Schmidt and Lech Borowiec for permission to use their photos. They retain the copyright in their images.







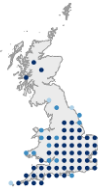
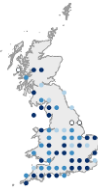
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Taxonomically, the typical weevils are the Nanophytidae, Dryophthoridae, Eirrhiniidae, Raymondionymidae, and the Curculionidae minus Rhamphini, Entiminae, Ceutorhynchinae, Scolytinae, and Platypodinae. The rest of the weevils will be covered in parts 1-5, and 7 if I ever get round to the bark beetles.

Cleopus pulchellus and Cionus




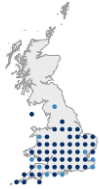






On **figworts and mulleins**. **Prominent shoulders**. **Distinctive patterns**: speckled, with **black spot** at the end of the wing-cases (and also in the middle of the wing-cases in *Cionus*). **Five segments** in the filament. [Compare](#) Ceutorhynchids (none has the same pattern as *Cionus* or *Cleopus*; six or seven segments in the filament).

Two **dark, blackish** species, and the distinctive *Cionus alauda* and *Cleopus pulchellus*.

	<i>Cionus scrophulariae</i>	<i>Cionus tuberculatus</i>	<i>Cionus alauda</i>	<i>Cleopus pulchellus</i>
				
Size	3.5-5.0 mm	3.4-4.2 mm	2.8-3.5 mm	2.5-3.0 mm
	<p>White scales on pronotum, with only narrow gap that does not reach the front. Centre black spot with white streak behind.</p> <p>Common figworts anywhere.</p> 	<p>Yellow scales on pronotum with wide black gap that reaches the front. Centre black spot with white streak behind.</p> <p>Similar places to <i>scrophulariae</i>, but less common.</p> 	<p>Whitish. Wide black oblong in centre of wing-cases.</p> <p>Common on figworts in the south.</p> 	<p>Speckled. No black spot in centre of wing-cases. Dark red-brown surface. Large tooth on front femur.</p> <p>Widespread but not common. Usually on figworts.</p> 
Compare	<i>Cionus tuberculatus</i> (pronotum scales yellowish, with wide gap; wing-cases with more rounded sides). <i>Cionus hortulanus</i> (paler; centre spot without white streak behind).	<i>Cionus scrophulariae</i> (pronotum scales white, narrow gap in middle; wing-cases with straighter sides). <i>Cionus hortulanus</i> (paler; centre spot without white streak behind; scales on pronotum whitish).	Distinctive pattern and shape (but see Ceutorhynchids <i>Poophagus sisymbrii</i> and <i>Tapinotus stellatus</i>).	<i>Cionus</i> (black spot in centre of wing-cases; blackish surface; smaller tooth on front femurs).
Foodplants	Mainly figworts <i>Scrophularia</i> , but also buddleias <i>Buddleja</i> and other Scrophulariaceae.	Figworts <i>Figworts</i> .	Figworts <i>Figworts</i> .	Figworts <i>Scrophularia</i> and mulleins <i>Verbascum</i> .





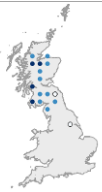

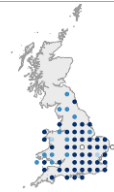
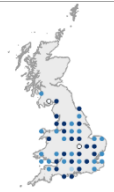
Cleopus pulchellus and Cionus (continued)

Three paler **grey, speckled** species. Even intervals with pale whitish-grey scales. **Compare** *Cionus scrophulariae* (more solidly white pronotum; darker, blacker wing-cases; clearer white streak behind centre spot; even intervals with dark blackish-grey scales). *Cionus tuberculatus* (yellowish pronotum sides; darker wing-cases; clearer white streak behind centre spot; even intervals with dark blackish-grey scales).

	<i>Cionus hortulanus</i>	<i>Cionus nigratarsis</i> **	<i>Cionus longicollis</i> **
			
Size	3.8-4.6 mm	3.6-4.3 mm	4.1-4.7 mm
	<p>Largely greyish, strongly speckled. Rostrum more angled and tapered in front of antenna sockets, especially in female. Male rostrum punctured and scaled to the tip; female rostrum punctured and scaled at base, smoother and almost bald beyond antenna sockets.</p>  <p>Common on figworts.</p>	<p>Largely greyish, strongly or weakly speckled. Eyes flatter and longer than <i>hortulanus</i> or <i>longicollis</i>. Male rostrum punctured and scaled to the tip; female rostrum punctured and scaled at base, smoother and almost bald beyond antenna sockets.</p>  <p>In places with good populations of Dark Mullein. Scarce.</p>	<p>Largely greyish, strongly or weakly speckled. Centre spot large, larger than rear spot. Wing-cases less domed in side view. Rostrum thick, punctured and scaled to the tip in both sexes.</p>  <p>In places with Great Mullein. Very rare outside Breckland.</p>
Compare	<i>Cionus nigratarsis</i> (rostrum slightly thicker, less angled; less tapered at tip; eyes flatter). <i>Cionus longicollis</i> (rostrum much thicker, less angled; centre spot larger, larger than rear spot).	<i>Cionus longicollis</i> (rostrum thicker; usually larger; centre spot larger, larger than rear spot; eyes more rounded). <i>Cionus hortulanus</i> (see account).	<i>Cionus nigratarsis</i> (rostrum not so thick; usually smaller; centre spot smaller, same size as rear spot; eyes flatter). <i>Cionus hortulanus</i> (see account).
Foodplants	Figworts <i>Scrophulariae</i> , less often on mulleins <i>Verbascum</i> or other Scrophulariaceae.	Dark Mullein <i>Verbascum nigrum</i> , occasionally on other mulleins.	Great Mullein <i>Verbascum thapsus</i> , occasionally on other mulleins.
Rostrum in side view			
Male			
Female			

Notaris

Long, thin rostrum, with antennae inserted **near the tip**. Obvious shoulders. Wing-cases with **narrow** scales or bald. **No tooth** on femurs. Usually **two spots** of dense scales on the wing-cases. Compare *Dorytomus* (narrower; front femurs with tooth on underside). *Thryogenes* (narrower; scales on wing-cases rounder and broader). *Grypus equiseti* (raised ridges on wing-cases; distinctive pattern). *Curculio* (wing-cases more tapered at rear, sides not so straight; rostrum thinner, pronotum usually wider at rear; usually on trees).

	<i>Notaris aethiops</i> **	<i>Notaris acridulus</i>	<i>Notaris scirpi</i>	<i>Tournotaris bimaculata</i> *
				
Size	5.3-7.9 mm	3.4-5.1 mm	5.5-7.3 mm	5.5-8.7 mm
	<p>No scales on wing-cases, glossy and shining.</p> <p>In sedge beds, fens, and other wetland vegetation. Uncommon.</p> 	<p>Smaller than other <i>Notaris</i>. Pronotum densely punctured, but punctures mostly separate from each other. Wing-cases with sparse scales, especially in the middle. Broad pearly scales* on side of body from hind legs to rear end of abdomen.</p> <p>In sedge beds, fens, and other tall wetland vegetation. Common.</p> 	<p>Pronotum densely punctured, some of the punctures joined together and looking more messy. Wing-cases with many scales (beware worn specimens). Broad pearly scales on side of body from mid legs to rear end of abdomen.</p> <p>In sedge beds, fens, and other tall wetland vegetation. Common.</p> 	<p>Wing-cases narrower and longer and pronotum wider. The front tibiae have several jagged teeth along the inner edge. Scales often form stripes on wing-cases.</p> <p>In sedge beds, fens, and other tall wetland vegetation. Uncommon.</p> 
Compare	Other <i>Notaris</i> (wing-cases rougher; pronotum more densely punctured; wing-cases with scales).	<i>Notaris scirpi</i> (larger; more densely scaled; pronotum narrower, punctures often joined together; pearly scales from mid legs to rear). <i>Tournotaris bimaculata</i> (wing-cases longer; scales often in stripes; jagged teeth on inside of front tibiae).	<i>Notaris acridulus</i> (smaller; sparsely scaled; pronotum wider, punctures separate; pearly scales from hind legs to rear). <i>Tournotaris bimaculata</i> (wing-cases longer; scales often in stripes; jagged teeth on inside of front tibiae).	<i>Notaris</i> (wing-cases proportionately wider and shorter; scales not in stripes; inside edge of front tibiae smooth).
Foodplants	Unknown	Sedges <i>Carex</i> , reedmace <i>Typha</i>	Grasses	Sedges <i>Carex</i> , reedmace <i>Typha</i> , grasses









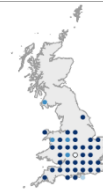
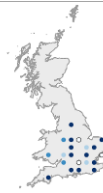
Notaris acridulus (left) has a band of pearly scales on its side from its hind legs to the tip of the abdomen. The area between the mid and hind legs is **dark**??

In *Notaris scirpi* (right) this band begins at the mid legs, so the **whole length** of the side is pearly.

In some specimens the colour of these scales is lost, but the difference in texture (dense covering of scales or rough texture in *scirpi*; smooth shining surface with large punctures in *acridulus*) is still apparent.

Thryogenes







Tooth at the end of the front tibiae, **long rostrum**, with antennae inserted **near the tip**. Wing-cases with at least some **narrow oval to round** scales among narrower hair-like ones. **No tooth** on femurs. **A difficult genus**. The shape of the scales is a useful character, but all species have a mix of round to hair-like scales, so you need to judge the predominate shape and the scales are often worn off. Differences in the shape of the antennal segments, pronotum, and wing-cases are subtle and hard to appreciate unless you have a series of carefully posed specimens to compare. **Compare** *Dorytomus*, *Acalyptus*, and *Ellescus* (tooth on the underside of the femurs). *Notaris* (scales narrower; smooth line down centre of pronotum; wing-cases proportionately broader and shorter). *Grypus equiseti* (raised ridges on the wing-cases; distinctive pattern).

	<i>Thryogenes fiorii</i> **	<i>Thryogenes festucae</i> *	<i>Thryogenes nereis</i>	<i>Thryogenes scirrhosus</i> *
				
Size	3.5-4.3 mm	3.8-4.6 mm	2.7-4.2 mm	3.3-4.4 mm
	<p>Black rostrum. Pronotum swollen, with rounded sides, almost as wide as the wing-cases.</p> <p>Discovered in Britain in 1993, but specimens were found hiding in older collections, so it had been overlooked. Not common but now known from a scatter of places.</p> 	<p>Rounded scales along suture similar to scales on rest of wing-cases (these scales mostly round, blunt ovals, with few pointed ovals).</p> 	<p>Whiter, rounded scales along suture contrast slightly with pale yellow or brown pointed oval scales that dominate the rest of the wing-cases. Narrower wing-cases than <i>festucae</i> and <i>scirrhosus</i>. Front legs not so long as <i>festucae</i>.</p> 	<p>Whiter, rounded scales along suture contrast strongly with pale yellow or brown narrow oval and hair-like scales on rest of wing-cases. Narrower pronotum than the other species. Rostrum thicker.</p> 
Compare	Other <i>Thryogenes</i> (dark brown to red brown rostrums, proportionately narrower and less swollen pronotums with less rounded sides).			
Foodplants	Sedges <i>Carex</i>	Spike-rushes <i>Eleocharis acutirostris</i>	Spike-rushes <i>Eleocharis</i>	Bur-reeds <i>Sparganium</i>

Smicronyx

Tiny weevils with small claws. Long, arched, narrow rostrum, antennae inserted near the tip. No tooth on the femurs. Black surface. Prominent waist and **obvious shoulders**. Wing-cases rather rounded to a narrower rear. One lives on gentians and centaury; the other two on dodders. **Compare** *Cosmobaris scolopacea* (wider and less rounded pronotum, lacks an obvious waist). *Tychius* (larger pronotum; usually more densely scaled). *Mecinus* (pronotums larger; only five segments in filament). *Tanysphyrus* (rostrum thicker; claws hardly apparent). *Procas*, *Notaris*, *Thryogenes* (all much larger).

Fresh specimens of *reichii* and *coecus* are more densely scaled than the ones shown here, so do not assume that your weevil is *jungermanniae* just because it is more scaled than the illustrations of the other two species: check the other characters.






	<i>Smicronyx reichii</i> **	<i>Smicronyx jungermanniae</i> *	<i>Smicronyx coecus</i> ***
			
Size	2.0-2.5 mm	1.8-2.3 mm	1.8-2.3 mm
Pronotum	With low, raised warts	With shallow punctures	With shallow punctures
Claws	Both the same length	Both the same length	Front claw on each foot shorter than rear claw (about two-thirds as long)
	<p>Pronotum covered in raised, low warts, unlike the sunken punctures of the other two species. Can be just as densely scaled as <i>jungermanniae</i> when fresh.</p> <p>Uncommon, but to be looked for in warm, open, disturbed ground where its foodplants grow.</p> 	<p>Covered in patches of scales when fresh. Wing-cases with straighter sides than <i>coecus</i>, proportionately longer and narrower.</p> <p>Often in heathland (heathers are often hosts to Common Dodder), but also in other open ground where dodders grow. The most frequently found <i>Smicronyx</i>.</p> 	<p>Few scales on wing-cases, but note that the specimen shown here is rather worn and fresh specimens may be more densely scaled than the one shown here. Distinctive unequal claws: the front one is shorter than the rear one.</p> <p>In similar places to <i>jungermanniae</i>, but much rarer.</p> 
Compare	<i>Smicronyx jungermanniae</i> (pronotum punctured; body narrower, sides straighter). <i>Smicronyx coecus</i> (pronotum punctured; claws unequal).	<i>Smicronyx reichii</i> (pronotum with warts; body wider, sides more rounded). <i>Smicronyx coecus</i> (less densely scaled; claws unequal).	<i>Smicronyx reichii</i> (pronotum with warts; claws equal). <i>Smicronyx coecus</i> (when fresh, more densely scaled; claws equal).
Foodplants	Centauries <i>Centaureium</i> and probably Yellow-wort <i>Blackstonia perfoliata</i>	Dodders <i>Cuscuta</i>	Dodders <i>Cuscuta</i>

Procas

Long thin rostrum, antennae inserted at the **tip**. **No** tooth on front femurs. **Mottled** wing-cases, with **square shoulders**. Red-brown feet contrasting with black legs. **Compare** *Notaris* and *Thryogenes* (not bristly; rostrum less densely punctured, more shining, antennae inserted further back). *Dorytomus* (front femur with tooth).

Pachytychius haematocephalus

Wide, swollen pronotum. Long, thin, arched rostrum, antennae inserted near the **tip**. **Tooth** on underside of **hind** femur, **no** tooth on front or mid femurs.

	<i>Procas granulicollis</i> **	<i>Procas picipes</i> ***	<i>Pachytychius haematocephalus</i> ***
			
Size	3.3-5.1 mm	3.8-6.8 mm	3.0-3.9 mm
	<p>Wing-cases with fine hair-like scales and a few longer and thicker raised scales. Rostrum with scales almost flat against surface.</p>  <p>Among leaf litter, stones, moss, or other low vegetation. Often at the base of Climbing Corydalis on heaths and in open woods or bracken.</p>	<p>All scales on wing-cases fine and hair-like. Rostrum with scales obviously arching, so the rostrum looks fuzzy. Pronotum slightly less rough than in <i>granulicollis</i>, but this is difficult to see through the scales.</p>  <p>Among leaf litter, stones, moss, or other low vegetation in open ground. Known from a scatter of places, but only modern record is from Lundy. Extremely rare.</p>	<p>Distinctive shape, with rounded, swollen pronotum and rather straight-sided, long wing-cases. Four short stripes at front of wing-cases.</p> <p>Very rare, in short coastal grassland.</p> 
Compare	<i>Procas picipes</i> (see account).	<i>Procas granulicollis</i> (a few longer and thicker scales on wing-cases; rostrum with scales almost flat; pronotum slightly rougher).	<i>Hypera</i> (narrower pronotum, especially at rear; usually shorter rostrum). <i>Dorytomus</i> (narrower pronotum; tooth on front femur). <i>Tychius</i> (wing-cases more curved at sides; antennae shorter; rostrum narrower at tip; pronotum narrower than wing-cases)
Foodplants	Probably Climbing Corydalis <i>Ceratocapnos claviculata</i> .	Unknown.	Bird's-foot-trefoil <i>Lotus corniculatus</i> .

Acalles and *Kyklioacalles*

Pronotum pulled over front of head like a **hood**. **Covered in flat round scales**. Legs rather stocky. When disturbed often adopt a curious posture with legs held out and together underneath the body, unlike other weevils which usually pull their legs in to the body. All three are associated with **dead twigs and leaves**, and are often found by shaking dense bundles of twigs, especially witches' brooms and epicormic growth where dead leaves and sticks have built up. They can also be found in leaf litter or moss.




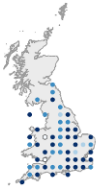
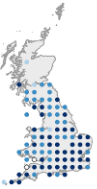
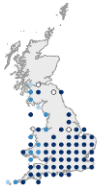



For now, this is an easy group, but it is probably only a matter of time before someone takes a close look at British *Acalles misellus* and discovers one or more of the very similar looking species that are found on the continent. Then things will get difficult. *Onyxacalles gibraltarensis* has recently been found in Essex. It is an introduced species from southern Europe. See [Coleopterist 26: 1-6](#).



Kyklioacalles roboris (left) has a prominent bump on each side of the pronotum, crowned with white scales.



Acalles misellus (right) and *ptinoides* have smoother rounded sides to the pronotum.

	<i>Kyklioacalles roboris</i> *	<i>Acalles ptinoides</i>	<i>Acalles misellus</i>
			
Size	2.5-3.6 mm	1.9-3.0 mm	2.0-3.1 mm
	<p>Pronotum with prominent bump on each side, straighter sides at rear, and broad shallow groove down the middle (most easily seen at as a depression at the rear). Erect paddle scales in dense long tufts on wing-cases and pronotum. Tufts often with four or more rows of paddle scales, more tightly packed than in <i>misellus</i>. Wing-cases appear slightly ribbed, from longer lines of raised scale tufts and also third and fifth intervals slightly raised at front.</p> 	<p>Hourglass figure, with pronotum sides curved in at rear, creating obvious waist. Paddle scales evenly spread and only slightly raised, no tufts. Wing-cases not ribbed.</p> 	<p>Hourglass figure, with pronotum sides curved in at rear, creating obvious waist. Paddle scales erect, single, and in tufts of two or three rows. Wing-cases only appear ribbed where erect scale tufts form long lines: intervals not raised.</p> 
Compare	<i>Acalles ptinoides</i> (more hourglass shape; pronotum rounded on top, no groove; bump on pronotum weak or absent; paddle scales curved rather than erect, not in tufts). <i>Acalles misellus</i> (more hourglass shape; pronotum rounded on top, no groove; bump on pronotum weak or absent; tufts with two or three rows of scales).	<i>Kyklioacalles roboris</i> (less hourglass shape; pronotum with a groove down the middle and prominent bump on side; paddle scales erect in long tufts; wing-cases ribbed). <i>Acalles misellus</i> (paddle scales erect and in long tufts).	<i>Kyklioacalles roboris</i> (less hourglass shape; pronotum with a groove down the middle and prominent bump on side; wing-cases more strongly ribbed). <i>Acalles ptinoides</i> (paddle scales curved rather than erect, not in tufts).
Foodplants	Probably decaying wood in twigs and branches.	Probably decaying wood in twigs and branches.	Probably decaying wood in twigs and branches.
Side view of wing-cases			

Trachodes hispidus

Large erect paddle scales in rows on wing-cases and pronotum. Rostrum long and thin. Tooth on the underside of the front femur.

Cryptorhynchus lapathi





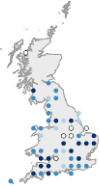


Rather large punctures on wing-cases. White rear. Tufts of scales on pronotum and wing-cases. Tooth on underside of front femur.

Grypus equiseti

Wing-cases lumpy. Long, thin rostrum, antennae inserted near the tip. Distinctive pattern. No tooth on the front femur.

Cotaster uncipes

Related to *Cossonus* but looks more like *Orthochaetes* on next page.





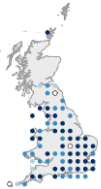



	<i>Trachodes hispidus</i>	<i>Cryptorhynchus lapathi</i>	<i>Grypus equiseti</i>	<i>Cotaster uncipes</i>
	 © Lech Borowiec	 © Lech Borowiec		 © Lech Borowiec
Size	2.5-3.9 mm	6.7-8.7 mm	4.1-6.7 mm	2.0-2.5 mm
	A bizarre weevil, with huge paddle-shape erect scales on the wing-cases and pronotum. Not so unlike <i>Acalles</i> in general appearance, but rostrum much longer On the ground and in leaf litter and twigs in woods, sometimes heaths and scrub.	Covered in scales, with distinctive pattern. On and around willows in wetlands. 	Distinctive pattern, with pale sides and tip. Bumps and hollows on wing-cases. On horsetails in wet places or damp grasslands. 	Like <i>Orthochaetes</i> , but antennae shorter, inserted further back from tip of rostrum; pronotum longer compared to wing-cases). Very rare introduction, hardly established. In leaf litter in a wood in Oxfordshire only. 
Compare	<i>Acalles</i> and <i>Kykliacalles</i> (rostrums shorter; erect scales much smaller).	<i>Acalles</i> and <i>Kykliacalles</i> (much smaller and more rounded; rear not white). <i>Grypus equiseti</i> (wing-cases lumpy and uneven; no tooth on front femurs; punctures on wing-cases smaller, neater).	<i>Cryptorhynchus lapathi</i> (punctures on wing-cases larger; rostrum shorter; tooth on underside of front femur). <i>Notaris</i> (no raised lumps on wing-cases; scales not forming white tip to wing-cases).	
Foodplants	Probably decaying wood.	Willows <i>Salix</i> , occasionally alder <i>Alnus</i> or birches <i>Betula</i>	Horsetails <i>Equisetum</i> .	



Orthochaetes (next page) have a rostrum raised above the head at its base, like a nose with a high bridge.

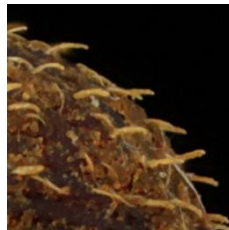
Orthochaetes, Pseudostyphlus pillumus, and Anchonidium unguiculare

Strange weevils, with low ridges down the wing-cases **large erect or curved scales**. Antennae inserted at or near the **tip** of the rather wide **rostrum**. Often **encrusted**. Compare *Grypus equiseti* (lumps on wing-cases; white rear and sides). *Syagrius intrudens* (lumps on wing-cases; surface shining). *Trachodes hispidus* (larger; paddle-scales larger; black and white; antennae inserted around half way along rostrum; pronotum and wing-cases more rounded). *Mitoplinthus caliginosus* (much larger; erect scales smaller). *Cotaster uncipes* (pronotum longer compared to wing-cases; antennae stouter, inserted further back along rostrum, scape shorter).

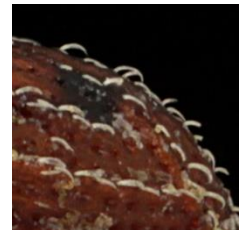
	<i>Orthochaetes setiger</i>	<i>Orthochaetes insignis</i> *	<i>Pseudostyphlus pillumus</i> ***	<i>Anchonidium unguiculare</i> ***
			 © Lech Borowiec	 © Udo Schmidt
Size	2.6-3.5 mm	2.4-3.0 mm	2.5-3.6 mm	2.2-3.0 mm
	Often encrusted. No scutellum. Erect scales in single rows on alternate intervals, which are raised into low ridges, especially at the front. Base of rostrum raised above the head like a Roman nose with a high bridge (see previous page), but mud or encrustation at the base can obscure this.  Grasslands and other open areas. On the ground, among moss, stones, or leaf litter. Common, but not often found, except with a vacuum.	Like <i>Orthochaetes setiger</i> , but wing-cases slightly wider in the rear half, and raised scales shorter, strongly curved back so the ends almost touch the surface.  In similar places to <i>setiger</i> , but much less common.	Covered in flat, round scales . Erect scales on alternate intervals. Prominent shoulders . In disturbed ground. Rare. 	?? Very rare in leaf litter in woods in Devon and Cornwall. 
Compare	<i>Pseudostyphlus pillumus</i> (scutellum; covered in flat scales; shoulders broader; pronotum wider; rostrum without high bridge). <i>Anchonidium unguiculare</i> (??). <i>Orthochaetes insignis</i> (see account).	<i>Pseudostyphlus pillumus</i> (scutellum; covered in flat scales; shoulders broader; pronotum wider; rostrum without hollow at base). <i>Anchonidium unguiculare</i> (??).	<i>Orthochaetes</i> (no scutellum; flat scales hair-like; erect scales narrower, not paddle shape; pronotum narrower).	<i>Orthochaetes</i> (pronotum narrower, ??).
Foodplants	On roots of many plants, but especially thistles.	On the roots of many plants.	Mayweeds <i>Matricaria</i> and probably other similar composites.	



Orthochaetes setiger has longer, straighter, more erect hair-scales.



Orthochaetes insignis has shorter hair-scales that are strongly curved back so the tip almost touches the surface



Mitoplinthus caliginosus





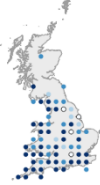

A **large** weevil with a distinctive shape: rather **stretched pronotum** longer than wide, about as wide as the **narrow** wing-cases, shoulders hardly apparent. Long but rather wide rostrum, with antennae inserted at the **tip**.

Orobitis cyanea

One of the **roundest** weevils of all. **Shiny**. **Domed** back, long brown legs.

Syagrius intrudens

Shining surface, **covered in bumps**. Rostrum **tapering**, antennae inserted at **tip**, **long scape**.




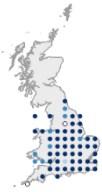

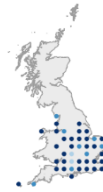
	Mitoplinthus caliginosus**	Orobitis cyanea	Syagrius intrudens
			 © Udo Schmidt
Size	6.1-9.0 mm	2.2-3.0 mm	4.5-7.2 mm
	<p>Rostrum slightly narrowed around the middle, before rounded tip. Rather long pronotum, longer than wide, but about as wide as the wing-cases, and with a smooth, shining line down the middle. Prominent tooth on underside of front femurs. Large hook at tip of tibiae, which have patch of golden scales near the tip. Wing-cases with rows of large punctures, larger than the tiny punctures of many other weevils. Front tibiae strongly indented at base.</p> <p>On the ground, under stones, among leaf litter. In open places and woods. Often around Hops <i>Humulus lupulus</i>. Rare.</p> 	<p>Distinctive round, hunched shape, looking rather like a violet seed. Broad white scales on underside.</p> <p>Widespread in grasslands, open areas in woods, among scrub, and other places where violets grow.</p> 	<p>Immediately recognised by the many round bumps over wing-cases and pronotum. Pronotum as wide as wing-cases. Rostrum tapering, like a womble nose.</p> <p>On and around ferns. Often in parks and gardens. A member of an Australasian genus, but not known from outside Britain and Ireland. Introduced, but perhaps extinct in its native range.</p> 
Compare	<i>Sitophilus</i> (smaller; antennae inserted near base of rostrum; pronotum proportionately even longer). <i>Euophryum</i> , <i>Pentharthrum</i> , <i>Phloeophagus</i> , <i>Dryophthorus</i> , and <i>Pselactus</i> (smaller; antennae inserted nearer base of rostrum). <i>Pissodes</i> (flat scales on wing-cases; punctures on pronotum small; rostrum narrower).	Unique shape.	Unique shape and bumpiness.
Foodplants	Various plants	Violets <i>Viola</i>	Ferns.

Tanysphyrus

Tiny weevils that live on **duckweeds** and **aquatic liverworts**. **Long but thick rostrum** and unique feet: claw-bearing segment is more or less contained between the lobes of the previous (heart-shape) segment, so the **feet look blunt and stubby**. **Compare *Smicronyx*** (claws protruding well beyond the heart-shape segment; narrower rostrums). *Anoplus* (lack the claw-bearing segment altogether; rostrum wider and more rounded; waist less apparent).





Stenopelmus rufinasus

Small aquatic weevil. **Short, broad rostrum, front half red**. Red-brown legs, **slender feet**: third segment of tarsi **narrow, barely lobed**. **No hook** on the end of the front tibiae. Oblong, **flat scales** on wing-coverts, pronotum, and femurs. On **Water-fern**. **Compare *Bagous*** (usually longer rostrums, not red in front half; hook on end of front tibiae; barnacle warts rather than flat scales). Broad-noses (third segment of tarsi wider and strongly heart-shape; most are larger, the only ones this small have wider rostrums, and they have wider pronotums, or thicker antennae, or erect bristles).

	<i>Tanysphyrus lemnae</i>	<i>Tanysphyrus ater</i> ***	<i>Stenopelmus rufinasus</i>
		 © Lech Borowiec	
Size	1.5-1.9 mm	1.5-2.0 mm	2.5-3.0 mm
	<p>One of our smallest weevils. Covered in patches of scales when fresh, but often loses these and looks black, with contrasting red-brown tibiae.</p> <p>Common on duckweeds, and found on other aquatic plants or in mud.</p> 	<p>Very like <i>lemnae</i>, but has black tibiae. When fresh, sides of pronotum more thickly scaled.</p> <p>Discovered in Britain in 2013. Still only known from Norfolk, but should be looked for on and around aquatic liverworts elsewhere.</p> 	<p>When fresh, covered with golden biscuit-brown scales, mottled with patches of blackish and white. Feet slender, with no wide heart-shape segment.</p> <p>On and around Water-fern in wetlands. An American species, introduced into Europe (as was its foodplant). Now widespread and naturalised.</p> 
Compare	<i>Tanysphyrus ater</i> (tibiae black). <i>Stenopelmus rufinasus</i> (rostrum shorter, red-brown; feet more slender; larger).	<i>Tanysphyrus lemnae</i> (tibiae red-brown). <i>Stenopelmus rufinasus</i> (rostrum shorter, red-brown; tibiae red-brown; feet more slender; larger).	Broad-noses [Entiminae] (similar shape rostrum, but none of them looks like this, most are bigger; heart-shape segment in feet). Ceutorhynchids: <i>Neophytobius</i> , <i>Rhinoncus</i> , and <i>Pelenomus</i> (third segment in feet wider, heart-shape; wing-cases more tapered towards rear). Ceutorhynchids: <i>Phytobius leucogaster</i> and <i>Eubrychius velutus</i> (legs longer; different shape).
Foodplants	Duckweeds <i>Lemna</i>	an aquatic liverwort <i>Ricciocarpus natans</i>	Water-fern <i>Azolla filiculoides</i>

***Nanophyes marmoratus* and *Dieckmanniellus gracilis*.**

Oval-shape, with **no shoulders**. **Black and orange** pattern. **Compare** Apionids (similar shape, but only a few are orange; they all have straight antennae and none have the same pattern as *Nanophyes* or *Dieckmanniellus*).

	<i>Nanophyes marmoratus</i>	<i>Dieckmanniellus gracilis</i> **
		
Size	2.0-2.5 mm	2.0-2.5 mm
	<p>Shoulderless shape and distinctive but variable pattern of orange and white bands is shared only with <i>Dieckmanniellus</i>. Femurs entirely orange or gradually darker towards tip, with no spines on underside.</p> <p>Common. Often easily found by closely examining Purple Loosestrife plants.</p> 	<p>Much rarer than <i>marmoratus</i>. ??Wing-cases usually with solid orange patch with pale and black spots. Femurs mostly orange with clear, broad, black tip. But patterns variable, so always confirm <i>gracilis</i> by the two small spines on underside of each femur and the longer and more slender rostrum. The second segment of the filament is longer (almost as long as the first) in <i>gracilis</i>, whereas it is shorter and more rounded in <i>marmoratus</i>, but this is not easy to see except when comparing the two side by side</p> <p>Uncommon, but to be looked for on Water-purslane in warm, open, usually seasonally flooded ground.</p> 
Compare	<i>Dieckmanniellus gracilis</i> (femurs with two small spines on underside; rostrum longer and more slender).	<i>Nanophyes marmoratus</i> (femurs without spines on underside; rostrum thicker, shorter)
Foodplants	Purple Loosestrife <i>Lythrum salicaria</i>	Water-purslane <i>Lythrum portula</i>



Nanophyes marmoratus. No spines on front femur.



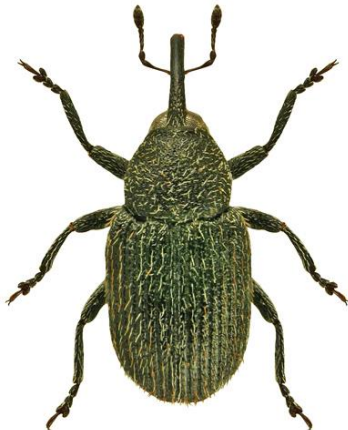




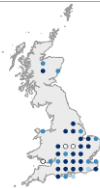


Dieckmanniellus gracilis. Two spines on underside of front femur.

The next five pages are of small weevils with only **five segments filament of the antenna**. The only other species with five segments in the filament are the very different *Cionus* and *Cleopus*, and *Pentarthrum* and *Euophryum*.





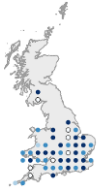

Cleopomiarus and Miarus

Tubby weevils, with a **wide, swollen pronotum**, emphasised by the **long, thin rostrum**. **Flat-backed**, with slight hollow in middle of wing-cases. Brown or white hair-scales in rows of one or two. Large **gap between bases of front legs** (bases almost touching in *Gymnetron*, *Rhinusa*, and *Mecinus*). **Compare** Ceutorhynchs (pronotum usually narrower at rear; shoulders prominent; six or seven segments in filament). *Mecinus pascuorum* and *labilis* (tarsi and antennae red-brown; smaller). *Rhinusa linariae* (rostrum thicker, bent down). *Rhinusa antirrhini* (rostrum trowel-shape). *Rhinusa collina* (hair-scales in rows of three or four; tibiae chunkier).

	<i>Cleopomiarus graminis</i> *	<i>Cleopomiarus micros</i> ***	<i>Cleopomiarus plantarum</i> ***	<i>Miarus campanulae</i> *
		 © Lech Borowiec	 © Lech Borowiec	
Size	3.0-4.1 mm	2.1-2.7 mm	2.6-3.3 mm	2.6-3.6 mm
Tibiae	Black	Black	Black	Black
Tarsi	Black	Black	Black	Black
Hind femur	Small tooth	No tooth	Small tooth	No tooth
	Especially tubby. Appears bristly from erect scales. Calcareous grasslands. Adults on flowers of other plants, especially yellow composites, before the foodplants bloom. 	Slightly bristly , hair-scales slightly raised, especially at rear. On Sheep's-bit in coastal grasslands and dunes. 	Bristly . Wing-cases narrower and straighter than other <i>Cleopomiarus</i> . Segments of filament longer than in <i>micros</i> , especially the second. Small tooth on hind femur, but this not easy to see (look from behind and from different angles). Grasslands and woodland clearings. Extremely rare, no persistent localities known. 	Not bristly, the scales more or less flat . Grasslands. Especially fond of Harebell <i>Campanula rotundifolia</i> . 
Compare	<i>Cleopomiarus micros</i> and <i>plantarum</i> (pronotums narrower; wing-cases narrower and straighter). <i>Miarus campanulae</i> (not bristly; not quite as tubby).	<i>Cleopomiarus graminis</i> (wider and more rounded) <i>Cleopomiarus plantarum</i> (sides of wing-cases straighter; second segment of filament longer and thinner; small tooth on hind femur). <i>Miarus campanulae</i> (not bristly; hair-scales shorter; wing-cases slightly wider).	<i>Cleopomiarus graminis</i> (much wide and fatter; sides of wing-cases more rounded). <i>Cleopomiarus micros</i> (wider; sides of wing-cases more rounded; second segment of filament shorter and stubbier; no tooth on hind femur). <i>Miarus campanulae</i> (not bristly; wing-cases wider and more rounded at sides; no tooth on hind femur).	<i>Cleopomiarus</i> (bristly).
Foodplants	Harebell and bellflowers <i>Campanula</i> and Round-headed rampion <i>Phyteuma orbiculare</i>	Sheep's-bit <i>Jasione montana</i>	Harebell and bellflowers <i>Campanula</i> and Round-headed rampion <i>Phyteuma orbiculare</i>	Harebell and bellflowers <i>Campanula</i> and Round-headed rampion <i>Phyteuma orbiculare</i>




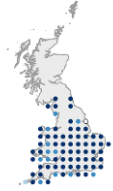
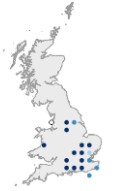
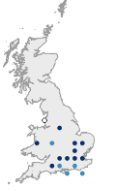


Wetland *Gymnetron*

Flat, **round yellow scales** on **sides** of pronotum, **flat** hair-like scales on wing-cases. On **water-speedwells** and **Brooklime**. Colour of surface variable and can be confusing. **Five** segments in filament. [Compare](#) *Mecinus pascuorum* and *labilis* (bristly; no round scales on pronotum). Other *Gymnetron* (bristly; no round scales on pronotum). Elongate *Mecinus* (bodies longer and narrower). *Rhinusa* (no round scales on pronotum).

	<i>Gymnetron beccabungae</i> *	<i>Gymnetron veronicae</i> *	<i>Gymnetron villosulum</i>
			
Size	2.0-2.5 mm	2.0-2.4 mm	2.1-2.9 mm
Tibiae	Red-brown or black.	Red-brown or black.	Red-brown or black.
Tarsi	Red-brown or black.	Red-brown or black.	Red-brown.
Hind femur	No tooth.	No tooth.	No tooth.
	<p>Brightest of the three, with a dense covering of round yellow scales on the pronotum, contrasting with the wing-cases, which are smoother and shinier than in the other two. Sparse cover of narrow, short scales. Usually red-brown, but black forms are known.</p> <p>On wetland vegetation where the foodplants grow.</p> 	<p>Pronotum less densely covered in round scales than in <i>beccabungae</i>, especially centre. Scales on wing-cases short, but wider than in <i>beccabungae</i>, surface more strongly wrinkled, less smooth and less polished. Often black in Britain, but sometimes red-brown. Rare all-black <i>beccabungae</i> with scales worn off the pronotum could be similar: check size of scales on wing-cases and texture of wing-cases.</p> <p>On wetland vegetation where the foodplants grow.</p> 	<p>Appears hairy under a hand lens. Easily recognised by the long hairs on the pronotum and the wing-cases, which obscure the surface. Surface red-brown.</p> <p>On wetland vegetation where the foodplants grow.</p> 
Compare	<i>Gymnetron veronicae</i> and <i>villosulum</i> (see accounts).	<i>Gymnetron beccabungae</i> and <i>villosulum</i> (see accounts).	<i>Gymnetron beccabungae</i> and <i>veronicae</i> (scales on wing-cases shorter, not obscuring surface).
Foodplants	Water-speedwells <i>Veronica anagallis-aquatica</i> , <i>scutellata</i> , and <i>catenata</i> , and Brooklime <i>Veronica beccabungae</i> .	Water-speedwells <i>Veronica anagallis-aquatica</i> and <i>catenata</i> , and Brooklime <i>Veronica beccabungae</i> .	Water-speedwells <i>Veronica anagallis-aquatica</i> and <i>catenata</i> , and Brooklime <i>Veronica beccabungae</i> .

Rhinusa

Three species that live on **toadflax**. Five segments in filament.

	<i>Rhinusa antirrhini</i>	<i>Rhinusa linariae</i> **	<i>Rhinusa collina</i> **
			 © Lech Borowiec
Size	2.2-3.0 mm	2.7-3.5 mm	2.5-3.2 mm
Tibiae	Black.	Black or dark brown.	Black.
Tarsi	Black or dark brown.	Black or brown.	Black or dark brown.
Hind femur	No tooth or a very tiny tooth.	No tooth or a very tiny tooth.	Sharp tooth.
	<p>Trowel-shape rostrum, pinched in at base, rather straight in side view. Hair-scales brownish, erect and spiky, appearing bristly.</p> <p>To be expected on any patch of Common Toadflax in the south.</p> 	<p>Rostrum strongly bent downwards. Hair-scales white, only slightly raised, hardly not appearing bristly except at the rear, shorter and neater than in <i>antirrhini</i>. Pronotum proportionately short and wide, swollen at sides, widest around the middle).</p> <p>Uncommon on toadflaxes.</p> 	<p>Rostrum normal, slightly downcurved. Hair scales brownish raised, especially at rear, but shorter than in <i>antirrhini</i>, in rows of three or four. Small but sharp tooth on underside of hind femurs (may be difficult to see).</p> <p>Uncommon on toadflaxes.</p> 
Compare	<p><i>Rhinusa linariae</i> (scales shorter and white, hardly bristly except at rear; rostrum not pinched in at base, strongly bent downwards; pronotum swollen). <i>Rhinusa collina</i> (hair-scales shorter; rostrum longer, not pinched in at base; obvious tooth on hind femur). <i>Mecinus pascuorum</i> (usually smaller; rostrum not pinched in at base; tarsi paler). <i>Gymnetron melanarium</i> and <i>rostellum</i> (rostrum not trowel-shape; hair-scales shorter, neater, white). <i>Cleopomiarus</i> and <i>Miarus</i> (rostrums not trowel-shape).</p>	<p><i>Rhinusa antirrhini</i> (hair-scales longer, more erect; rostrum pinched in at base, straighter; pronotum not swollen). <i>Rhinusa collina</i> (hair-scales brown; rostrum longer, only slightly downcurved; tooth on hind femur obvious). <i>Mecinus pascuorum</i> (bristly; usually smaller; rostrum not strongly bent downwards). <i>Gymnetron melanarium</i> and <i>rostellum</i> (smaller; rostrum not sharply bent downwards, pronotum not so wide). <i>Cleopomiarus</i> and <i>Miarus</i> (rostrums not bent at base; pronotums widest behind the middle).</p>	<p><i>Rhinusa antirrhini</i> (hair-scales white, longer, bristlier; rostrum pinched in at base, shorter and straighter; tooth on hind femur tiny or absent). <i>Rhinusa linariae</i> (hair-scales white; rostrum strongly bent downwards; tooth on hind femur tiny or absent). <i>Mecinus pascuorum</i> (usually smaller; rostrum thinner; tibiae narrower, less chunky). <i>Gymnetron melanarium</i> and <i>rostellum</i> (smaller; hair-scales shorter, neater, white; pronotum not so wide). <i>Cleopomiarus</i> and <i>Miarus</i> (pronotums widest behind the middle; hair-scales in rows of one or two; tibiae less chunky).</p>
Foodplants	Toadflaxes <i>Linaria</i>	Toadflaxes <i>Linaria</i>	Toadflaxes <i>Linaria</i>
Rostrum in side view			

Colour variation in *Mecinus pascuorum* (see next page)









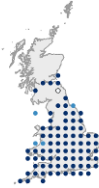
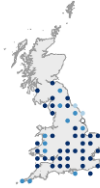
Black wing-cases, black tibiae.



Wing-cases with red-brown blotch, brown tibiae.




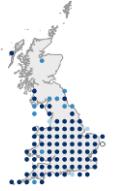

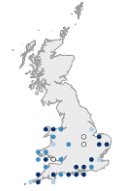

Dry *Gymnetron* and wide *Mecinus*

Tiny weevils with raised to erect hair-scales, appearing **bristly** (except *Gymnetron melanarium*), antennae inserted about **half way** along rostrum. **Five** segments in filament. [Compare](#) Wetland *Gymnetron* (round scales on side of pronotum; not bristly).

	<i>Gymnetron melanarium</i> *	<i>Gymnetron rostellum</i> ***	<i>Mecinus pascuorum</i>	<i>Mecinus labilis</i>
				
Size	1.4-2.4 mm	1.9-2.2 mm	1.8-2.5	2.1-2.4
Tibiae	Black.	Red-brown.	Red-brown or black.	Red-brown.
Tarsi	Black or dark brown.	Black or dark brown.	Red-brown.	Red-brown.
Hind femur	No tooth.	No tooth.	No tooth or a tiny tooth.	No tooth or a tiny tooth.
	<p>Hair-scales clean white, only slightly raised, not or hardly bristly. Pronotum much wider than long. Slender legs.</p> <p>In dry grasslands. Uncommon.</p> 	<p>Hair-scales clean white, erect, bristly. Pronotum much wider than long. Both <i>Gymnetron</i> appear more neatly scaled than the two wide <i>Mecinus</i>: flat hair-scales among the erect ones are slender, small and hardly noticeable.</p> <p>Rare in open, often disturbed, ground.</p> 	<p>Variable in size, shape, and colour: some are narrower or wider; wing-cases may be all black or have red-brown blotch in rear half (see previous page). Erect hair scales dirty white or pale yellowish. Femurs rather chunky. Male has prominent tooth on underside of front femur (no tooth in female). Often has many flat hair-scales among the erect ones, so appears matted, messy, and densely bristly.</p> <p>Very common in grasslands and anywhere else with Ribwort Plantain.</p> 	<p>Distinctive pattern of black and pink-brown bands. Mix of brown and clean white hair-scales. Short, stubby scape. No tooth on front femur.</p> <p>Similar places to <i>pascuorum</i>, but much less common.</p> 
Compare	<i>Mecinus pascuorum</i> and <i>labilis</i> (bristly; femurs chunkier; hair-scales denser; feet pale red-brown; pronotum proportionately longer). <i>Gymnetron rostellum</i> (hair-scales more erect; tibiae red-brown). <i>Rhinusa</i> (see accounts).	<i>Mecinus pascuorum</i> and <i>labilis</i> (femurs chunkier; hair-scales denser; feet pale red-brown; pronotum proportionately longer). <i>Gymnetron rostellum</i> (hair-scales only slightly raised; tibiae black). <i>Rhinusa</i> (see accounts).	<i>Mecinus labilis</i> (distinctive pattern on wing-cases; scape stubbier; white and brown hair-scales). Dry <i>Gymnetron</i> (legs more slender; feet dark; hair-scales neater). <i>Rhinusa</i> (See accounts). <i>Cleopomiarus</i> (feet dark; larger). <i>Miarus campanulae</i> (feet dark; larger; not bristly). <i>Tychius picirostris</i> (wing-cases narrower and straighter-sided; antennae inserted nearer tip of rostrum; six segments in filament; not bristly).	<i>Mecinus pascuorum</i> (lacks bands on wing-cases; scape more slender; hair-scales all one colour). Dry <i>Gymnetron</i> (legs more slender; feet dark, hair-scales neater). <i>Rhinusa</i> (See accounts). <i>Cleopomiarus</i> (feet dark; larger). <i>Miarus campanulae</i> (feet dark; larger; not bristly).
Foodplants	Germander Speedwell <i>Veronica chamaedrys</i> and probably other speedwells.	Unknown. Has been found on speedwells <i>Veronica</i> , but also on mayweeds and plantains.	Ribwort Plantain <i>Plantago lanceolata</i> .	Ribwort Plantain <i>Plantago lanceolata</i> .

Elongate *Mecinus*

Long and narrow. Wing-cases almost **straight-sided**. Black or metallic blue. Not bristly: hair-scales fine, almost **flat**. **Five** segments in filament. Compare *Limnobaris* (round white scales on underside; rostrum different shape; seven segments in filament). *Melanobaris laticollis* (smoother, more shining; seven segments in filament). *Magdalis* (less sausage-shape; wing-cases wider towards rear; seven segments in filament).

	<i>Mecinus pyraster</i>	<i>Mecinus janthinus</i> **	<i>Mecinus circulatus</i> *	<i>Mecinus collaris</i> *
				
Size	2.3-4.2 mm	3.2-4.2 mm	2.6-3.7 mm	3.0-4.0 mm
Tibiae	Black.	Black.	Red-brown.	Black.
Tarsi	Red-brown.	Black.	Red-brown.	Brown to black.
Hind femur	No tooth or a tiny tooth.	No tooth or a tiny tooth.		No tooth.
	<p>Long and sausage shape, black. Pronotum with sharp collar at front. Mostly two rows of punctures on each interval.</p> <p>Very common almost anywhere with Ribwort Plantain, except in far north.</p> 	<p>The longest and thinnest of the group, pronotum black, wing-cases dark metallic blue. Pronotum with sharp collar at front. One row of punctures on each interval.</p> <p>In gardens, and open disturbed ground with Common Toadflax. Not common.</p> 	<p>Thick scales forming stripe on sides of wing-cases and pronotum separates. Red-brown tibiae.</p> <p>In open disturbed ground and grasslands, usually on the coast.</p> 	<p>Round scales forming golden band at rear of pronotum. Rostrum almost straight.</p> <p>In saltmarshes.</p> 
Compare	<i>Mecinus pascuorum</i> (body wider; bristly). <i>Mecinus janthinus</i> (thinner; metallic blue). <i>Tychius picirostris</i> (obvious waist; collar not sharp; tibiae red-brown; scales thicker; six segments in filament).	Other Elongate <i>Mecinus</i> (wider; black). <i>Melanobaris laticollis</i> (wider; pronotum metallic; seven segments in filament).	Other Elongate <i>Mecinus</i> (tibiae black, no stripes on wing-cases).	Other Elongate <i>Mecinus</i> (no round scales on rear of pronotum; rostrums more curved). Wetland <i>Gymnetron</i> (bodies wider; legs longer; rostrum longer and thinner). <i>Limnobaris</i> (white scales on sides of body, not pronotum).
Foodplants	Ribwort Plantain <i>Plantago lanceolata</i> .	Toadflaxes <i>Linaria</i> .	Plantains <i>Plantago</i> .	<i>Sea Plantain Plantago maritima</i> .







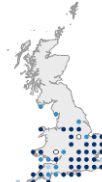


Mecinus pyraster has silver hair-like scales, and a typical, curved rostrum.



Mecinus collaris has a distinctive golden collar, and a thick, rather straight rostrum.

Sibinia

Covered in **broad scales**. Antennae inserted near tip of rostrum. Two species have keyhole shape mark on wing-cases, unique among the weevils. Compare *Tychius* (no keyhole mark; different shape, but if in doubt check the tips of the wing-cases: rounded and with a cleft in *Sibinia*; pointed and more or less joined together in *Tychius*).

	<i>Sibinia arenariae</i>	<i>Sibinia primita</i>	<i>Sibinia pyrrhodactyla</i>	<i>Sibinia sodalis</i>
				
Size	2.4-2.9 mm	1.7-2.1 mm	2.1-3.0 mm	2.0-2.5 mm
	<p>Golden brown with darker keyhole faintly outlined in white. Pronotum slightly wider than long.</p> <p>In saltmarshes and grasslands. Coastal.</p> 	<p>Darker orange-brown with dark keyhole strongly outlined in white. Pronotum about as wide as long.</p> <p>Open disturbed ground.</p> 	<p>Scales mixed: most orange-brown, but with white flecks. Black or dark brown antennae.</p> <p>Disturbed ground.</p> 	<p>Cliffs and coastal grassland.</p> 
Compare	<i>Sibinia primita</i> (smaller; darker; antennae usually darker).	<i>Sibinia arenariae</i> (larger and yellower; paler; antennae usually paler).	<i>Sibinia arenariae</i> and <i>primita</i> (keyhole marks; slimmer). <i>Sibinia sodalis</i> (wing-cases slimmer, tapered and more pointed rear; scales broader). Plain <i>Tychius</i> (wing-cases not so wide). Worn <i>Tychius quinquepunctatus</i> (tooth on hind femur).	<i>Sibinia pyrrhodactyla</i> (wing-cases fatter, blunt rear; scales narrower). <i>Tychius</i> (compare body shapes).
Foodplants	Sea-spurreys <i>Spergularia</i> .	Sea-spurreys <i>Spergularia</i> and pearlwrts <i>Sagina</i> .	Corn Spurrey <i>Spergula arvensis</i> .	Thrift <i>Armeria maritima</i> .













Sibinia: wing-cases are rounded at the rear, leaving a cleft between them



Tychius: tips of the wing-cases are almost joined together and are more pointed.



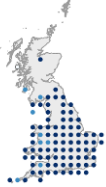


Patterned *Tychius*

Stripes (usually more than one) or **large spots** on wing-cases. Antennae inserted near the tip. Compare *Sibinia* (keyhole pattern or no pattern; wing-cases with rounded at tips and a cleft). Plain *Tychius* (no pattern, but some have light stripe down centre of like wing-cases like *lineatulus*: see accounts).

	<i>Tychius lineatulus</i> *	<i>Tychius parallelus</i> **	<i>Tychius schneideri</i> *	<i>Tychius polylineatus</i> ***	<i>Tychius quinquepunctatus</i> ***
	 © Lech Borowiec			 Lech Borowiec	
Size	2.4-2.7 mm	2.9-4.0 mm	2.3-3.0 mm	2.7-3.3 mm	2.7-4.0 mm
	Looks blackish with a clear white stripe down centre of wing-cases and pronotum, but no stripe on sides of pronotum. Rest of wing-cases with narrower scales, sometimes hair-like, sometimes broader and denser. Dark femurs . Uncommon in grassland. 	Pronotum with stripes down centre and side of pronotum. Pronotum much narrower than wing-cases, eyes more bulging than in <i>schneideri</i> . Broad stripes . Local on Broom in the south and again in northern Scotland. 	Pronotum with stripes down centre and side of pronotum. Pronotum about as wide as wing-cases. Narrow stripes . Open ground, usually by the coast. 	Like <i>schneideri</i> , but stripe down centre only . Pronotum wider. Narrow stripes . Chalk grassland, very rare . 	Shiny. Large spots on shoulders . Hind femurs with a prominent tooth , larger than in any other <i>Tychius</i> . Strongly swollen pronotum . Among open scrub, in woodland clearings, dunes, and grassland. 
Compare	<i>Tychius parallelus</i> (pronotum narrower at shoulders; scales broader; stripe on side of pronotum). <i>Tychius schneideri</i> (scales broader; stripe on side of pronotum; femurs brown). <i>Tychius polylineatus</i> (scales broader; pronotum more swollen at sides). <i>Tychius picirostris</i> (smaller; scales along suture not wider than rest; six segments in filament). <i>Tychius meliloti</i> (scales broader; rostrum paler; eyes flatter; looks brown). <i>Tychius stephensi</i> (scales broader; usually no stripe). Other Plain <i>Tychius</i> (scales broader; look pale brown or grey; femurs red-brown).	<i>Tychius schneideri</i> and <i>polylineatus</i> (pronotum wider; wing-cases narrower; stripes narrower).	<i>Tychius parallelus</i> (stripes wider; wing-cases broader; pronotum narrower). <i>Tychius polylineatus</i> (no stripe on sides of pronotum). <i>Tychius lineatulus</i> (usually looks darker; femurs blackish; no stripe on sides of pronotum; scales narrower).	<i>Tychius parallelus</i> (stripes wider; wing-cases broader; pronotum narrower). <i>Tychius schneideri</i> (stripe on sides of pronotum). <i>Tychius lineatulus</i> (scales narrower; looks darker; pronotum less swollen at sides).	Other <i>Tychius</i> (no shoulder spots; different shape; no tooth on femurs, or only a tiny tooth).
Foodplants	Clovers <i>Trifolium</i>	Broom <i>Cytisus scoparius</i>	Kidney Vetch <i>Anthyllis vulneraria</i>	Clovers <i>Trifolium</i>	Vetches and vetchlings <i>Vicia</i> and <i>Lathyrus</i>

Dark *Tychius*







Wing-cases with very **narrow** scales. **Blackish** antenna **clubs**, and **blackish femurs**. **No stripes**. **Rostrum** and surface of wing-cases **black**. See illustrations after the Plain *Tychius* species accounts. Compare *Tychius stephensi* (scales wider; antenna club red-brown). *Tychius meliloti* (scales wider; rostrum strongly bent; white stripe down centre of wing-cases). *Tychius lineatulus* (larger; scales away from suture neater and finer). Other Plain *Tychius* (femurs red-brown; antenna clubs usually red-brown; scales wider).

	<i>Tychius picirostris</i>	<i>Tychius pusillus</i> *	<i>Tychius tibialis</i> **
			
Size	1.8-2.4 mm	1.5-1.8 mm	2.1-2.5 mm
Eyes	Flat to rounded.	Flat to rounded.	Flat to rounded.
Femurs	Blackish.	Blackish.	Blackish.
Scales in striae	Slightly narrower.	Slightly narrower.	Slightly narrower.
Antenna club	Dark.	Dark.	Dark.
Other features	<p>Very common. The only <i>Tychius</i> with six segments in the filament. Scales narrower than the six plain species, in rows of two on narrower intervals, three on wider intervals. No tooth on inside of front tibiae, which are red-brown, or have slightly darker bases (some may be similar to <i>tibialis</i>, so beware).</p> <p>Almost anywhere with open ground and clovers.</p> 	<p>A tiny version of <i>picirostris</i>, scales larger in proportion to body size, in rows of one on narrower intervals, two on wider intervals. Male has tooth half way up inside of front tibiae.</p> <p>Open ground with trefoils. Much less common than <i>picirostris</i>.</p> 	<p>Like <i>picirostris</i>, but rostrum longer and straighter. Seven segments in filament, and tibiae are more strongly bicoloured: blackish at base, red-brown at tip. Male has tooth half way up inside of front tibiae.</p> <p>Open ground. Uncommon.</p> 
Compare	Other <i>Tychius</i> (seven segments in filament). <i>Tychius stephensi</i> (scales usually broader; paler antennae, with seven segments; antenna club paler). <i>Tychius tibialis</i> (rostrum longer and straighter, more pointed at tip; front tibiae bicoloured; seven segments in filament; wing-cases blunter and wider at rear). <i>Tychius pusillus</i> (smaller; seven segments in filament; scales in rows of one or two).	<i>Tychius picirostris</i> (larger; six segments in filament; scales in rows of two to three; no tooth on inside of male front tibiae).	<i>Tychius picirostris</i> (rostrum shorter not so straight, not so pointed at tip; tibiae not so strongly bicoloured; six segments in filament; no tooth on male front tibiae; wing-cases narrower and more pointed at rear).
Foodplants	White clover <i>Trifolium repens</i> and Alsike Clover <i>Trifolium hybridum</i>	yellow trefoils <i>Trifolium</i>	Clovers <i>Trifolium</i>

Plain *Tychius*




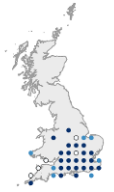


Six plain species with **broad scales** largely **hiding the surface**, and **no stripes** or **just one stripe down the centre** of the wing-cases. Tip of rostrum (beyond antenna sockets) **red-brown**. Surface of wing-cases often red-brown in rear half, but this often hidden under scales. **Femurs red-brown** except for *meliloti*. Note variability in colour and density of scales within species. See [illustrations after the species accounts](#). Compare *Sibinia* (keyhole pattern, or different shape; wing-cases with cleft at rear). Dark *Tychius* (scales usually narrower; femurs and rostrums darker than most plain species). *Mecinus pascuorum* (bristly; femurs dark [like *meliloti*]; five segments in filament. *Acalyptus carpini* (pronotum narrower and smaller; scales narrower and hair-like, golden; rostrum less tapering).

Three species with more **rounded eyes**.

	<i>Tychius squamulatus</i> *	<i>Tychius junceus</i>	<i>Tychius crassirostris</i> ***
			
Size	2.0-3.0 mm	2.0-2.5 mm	2.0-2.5 mm
Eyes	Bulging.	Rounded to bulging.	Rounded.
Femurs	Red-brown.	Red-brown.	Red-brown.
Scales in striae	Same as intervals.	Same as intervals.	Same as intervals.
Antenna club	Dark	Red-brown	Dark.
Other features	<p>Broad body, long rostrum, hardly tapering. Small tooth on underside of hind femurs, but this can be tiny and almost imperceptible, so do not rely on it (especially as <i>crassirostris</i> has a tiny tooth on the hind femurs). Pronotum sides rather straight in rear half.</p>  <p>Open ground. Uncommon.</p>	<p>Variable in colour and density of scales. Retroussé rostrum. Rather swollen pronotum, appears slightly outside, occupying rather too much of body compared to wing-cases.</p> <p>Common in the south on a wide range of legumes in grasslands and other open ground.</p> 	<p>Antenna club darker than in <i>junceus</i> and <i>breviusculus</i>, the species most likely to be confused with this one. Rostrum heavier at tip, angled in side view, especially on underside. Eyes more rounded than <i>breviusculus</i>. Male has brush of scales under front femurs.</p> <p>Very rare. Known only from soft cliffs in Dorset. Best found by looking for the galls on melilots.</p> 
Compare	<p><i>Tychius junceus</i> (rostrum tapered at tip; pronotum sides more curved in at rear; no tooth on hind femur; club paler). <i>Tychius crassirostris</i> (rostrum thicker, tapered to wedge-shape at tip; pronotum proportionately longer and narrower; shoulders less prominent). <i>Tychius stephensi</i> (rostrum thicker, dark up to antenna bases; eyes flatter; wing-cases narrower, shoulders less prominent). <i>Tychius brevisculus</i> (eyes flatter; club paler; no tooth on femurs). <i>Tychius meliloti</i> (eyes flatter; rostrum tapering at tip; femurs dark).</p>	<p><i>Tychius squamulatus</i> (rostrum not tapered at tip; pronotum sides straighter at rear; tiny tooth on hind femur; club darker). <i>Tychius crassirostris</i> (rostrum more angled, slightly thicker; pronotum proportionately longer and narrower; wing-cases proportionately longer, shoulders less prominent). <i>Tychius stephensi</i> (rostrum straighter, dark up to antenna bases; eyes often flatter; wing-cases narrower, sides straighter, shoulders less prominent). <i>Tychius brevisculus</i> (eyes flatter; rostrum less retroussé; pronotum more swollen in front half, but sides straighter in rear half). <i>Tychius meliloti</i> (eyes flatter; rostrum sharply bent from base; femurs dark; pronotum sides straighter in rear half).</p>	<p><i>Tychius squamulatus</i> (rostrum narrower, not tapered at tip; pronotum proportionately wider; shoulders more prominent). <i>Tychius junceus</i> (rostrum less angled in side view, slightly narrower, retroussé at tip; pronotum larger compared to wing-cases, but proportionately shorter and wider; wing-cases proportionately shorter, shoulders more prominent; club paler). <i>Tychius stephensi</i> (rostrum straighter, dark up to antenna bases; eyes often flatter; wing-cases straighter at sides; scales usually neater, striae more obvious). <i>Tychius brevisculus</i> (eyes flatter; rostrum less angled in side view, not so heavy at tip; pronotum more swollen in front half; club paler). <i>Tychius meliloti</i> (eyes flatter; rostrum sharply bent from base, narrower at tip; femurs dark).</p>
Foodplants	Bird's-foot Trefoil <i>Lotus corniculatus</i>	Legumes	Melilots <i>Melilotus</i>

Plain *Tychius* (continued)

Three species with **flatter eyes** (least so in *stephensi*, but in *meliloti* and *breviusculus*, eyes are clearly flatter than in the species on the previous page). See illustrations on the next few pages.

	<i>Tychius stephensi</i> *	<i>Tychius meliloti</i>	<i>Tychius brevisculus</i> ***
			
Size	2.0-2.8 mm	2.0-2.5 mm	2.0-2.5 mm
Eyes	Flat to rounded.	Almost flat.	Almost flat
Femurs	Red-brown.	Dark.	Red-brown.
Scales in striae	Narrower.	Narrower.	Narrower.
Antenna club	Red-brown	Dark.	Red-brown
Other features	<p>Greyish scales: the other plain species are usually more yellow, but they can be greyish too. Rostrum dark almost up to antenna bases, rather straight. Body rather narrow, straight-sided, and less waisted than in other Plain <i>Tychius</i>. Rostrum often blackish up to antenna bases. Could be confused with some of the Dark <i>Tychius</i>, especially a thicker-scaled <i>picrostris</i>. If in doubt, count antenna segments to rule out <i>picrostris</i>.</p> <p>Grasslands. Uncommon.</p> 	<p>Dark femurs. Pronotum narrower at base in proportion to wing-cases, and shoulders are more square and prominent than in other Plain <i>Tychius</i>, emphasising waist. Rostrum sharply bent at base.</p> <p>Female rostrum strongly tapered after antenna bases. Male with tooth on inside of front tibia (shared with <i>pusillus</i> and <i>tibialis</i>, but no other Plain <i>Tychius</i>).</p> <p>Waste ground with plenty of melilots.</p> 	<p>Flat eyes, yellowish or cream scales. Pronotum wide and swollen in front of the middle.</p> <p>Waste ground with plenty of melilots. Rare, but might be spreading.</p> 
Compare	<p>Dark <i>Tychius</i> (femurs darker; rostrum blackish beyond antenna bases; antenna clubs darker; scales narrower). <i>Tychius squamulatus</i> (rostrum narrower more curved, paler; pronotum proportionately wider; shoulders more prominent; wing-cases broader, sides more tapered; eyes more bulging). <i>Tychius junceus</i> (rostrum more curved, dark only at base, retroussé at tip; eyes often more rounded; shoulders and waist more prominent). <i>Tychius crassirostris</i> (rostrum more angled, dark only at base; eyes often more rounded; wing-cases more oval; scales denser and usually messier, obscuring striae). <i>Tychius brevisculus</i> (rostrum dark only at base, slightly tapered at tip; pronotum wider, more swollen in front half). <i>Tychius meliloti</i> (rostrum sharply bent from base, narrower at tip; femurs dark; male with tooth on inside of front tibiae).</p>	<p>Dark <i>Tychius</i> (rostrum blackish beyond antenna bases, not so narrow at tip; shoulders not so square, waist not so prominent; scales narrower, no stripe down wing-cases). <i>Tychius squamulatus</i> (rostrum not narrowed at tip; pronotum proportionately wider; eyes more bulging; femurs pale). <i>Tychius junceus</i> (eyes more rounded; shoulders not so square; femurs pale). <i>Tychius crassirostris</i> (rostrum thicker, more angled in side view; eyes more rounded; waist less prominent; femurs pale; scales denser and usually messier, obscuring striae). <i>Tychius brevisculus</i> (pronotum wider, more swollen in front half; shoulders not so square; femurs pale).</p>	<p><i>Tychius squamulatus</i> (eyes bulging; rostrum narrower, not tapered at tip). <i>Tychius junceus</i> (eyes rounded; rostrum slightly more retroussé at tip; pronotum wider further back, around middle). <i>Tychius stephensi</i> (rostrum straighter, dark up to antenna bases; eyes often flatter; wing-cases straighter at sides). <i>Tychius crassirostris</i> (eyes rounded; rostrum angled in side view, heavier at tip; not so swollen; club darker). <i>Tychius meliloti</i> (rostrum sharply bent from base, narrower at tip; pronotum wider further back, around middle; femurs dark).</p>
Foodplants	Red Clover <i>Trifolium pratense</i>	Melilots <i>Melilotus</i>	Melilots <i>Melilotus</i>

Plain and Dark *Tychius*: rostrums in side view. Differences between sexes are often greater than those between species.

Males

Females

Plain *Tychius*

breviusculus



Tychius brevisculus. Not so angled as *crassirostris* and *junceus*.

crassirostris



Tychius crassirostris. Sharply angled on under side. Heavy tip.

junceus



Tychius junceus. Tapered after antennae.

stephensi



Tychius stephensi. Rather thick, straighter than the others, dark as far as antenna bases.



Tychius brevisculus. Tapering after antennae, like *junceus* but not so retroussé.



Tychius crassirostris. Sharply angled on under side. Very like male *junceus*, but not so retroussé, more angled on under side, and slightly shorter and thicker.



Tychius junceus. Slender and tapered after antennae.



Tychius stephensi. Rather thick and straight, heavy tip, dark as far as antenna bases.

Males

Females

squamulatus



Tychius squamulatus. Long, not narrowing much after antennae.

melliloti



Tychius melliloti. Sharply bent from base.



Tychius melliloti. Sharply bent from base, very slender at tip.

Dark *Tychius*

picrostris



Tychius picrostris. Dark to beyond antenna bases.



Tychius picrostris. Long and pointed. Dark to beyond antenna bases.

pusillus

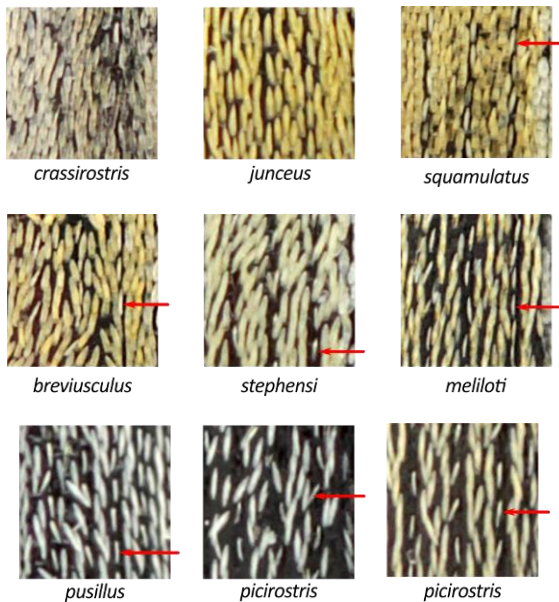


Tychius pusillus. Dark to beyond antenna bases.



Tychius pusillus. Dark to beyond antenna bases.

Plain and Dark *Tychius*: scales

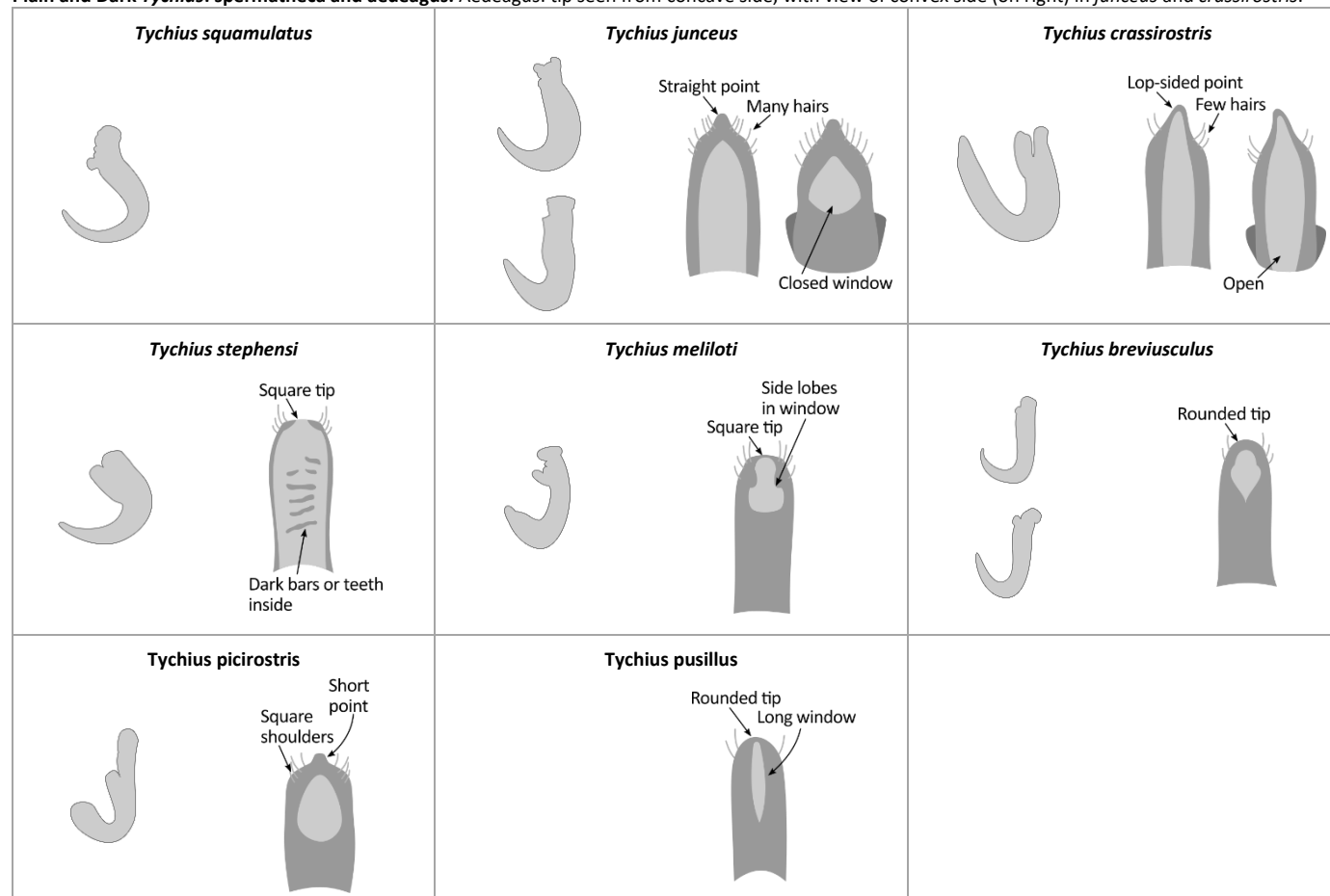


In the middle of the wing-cases, the scales of *crassirostris* and *junceus* are all more or less the same size and shape. In the other species, the scales in the striae (marked with a red arrow) are narrower and sometimes paler than those in the intervals.

These narrower scales are not always easy to see. In species without them (*junceus* and *crassirostris*), the scales are usually more messy and they can obscure the striae. This seems to be true of *crassirostris*, but in *junceus* the striae are sometimes clear.

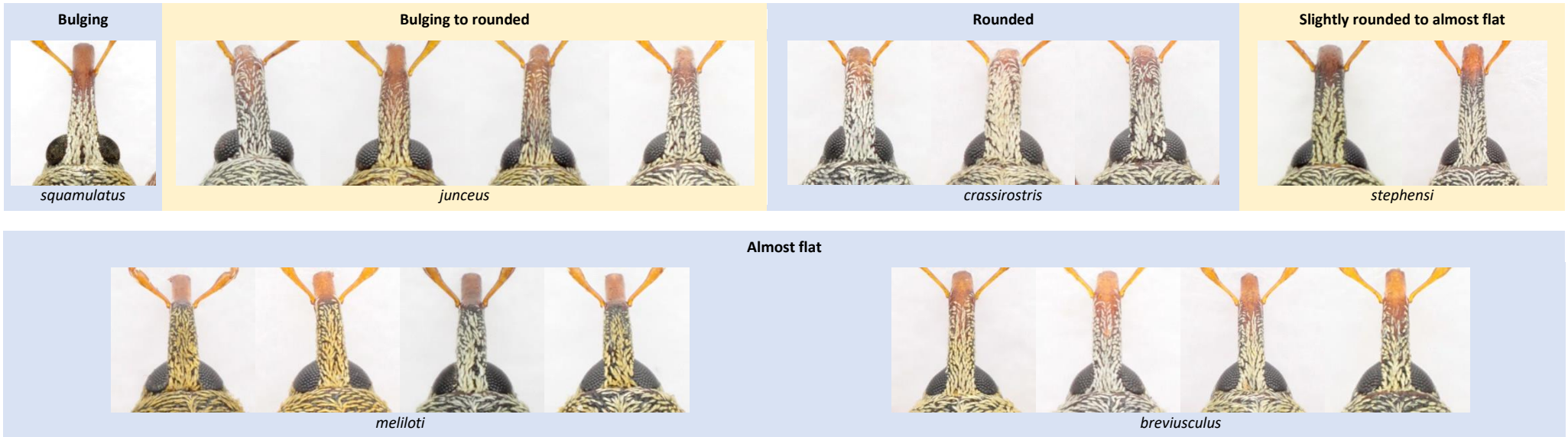
Beware that near the rear end of the wing-cases the scales in the striae of *junceus* may be slightly narrower than those in the middle of the wing-cases.

Plain and Dark *Tychius*: spermatheca and aedeagus. Aedeagus: tip seen from concave side, with view of convex side (on right) in *junceus* and *crassirostris*.



The six plain *Tychius*: eyes

Eye shape is an important character among the plain species. It is rather variable in *junceus*, but the eyes are always more rounded than the outline of the head, whereas in *meliloti* and *breviusculus* they more or less follow the outline of the head and do not protrude at all. This is a useful field character. Species arranged from most bulging to flattest eyes.



Male *Tychius crassirostris*. The scales on the underside of the front femur are raised and form a brush. In other plain *Tychius*, the scales are flat or only very slightly raised.



The easiest way to find *Tychius crassirostris* is to look for its swollen sausage galls on the leaves of melilots.



Tychius meliloti usually has a more contrasting centre stripe than other plain *Tychius*.



Male *Tychius meliloti* has a tooth on the inside of the front tibia. Note too the bent and tapered rostrum.



Tychius pusillus is obviously smaller than the much more common *picirostris*. It has rows of one or two scales on each interval rather than rows of two or three. The male has tooth on the inside of the front tibia. These are easier fieldmarks than the number of segments in the filament.

The six plain *Tychius*: body shape and variation in scaling

Tychius squamulatus



Pronotum with rather **straight sides at rear**.

Tychius junceus



Wide pronotum and wing-cases. Pronotum large in proportion to wing-cases, sides evenly **rounded**, appear rather **swollen**. Often messy, with scales obscuring striae, but striae are sometimes more obvious.

Tychius crassirostris



Pronotum **proportionately slightly longer** than *junceus* or *breviusculus*, **wing-cases narrower** and more oval, **shoulders not prominent**. Scales messy, obscuring striae.

Tychius stephensi



Wing-cases with rather straight sides in male, shoulders not prominent. Slightly more curved sides in female, but still proportionately longer and narrower than in *junceus*. Striae usually obvious.

Tychius melloti



Prominent shoulders, pronotum proportionately **narrower** at base compared to wing-cases. Stripe down centre usually more prominent than in other plain species.

Tychius brevisculus







Pronotum **swollen in front half**, straighter sides in rear half.

Acalyptus carpini

Small, covered in **golden hairs** (may fade to greyish when old). Long rostrum. **No** tooth on front femurs.

Ellescus bipunctatus

Another small and distinctive species found on willows. Mid-length rostrum. **No** tooth on front femurs.

	<i>Acalyptus carpini</i>*	<i>Ellescus bipunctatus</i>**
		
Size	1.9-2.6 mm	2.3-3.4 mm
	<p>Rather plain, but distinctive, with its golden hair-scales. Orange-brown feet and antennae. Obvious shoulders, pronotum rather small compared to wing-cases</p> <p>Usually on willows. Widespread across the south but uncommon and local.</p> 	<p>Whitish with distinctive pattern of two chocolate spots on wing-cases, sometimes with another smaller pair in front of these. Femurs blackish, contrasting with orange-brown tibiae and feet.</p> <p>On and around willows. Local and uncommon.</p> 
Compare	<p><i>Anthonomus rubi</i> and <i>brunnipennis</i> (longer rostrum, legs, and antennae; sparsely and shortly scaled). <i>Tychius</i> (pronotums wider; rostrums more tapering). <i>Dorytomus</i> (tooth on underside of front femurs; often mottled or plain orange-brown, not dark with contrasting orange-brown feet). <i>Mecinus pascuorum</i> (hairs greyish; pronotum wider; five segments in filament).</p>	<p><i>Tychius</i> (shoulders not so square, pronotums wider; wing-cases plain or with stripes, not brown spots). Ceutorhynchids <i>Poophagus sisymbrii</i>, <i>Tapinotus stellatus</i>, and <i>Drupenatus nasturtii</i> (longer legs, rostrums, and antennae; scales wider, patterns different).</p>
Foodplants	Willows <i>Salix</i> .	Willows <i>Salix</i> .

Dorytomus

Rather **straight-sided**, and **narrow** weevils on **willows and poplars**. **Plain** orange-brown, or **mottled**. Prominent **tooth on underside of front femurs**. A difficult genus: the patterns and colour vary, and there are several subtly different pairs. Species >4 mm long are called large; those <3 mm are tiny. Species are usually associated with either *Salix* or *Populus* but they **can appear on each others' foodplants**, and indeed on other trees, so do not rely on this. Most spend the winter in moss or leaf litter at the base of their foodplants, or under bark. **Compare** *Hypera* (no tooth front femurs; wing-cases usually wider, so have more of a waist). *Thryogenes*, *Tournotaris*, and *Notaris* (no tooth on front femurs). *Ellescus bipunctatus* (two spots on wing-cases; no tooth on front femurs). *Acalyptus carpini* (no tooth on front femurs; shorter antennae; not mottled).

This is a difficult genus. The differences between the species are often subtle, and the variation within the species is confusing. That said, most examples of many of the species are readily recognisable with experience; a reference collection helps immeasurably. The main difficulties are: separating *rufatus* and *melanophthalmus*; separating *taeniatus* and *dejeani*; and the three extremely rare species *salicis*, *majalis*, and *rubrirostris*. *Dorytomus rubrirostris* in particular has been widely misidentified in collections.



Dorytomus ictor. Hairs long and **projecting well beyond edge** of pronotum (yellow line).



Dorytomus dejeani. Hairs hardly projecting beyond edge of pronotum (yellow line).

The **Fringe hairs** referred to in the tables are on the sides of the front edge of the pronotum. In some species they are long, **projecting well beyond the edge of the pronotum** and **directed forwards** and slightly up.

In others, the hairs are **shorter**, they **project only slightly** beyond the edge, and they are directed **mostly upwards** and only slightly forwards.

The photos show the difference between *Dorytomus ictor* (long projecting hairs, sweeping forward more than up) and *dejeani* (hairs hardly projecting, sweeping up more than forward). But even in *dejeani* the hairs do project beyond the front edge, and this is not an easy character unless you have both states to compare. There are always other characters you can use instead, so do not worry if you cannot decide whether the hairs are projecting or not: it is just another clue to help you.



Dorytomus ictor has a thicker and shorter rostrum than most *Dorytomus*. It could be confused with a *Hypera*, but it has a tooth on the underside of the front femur. Note that the tooth can be hidden, as here, so check from below.



Dorytomus taeniatus. No notch.







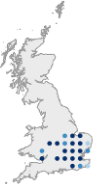



Dorytomus melanophthalmus. Notch in front edge of pronotum (yellow line), with keels either side (blue lines)



The **Prosternum notch** is on the underside of the front edge of the thorax. In some species there is a notch in the front edge, with a **keel on either side**. The keels are usually easier to see than the notch, but the hair-scales may hide them, and sometimes the keels may be weak and almost lacking. As with the fringe of hairs, there are always other characters you can use, so do not worry if you cannot decide whether your weevil has a notched prosternum.

Dorytomus (continued)


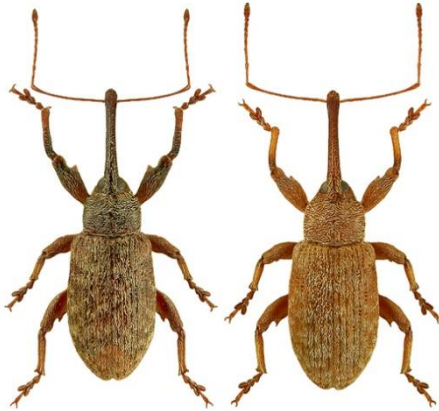

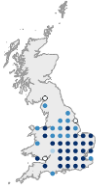
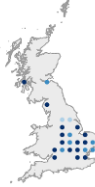


Three easier species, each with a distinctive feature: raised bristly hair-scales; short, thick rostrum; narrow body, wide rostrum.

	<i>Dorytomus hirtipennis</i> ***	<i>Dorytomus ictor</i> *	<i>Dorytomus salicinus</i> **
	 <p>© Lech Borowiec</p>		
Size	2.8-3.8 mm	3.9-4.5 mm	2.5-3.2 mm
Prosternum	Notched.	Notched.	Not notched.
Fringe hairs	Long and projecting well beyond edge of pronotum. Slightly bristly ; the only <i>Dorytomus</i> with raised hair scales on wing-cases. Rostrum rather thick.	Long and projecting well beyond edge of pronotum. Rostrum short , rather thick. Pronotum proportionately wider. Rostrum usually with scales at least as far as antenna bases. A few slightly wider and blunter scales among the pointed hair-scales in the rear of the wing-cases.	Hardly projecting beyond edge of pronotum. Small and slender , but with wide rostrum . Pronotum and wing-cases narrow, pronotum usually longer than wide . Narrow body makes the thick rostrum appear disproportionately wide. Rostrum often scaled up to antenna bases.
	<p>Scattered and rare. Associated with White Willow <i>Salix alba</i>, but has been found on other willows and poplars.</p> 	<p>On and around Black Poplars, including cultivated varieties and street trees.</p> 	<p>On and around willows in fens and wetlands. Scarce.</p> 
Compare	Other <i>Dorytomus</i> (scales more or less flat).	<i>Dorytomus salicis</i> (smaller; hairs on pronotum hardly projecting). <i>Dorytomus rubrirostris</i> (hairs on pronotum hardly projecting; rostrum longer). Other <i>Dorytomus</i> (longer rostrums, usually with scales only at extreme base).	Other <i>Dorytomus</i> (rostrums proportionately narrower; pronotums and wing-cases proportionately wider).
Foodplants	Willows <i>Salix</i> .	Black Poplar <i>Populus nigra</i>	Willows (mostly Goat Willow <i>Salix caprea</i> and Great Willow <i>Salix cinerea</i>)
			

Dorytomus (continued)






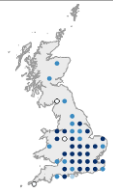
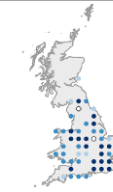
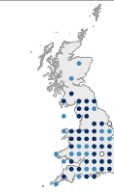



Two easier large species with **ridiculously long** appendages.

A **large**, dark species, with a rather long, thin, **smooth, shining** rostrum, **inflated pronotum**, and a unique tooth on the front tibiae in male.

	<i>Dorytomus longimanus</i>	<i>Dorytomus filirostris</i> *	<i>Dorytomus tremulae</i> ***
		 © Lech Borowiec	 © Lech Borowiec
Size	4.2-6.5 mm	4.0-5.0 mm	4.0-5.4 mm
Prosternum	Notched.	Notched.	Notched.
Fringe hairs	Long and projecting well beyond edge of pronotum.	Long and projecting well beyond edge of pronotum.	Long and projecting well beyond edge of pronotum.
	<p>Long front legs and feet, especially so in male. Even in the female, the front legs are obviously longer than in other species. Antennae long too, but not as long as <i>filirostris</i>. Shining, thin rostrum strongly arched. Mottled, may dark purple-brown, or orange-brown.</p>  <p>On and around poplars.</p>	<p>Long antennae, especially long scape. Rostrum long, straighter and hardly downcurved, rather dull.</p> <p>On and around poplars. Scattered, but may be spreading.</p> 	<p>Pronotum swollen, appears inflated, at its widest, as wide as the wing-cases. Male front tibiae with a tooth half way up the inside edge (less obvious in female, but front tibiae appears slightly indented at base). Pronotum almost as wide as wing-cases. Rostrum dark, shining,</p>  <p>On and around poplars and aspens. Rare.</p>
Compare	<i>Dorytomus filirostris</i> (front legs shorter; front femurs thicker and with stronger tooth; rostrum wider, especially at base and tip, straighter). <i>Dorytomus tremulae</i> (front legs shorter; tooth on inside front tibiae). Other <i>Dorytomus</i> (front legs and antennae shorter; rostrums shorter or less strongly downcurved).	<i>Dorytomus longimanus</i> (front legs longer, with weaker tooth on femurs; rostrum strongly downcurved, smoother and more shining, narrower; scape shorter). Other <i>Dorytomus</i> (antennae shorter; rostrums usually shorter, often more downcurved).	<i>Dorytomus tortrix</i> , <i>rufatus</i> , and <i>melanophthalmus</i> (rostrums less strongly curved, usually red-brown; pronotum narrower than wing-cases; no tooth inside tibiae). <i>Dorytomus taeniatus</i> and <i>dejeani</i> (rostrum duller, thicker; pronotum narrower than wing-cases; no tooth inside tibiae). <i>Dorytomus majalis</i> and <i>salicis</i> (smaller; rostrum duller, thicker).
Foodplants	Poplars <i>Populus</i>	Poplars <i>Populus</i>	White Poplar <i>Populus alba</i> and Aspen <i>Populus tremula</i>
			



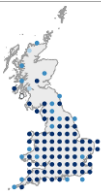
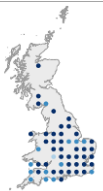


Dorytomus (continued)

Three **orange-brown** to dark brown species. *Dorytomus tortrix* and *melanophthalmus* have smoother, shining rostrums, with only faint punctures and grooves. *Dorytomus rufatus* has a slightly duller and more sculptured rostrum, in but not as punctured and grooved as *taeniatus* and *dejeani*.

	<i>Dorytomus tortrix</i>	<i>Dorytomus melanophthalmus</i>	<i>Dorytomus rufatus</i>
			 <div data-bbox="1814 207 2105 670"> <p>Scales on rear half of wing-cases</p>  <p><i>rufatus</i> all narrow and pointed</p>  <p><i>melanophthalmus</i>: some blunter ovals</p> </div>
Size	4.1-5.3 mm	3.1-4.0 mm	3.3-4.0 mm
Colour	Orange-brown.	Orange-brown, sometimes with a dark centre.	Orange-brown to carmine brown.
Rostrum	Orange-brown.	Orange-brown to black.	Orange-brown to dark brown.
Prosternum	Not notched.	Notched or weakly notched.	Notched.
Fringe hairs	Long and projecting well beyond edge of pronotum.	Hardly projecting beyond edge of pronotum.	Hardly projecting beyond edge of pronotum
	<p>Large. Scales fine and hair-like. Rostrum thin, shining and with only very fine punctures. Overall colour pale orange-brown, only very faintly mottled.</p> <p>On and poplars and Aspen.</p> 	<p>Some wider narrow-oval scales with rounded or blunt tips among the pointed hair-scales. The only other <i>Dorytomus</i> with these wider scales is <i>ictor</i>. Variable, usually orange-brown with brown rostrum, but sometimes has blackish rostrum or head, and wing-cases often blackish in centre.</p> <p>Frequent on and around willows.</p> 	<p>Very like <i>melanophthalmus</i>, but wing-cases more oval, with more evenly curved sides, no wider narrow-oval scales; rostrum thicker, shorter and straighter. More carmine-brown, but some <i>melanophthalmus</i> are more carmine. Rarely has a dark patch in centre of wing-cases.</p> <p>On and around willows.</p> 
Compare	<i>Dorytomus melanophthalmus</i> (rostrum thicker, more curved; smaller; some wider scales; pronotum narrower; fringe hairs shorter and hardly overlapping edge of pronotum). <i>Dorytomus longimanus</i> (see account). <i>Dorytomus rufatus</i> (see account). <i>Dorytomus taeniatus</i> and <i>dejeani</i> (see accounts).	<i>Dorytomus tortrix</i> (see account). <i>Dorytomus rufatus</i> (see account). <i>Dorytomus taeniatus</i> and <i>dejeani</i> (no wider scales; rostrum less curved, wider and more rounded near tip, more strongly punctured and grooved, less shining, often darker; pronotum widest at or in front of middle, more narrowed at rear).	<i>Dorytomus tortrix</i> (rostrum thinner; hair-scales on side of pronotum, overlapping edge; larger). <i>Dorytomus taeniatus</i> and <i>dejeani</i> (rostrum often darker; pronotum usually narrower, especially at rear, sides straighter in rear half; wing-cases with sides straighter in front half, often widest behind the middle).
Foodplants	Poplars and Aspen <i>Populus</i>	Willows <i>Salix</i>	Willows <i>Salix</i>
			



Dorytomus (continued)

Two **variably coloured** species with **pronotum widest at or in front of the middle**, with **sides straighter in rear half**, and **narrowed at rear**. Rostrum rather **dull**, strongly punctured and grooved.

	<i>Dorytomus taeniatus</i>	<i>Dorytomus dejeani</i>
		
Size	3.0-4.5 mm	3.7-5.0 mm
Colour	Orange-brown, purple-brown, or chocolate brown.	Orange-brown, purple-brown, or chocolate brown.
Rostrum	Dark brown to black.	Dark brown to black.
Prosternum	Not notched.	Not notched.
Fringe hairs	Hardly projecting beyond edge of pronotum.	Hardly projecting beyond edge of pronotum.
	<p>Very common and very variable in colour and mottling. Rostrum more rounded at tip and slightly wider at and after antennae compared with most other <i>Dorytomus</i>. Rostrum straighter than <i>melanophthalmus</i> and <i>dejeani</i>, less curved.</p> <p>On or around willows.</p> 	<p>Very like taeniatus, but front tibiae strongly bicoloured, blackish at base, pale brown at tip; rostrum slightly thinner and more evenly curved (straighter at base before curving down in front half in <i>taeniatus</i>). Often larger, but some overlap.</p> <p>On or around Aspen and poplars.</p> 
Compare	<p><i>Dorytomus melanophthalmus</i> (some wider scales on wing-cases; rostrum squarer and flatter at tip, smoother, more shining; pronotum wider at rear; rostrum often paler). <i>Dorytomus salicinus</i> (narrower body; proportionately wider rostrum; pronotum proportionately longer and narrower). <i>Dorytomus ictor</i> (shorter rostrum; long hairs overlapping front edge of pronotum sides). <i>Dorytomus longimanus</i> (more arched rostrum; longer antennae; long hairs overlapping front edge of pronotum sides). <i>Dorytomus filirostris</i> (longer rostrum; longer antennae; long hairs overlapping front edge of pronotum sides). <i>Dorytomus tortrix</i> (thinner rostrum, smoother and more shining; pronotum wider at rear; long hairs overlapping front edge of pronotum sides). <i>Dorytomus rufatus</i> (rostrum often paler; pronotum usually wider, and widest just behind the middle, sides more curved, wider at rear; wing-cases with curved sides, widest in front of middle).</p>	
Foodplants	Willows <i>Salix</i>	Poplars and Aspen <i>Populus</i>
		

Dorytomus (continued)





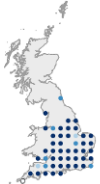
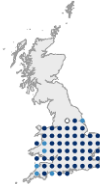
Three very rare species, all **may be extinct**. One is very like *taeniatus*; the other two are tiny.














	<i>Dorytomus rubrirostris</i> ***	<i>Dorytomus salicis</i> ***	<i>Dorytomus majalis</i> ***
	 <p>© Lech Borowiec</p>		 <p>© Lech Borowiec</p>
Size	3.6-4.2	2.5-3.1	2.4-3.0
Colour		Orange-brown to carmine brown.	Orange-brown to carmine brown.
Rostrum		Black	Orange-brown.
Prosternum		Not notched.	Notched.
Fringe hairs		Hardly projecting beyond edge of pronotum.	Hardly projecting beyond edge of pronotum.
	<p>Like <i>taeniatus</i>, but rostrum thicker and shorter, pronotum proportionately shorter and wider. ??rostrum??</p> <p>This is now considered a separate species from <i>Dorytomus edoughensis</i>, which is restricted to Africa. Used to be called <i>Dorytomus affinis</i>. References to <i>affinis</i> or <i>edoughensis</i> in Europe refer to this species.</p>	<p>Small. Pronotum not as wide as most other <i>Dorytomus</i>, sides rather evenly curved. Rostrum rather short and broad.</p>	<p>Small. Rostrum duller than <i>melanophthalmus</i>, more punctured, but not as strongly wrinkled or punctured as <i>taeniatus</i>. Antennae thicker, first segment of filament proportionately shorter than in <i>melanophthalmus</i> or <i>taeniatus</i>. Tooth on front femurs smaller and less prominent than in larger species. Very like a small <i>rufatus</i>, rostrum similarly intermediate between <i>melanophthalmus</i> and <i>taeniatus</i>. ??This all based on one specimen.</p>
Compare	<p><i>Dorytomus ictor</i> (rostrum shorter and thicker; fringe hairs projecting beyond edge of pronotum).</p>	<p><i>Dorytomus melanophthalmus</i> (larger; some wider scales on wing-cases; rostrum narrower and longer, smoother, more shining; pronotum wider; rostrum often paler; prosternum notched). <i>Dorytomus salicinus</i> (narrower body; proportionately wider rostrum; pronotum proportionately longer and narrower). <i>Dorytomus taeniatus</i> and <i>dejeani</i> (larger; rostrums longer; pronotums wider). <i>Dorytomus ictor</i> (larger; rostrum proportionately shorter; long hairs overlapping front edge of pronotum sides). <i>Dorytomus longimanus</i> (larger; rostrum more arched; antennae longer; long hairs overlapping front edge of pronotum sides). <i>Dorytomus filirostris</i> (larger; rostrum longer; antennae longer; long hairs overlapping front edge of pronotum sides). <i>Dorytomus tortrix</i> (larger; rostrum proportionately thinner, smoother and more shining; pronotum wider at rear; long hairs overlapping front edge of pronotum sides). <i>Dorytomus rufatus</i> (larger; rostrum often paler; prosternum notched; pronotum wider).</p>	<p><i>Dorytomus rufatus</i> (larger). <i>Dorytomus melanophthalmus</i> (larger; some wider scales on wing-cases; rostrum smoother, more shining; antenna segments more slender). <i>Dorytomus salicinus</i> (narrower body; proportionately wider rostrum; pronotum proportionately longer and narrower). <i>Dorytomus taeniatus</i> and <i>dejeani</i> (larger; rostrums longer, more clearly grooved; antenna segments more slender). <i>Dorytomus ictor</i> (larger; rostrum proportionately shorter; long hairs overlapping front edge of pronotum sides). <i>Dorytomus longimanus</i> (larger; rostrum more arched; antennae longer; long hairs overlapping front edge of pronotum sides). <i>Dorytomus filirostris</i> (larger; rostrum longer; antennae longer; long hairs overlapping front edge of pronotum sides). <i>Dorytomus tortrix</i> (larger; rostrum proportionately thinner, smoother and more shining; pronotum wider at rear; long hairs overlapping front edge of pronotum sides). <i>Dorytomus rufatus</i> (larger).</p>
Foodplants			

Curculio

Rostrum **very long** and **thin**. Body **oval**, **tapering** at rear. **Pronotum** rather **large** and **wide** compared with rest of body. **Long antennae**. **Eyes large** but almost **flat**. Compare *Anthonomus* (squarer shoulders; wing-cases with straighter sides, wider at rear; rostrum thicker; eyes more rounded). Ceutorhynchids (usually smaller; shorter, thicker rostrums; shorter antennae; smaller eyes, not so flat; pronotums often not so large or wide). *Dorytomus* (thicker rostrums; wing-cases with straighter sides; eyes more rounded).

Three larger **brown-scaled** species, with a **tooth** on the underside of the **front femurs**. Surface black, but hidden under brown scales. Rostrum shape and the position of the antennae are useful in this group, but only when comparing the same sex. Males have antennae inserted further along the antennae, at or in front of the middle. Only female glandium and nucum have the huge long rostrum with antennae inserted about a third or a quarter of the way along.




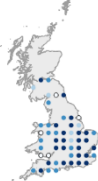
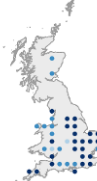
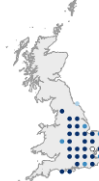
	<i>Curculio glandium</i>	<i>Curculio nucum</i>	<i>Curculio venosus</i>
			
Size	4.1-6.7 mm	6.0-8.0 mm	5.9-7.0 mm
Scutellum	Square or wider than long.	Square or wider than long.	Narrow , longer than wide.
Femurs	All with tooth on underside.	All with tooth on underside.	All with tooth on underside.
	<p>Scales along rear of suture hardly raised. Very like <i>nucum</i>, but hardly has a crest along the rear of the suture and is on average smaller. Antenna segments narrower and longer than in <i>nucum</i>, with shorter hairs (see next page).</p> <p>Female has the longest rostrum of any of our weevils, slightly narrower at the base than in <i>nucum</i>. Male rostrum much shorter than in female, antennae inserted nearer the tip. Common on and around oaks in the south.</p> 	<p>Scales long rear of suture raised, forming a crest. In female, antennae inserted</p> <p>Female has very long rostrum, like <i>glandium</i>, but antennae inserted further along than in <i>glandium</i>.</p> <p>Not often seen as an adult. The larvae leave round holes in hazelnuts when they emerge; these are found more often than the adult weevils.</p> 	<p>Pronotum rather straight-sided in rear half and slightly pinched in at front, less evenly curved and appearing less swollen than in <i>glandium</i> and <i>nucum</i>. Scales down centre of pronotum slightly raised and intermeshing, forming slight crest or line down centre of pronotum. Scales along rear of suture also slightly raised and forming a low crest, more prominent than in <i>glandium</i>, but less prominent than in <i>nucum</i>.</p> <p>Female rostrum shorter than in <i>nucum</i> and <i>glandium</i>, not much longer than in the male. Male is only <i>Curculio</i> with scapes that reach beyond the tip of the rostrum (check in side and front view, and imagine the scapes pointing straight forward along the rostrum).</p> <p>On and around oaks, but not as common as <i>glandium</i>.</p> 
Compare	<i>Curculio nucum</i> (see account). <i>Curculio venosus</i> (scutellum longer and narrower; female rostrum shorter; pronotum less evenly rounded at sides; crest of slightly raised and intermeshing scales along pronotum and rear of suture). Other <i>Curculio</i> (see accounts).	<i>Curculio glandium</i> (no crest of raised scales along rear suture; antenna segments longer and narrower; female antennae inserted closer to base of rostrum). <i>Curculio venosus</i> (see account). Other <i>Curculio</i> (see accounts).	<i>Curculio nucum</i> and <i>glandium</i> (scutellums wider; female rostrums longer; pronotum sides more evenly curved and swollen). Other <i>Curculio</i> (see accounts).
Foodplants	Acorns on oaks <i>Quercus</i>	Hazelnuts on hazels <i>Corylus</i>	Acorns on oaks <i>Quercus</i>

	<i>Curculio glandium</i>	<i>Curculio nucum</i>	<i>Curculio venosus</i>
Male			
Female	 Antennae inserted nearer base than in <i>nucum</i> .		 Rostrum shorter than in females of the other two.
	 Scales hardly raised over suture at rear.	 Scales raised over suture at rear.	 Scales raised over suture at rear.
Male			
Female	 Segments narrower and longer than in <i>nucum</i> , but compare same sex: beware that difference between male and female <i>glandium</i> may be greater than that between male <i>glandium</i> and female <i>nucum</i> .	 In both sexes, hairs more spreading than in <i>glandium</i> . Club proportionately slightly shorter and wider.	 Club slightly narrower than in the other two.

Curculio (continued)



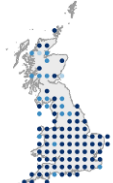
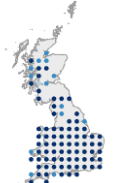

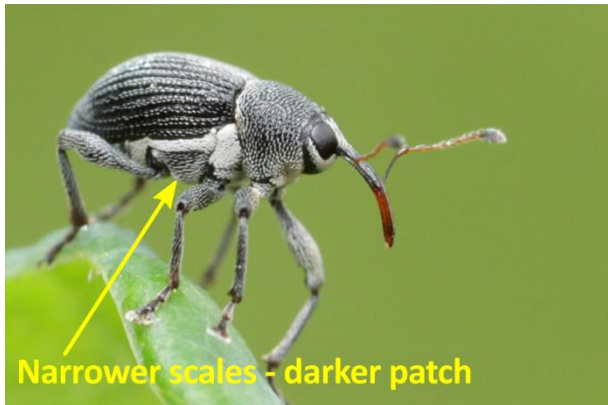
A **black and white** species. Note that *glandium*, *nucum*, and *venosus* have black surface, but it is hidden by the brown scales: worn specimens of those species have brown legs.

Two **smaller, brown** species. **Surface brown. No tooth on front femurs.**

	<i>Curculio villosus</i>	<i>Curculio betulae</i>	<i>Curculio rubidus</i>
			
Size	3.8-5.0 mm	3.4-4.2 mm	3.1-3.8 mm
Scutellum	Square or wider than long or only slightly longer than wide.	Square or wider than long.	Square or wider than long.
Femurs	All with small tooth on underside.	Tooth on underside of mid and rear only.	No tooth on any.
	<p>Legs black. Less densely scaled than the three larger brown <i>Curculio</i>, so more of the black surface is exposed and contrasts with the whitish (not brown) scales.</p> <p>Uncommon on and around oaks.</p> 	<p>Broader scales form patches in centre and sides of rear of pronotum. Centre patch may extend forward as a stripe down the middle. Worn specimens can be identified by combination of brown surface and tooth on underside of mid and hind femurs only.</p> <p>Open woods, scrub, and wetlands. Uncommon.</p> 	<p>Rostrum shorter than other <i>Curculio</i>. The only <i>Curculio</i> without a tooth on underside of any of the femurs.</p> <p>On and around birches. Uncommon.</p> 
Compare	<i>Curculio betulae</i> and <i>rubidus</i> (see accounts) Other <i>Curculio</i> (legs brown; scales brown; tooth on femurs larger).	<i>Curculio rubidus</i> (no tooth on any of the femurs; rostrum shorter). <i>Curculio villosus</i> (legs black; tooth on front femurs; surface black). Other <i>Curculio</i> (tooth on front femurs; surface black; scales on pronotum all hair-like, with at most a few broader scales along the extreme rear edge; wing-cases more densely scaled).	<i>Curculio betulae</i> (rostrum longer; tooth on mid and hind femurs). <i>Curculio villosus</i> (larger; rostrum longer; legs black; tooth on front femurs; surface black). Other <i>Curculio</i> (larger; rostrums longer; tooth on front femurs; surface black; wing-cases more densely scaled).
Foodplants	Oak apple galls on oaks <i>Quercus</i>	Birch <i>Betula</i> and alder <i>Alnus</i>	Birch <i>Betula</i>

Archarius

Tiny black weevils, like **miniature Curculio**: rostrum **very long and thin**. Body **oval, tapering** at rear. **Long antennae**. **Eyes large** but almost **flat**. **Broad white scales on underside**. Compare *Anthonomus* (squarer shoulders; wing-cases with straighter sides, wider at rear; rostrum thicker; eyes more rounded; not covered in white scales on underside). Ceutorhynchids (thicker rostrums; shorter antennae; smaller eyes, not so flat; often bristly).






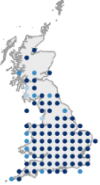
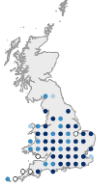

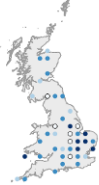

	Archarius salicivorus	Archarius pyrrhoceras
		
Size	1.9-2.7 mm	1.9-2.7 mm
	<p>Broad white scales on underside. Antenna filament dark brown. Rostrum all black in both sexes.</p> <p>On and around willows. Common.</p> 	<p>On underside, scales between mid and hind legs narrower exposing more of the black surface, so there is darker patch among the white. Antenna filament pale red-brown. Male rostrum red-brown beyond antennae (female rostrum all black).</p> <p>On and around oaks. Common.</p> 
Compare	<i>Archarius pyrrhoceras</i> (antennae paler; darker patch on underside of body; male rostrum red-brown in front half).	<i>Archarius pyrrhoceras</i> (antennae darker; underside of body all covered in broad white scales; rostrum black).
Foodplants	Galls on willows <i>Salix</i>	Cherry galls on oaks <i>Quercus</i> .
	 Scales all broad	 Narrower scales - darker patch

Anthonomus and Furcipes

Long rostrums, long front legs. The front legs are often **slightly crooked**, and the **eyes bulging** or sticking out at the sides. **Tooth on underside of front femurs.** Some species have **bands** of pale scales across the wing-cases, others are **plain**. Claws toothed (apart from *varians*). Most on trees of the rose family (Rosaceae), but there are species on elms *Ulmus*, pines *Pinus*, or herbaceous members of the rose family. Tree-feeding species are easily found by beating the host plants. Some of them are active in winter and early in the year, laying their eggs before the buds burst. **Compare** *Curculio* (rostrums narrower; more oval shape; eyes larger and flat). *Bradybatus fallax* (front legs shorter; band of scales across wing-cases narrower). *Brachonyx pineti* (proportionately much narrower and longer). *Dorytomus* (wing-cases proportionately longer and narrower; claws slender, untoothed).




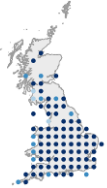
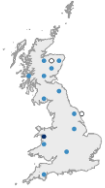

The species are treated very briefly here: see the separate guide to *Anthonomus* and *Furcipes* for identification.

Five patterned species with **wonky front legs** and a **large tooth** on the front femur.

	<i>Anthonomus bituberculatus</i>	<i>Anthonomus pomorum</i>	<i>Anthonomus chevrolati</i> ***	<i>Anthonomus ulmi</i> **	<i>Anthonomus pyri</i> ***
					
Size	2.2-3.3 mm	3.4-4.3 mm	2.5-3.1 mm	2.7-3.8 mm	3.4-4.3 mm
	<p>Bands of white scales across wing-cases almost straight or angled slightly forwards. Eyes squashed in front, strongly protruding at sides. No tooth on rear femur.</p> <p>Common on and around hawthorns.</p> 	<p>Bands of pale scales angled strongly forwards, speckled (as though dusted with icing sugar).</p> <p>Widespread but now less common, especially in orchards.</p> 	<p>Rounded eyes. Scales on forehead not forming centre parting.</p> <p>Rare on hawthorns in the south-east.</p> 	<p>Very like <i>bituberculatus</i>. Eyes hardly protruding at sides.</p> <p>Widespread but now rarely found. On elms.</p> 	<p>Broad white stripe down the pronotum.</p> <p>On and around apples. Very rare.</p> 
Compare	See separate guide to <i>Anthonomus</i> .	See separate guide to <i>Anthonomus</i> .	See separate guide to <i>Anthonomus</i> .	See separate guide to <i>Anthonomus</i> .	See separate guide to <i>Anthonomus</i> .
Foodplants	Hawthorn <i>Crataegus</i>	Apples <i>Malus</i>	Hawthorn <i>Crataegus</i>	Elm <i>Ulmus</i>	Apples <i>Malus</i> and Pears <i>Pyrus</i>

Anthonomus and Furcipes (continued)





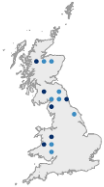

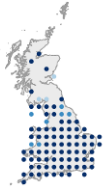
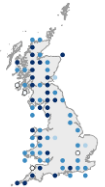
Three patterned species with front legs only slightly wonky, **tibiae not so indented**, and a **smaller tooth on the front femurs**. The species are treated very briefly here: see the separate guide to *Anthonomus* and *Furcipes* for identification.

	<i>Anthonomus pedicularius</i>	<i>Anthonomus conspersus</i> **	<i>Anthonomus rufus</i> *
			
Size	2.7-3.8 mm	2.5-3.0 mm	2.3-3.1 mm
	<p>The commonest patterned <i>Anthonomus</i>. Eyes bulging. Rostrum thicker at base than <i>bituberculatus</i>. Common on and around hawthorns.</p> 	<p>Wing-cases mottled, the scales not forming clear bands. Uncommon on Rowan.</p> 	<p>No tooth on rear femur. Eyes flat in front. Uncommon on and around Blackthorn.</p> 
Compare	See separate guide to <i>Anthonomus</i> .	See separate guide to <i>Anthonomus</i> .	See separate guide to <i>Anthonomus</i> .
Foodplants	Hawthorns <i>Crataegus</i>	Rowan <i>Sorbus aucuparia</i>	Blackthorn <i>Prunus spinosa</i>

Anthonomus and Furcipes (continued)

A distinctive species with **wonky legs**, large **double-pointed** tooth on front femurs.

Three **plain** species. See the separate guide to *Anthonomus* and *Furcipes* for further help with identification.

	<i>Furcipes rectirostris</i> **	<i>Anthonomus phyllocola</i> **	<i>Anthonomus rubi</i>	<i>Anthonomus brunnipennis</i>
	 © Lech Borowiec			
Size	3.7-4.9 mm	3.0-3.6 mm	2.0-3.2 mm	1.6-2.4 mm
	<p>Jagged bands across wing-cases. Pronotum narrower than in <i>Anthonomus</i>.</p> <p>Uncommon on and around Bird Cherry.</p> 	<p>Variable, but plain: orange, red, brown, or black. Hair scales very fine, hardly apparent.</p> <p>Uncommon in pine forests in Scottish Highlands.</p> <p>Used to be called <i>Anthonomus varians</i>.</p> 	<p>All-dark except for pale scutellum and slightly paler scape. Very long rostrum, long, elbowed antennae, long legs, and broad, square shoulders will identify this species among other weevils, but see <i>brunnipennis</i>.</p> <p>Very common in woods, grasslands, open ground. Often on the ground or in low vegetation.</p> 	<p>Very like rubi. Differs from other weevils by the same features.</p> <p>Less common than <i>rubi</i>, but difficult to detect and likely to be widely overlooked.</p> <p>May be commoner than <i>rubi</i> in the north, where it is often with Tormentil.</p> 
Compare	<i>Anthonomus</i> (single tooth on front femur; bands with straighter, not jagged, edges; pronotums wider).	<i>Anthonomus rubi</i> and <i>brunnipennis</i> (Pronotums proportionately narrower, less swollen; legs more slender; hair-scales thicker, readily apparent; eyes flatter; claws toothed; rostrums duller, less shining). <i>Dorytomus tortrix</i> (wing-cases proportionately longer and narrower; eyes less bulging).	<i>Anthonomus phyllocola</i> (see account). <i>Anthonomus brunnipennis</i> (usually slighter browner - mahogany rather than black; often smaller; second segment of filament proportionately shorter).	<i>Anthonomus rubi</i> (see account – beware fresh adults of <i>rubi</i> , which are paler than mature ones).
Foodplants	Bird Cherry <i>Prunus padus</i>	Pines <i>Pinus</i>	Many herbs and shrubs in the rose family (Rosaceae), including brambles <i>Rubus</i> and cinquefoils <i>Potentilla</i> .	Many herbs and shrubs in the rose family (Rosaceae). Often on Tormentil <i>Potentilla erecta</i> .






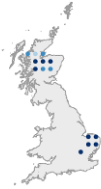
Scape and first three segments of filament. Compare first two segments in each species: longer and more slender in *rubi*, stouter in *brunnipennis*.

Bradybatus fallax

A recent arrival, on **sycamores and maples** *Acer*. A **narrow** band of scales across rear of wing-cases, and one down centre of pronotum. **Tooth on underside of front femur.**

Brachonyx pineti

Long and narrow, like an **orange-brown, hairy grain of rice with a rostrum**. **No** tooth on front femurs. Pronotum hardly narrower than wing-cases. Eyes rather flat but protruding at sides.

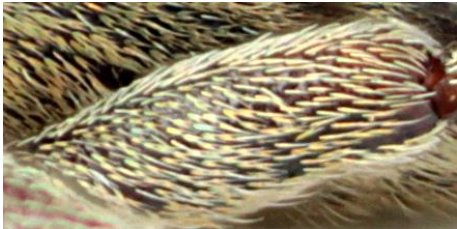
	Bradybatus fallax	Brachonyx pineti**
		
Size	3.2-3.8 mm	2.2-3.1 mm
	<p>Distinctive pattern and shape.</p> <p>On sycamores. So far only in a few places around London, but might spread.</p> 	<p>Slender, sausage-shape with almost flat hair-scales, and long, thin rostrum. Eyes bulging at sides.</p> <p>On pines in Scottish Highlands, and in a few places in plantations in the south.</p> 
Compare	<i>Anthonomus</i> and <i>Furcipes</i> (rostrums longer; front legs longer; bands of scales wider). <i>Curculio</i> (rostrums narrower; more oval shape; eyes larger and flat). <i>Dorytomus</i> (wing-cases proportionately longer and narrower; rostrums longer).	Size, shape, and colour are distinctive.
Foodplants	Sycamores and maples <i>Acer</i>	Scots Pine <i>Pinus sylvestris</i>

Hypera and Brachypera

Obvious **square shoulders**, wing-cases rather **straight-sided**. **Thick rostrum**. Hairs and **oval or forked scales** on body. **No tooth** on the front femur. **Seven** segments in the filament. On legumes and other herbs. Compare *Dorytomus* (tooth on underside of front femur; usually on or around trees). *Limobius* (six segments in filament; erect bristles over all of wing-cases – raised bristles mostly confined to rear *Hypera*, only over the whole wing-cases in *pastinacae*). Broad-noses *Liophloeus tessulatus* (tooth on underside of front femur; rostrum wider, widened at tip) and *Graptus triguttatus* (rostrum wider, widened at tip; three-spot pattern on wing-cases; shoulders not so square).

The shape of the flat scales is important in *Hypera* and *Brachypera*. There are two broad types: either the scales are obviously forked or deeply notched; or they are blunt, with a square or round end (only a very slight notch at the most). *Hypera melancholica*, *postica*, and *plantaginis* usually have scales less deeply forked than *meles*, *venusta*, *nigrirostris*, and *ononidis*, but there is some variation within the species: *Hypera meles* in particular can have scales more or less identical to the most deeply forked scales found in the other group. The scales on the femurs may be hair-like and narrow, or wider and forked, but sometimes the wider scales are present only on the front faces of the femurs, so check from in front as well from above. Among the flat scales on the wing-cases there are bristle scales. These may be short or long, and vary from almost flat to erect. The bristles in the front half are flatter than those at the rear (except in *pastinacae*). This quick key to the species groups uses these three characters: shape of flat scales on wing-cases; scales on the front face of the femurs; and bristliness.

Femurs

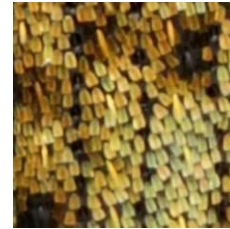


Hypera postica. Hair scales and wider, forked scales on front of femur



Hypera venusta. Hair-scales only.

Scales on wing-cases



Hypera rumicis. Flat scales blunt, bristles short.



Brachypera zoilus. Flat scales blunt, bristles long.



Hypera arator. Flat scales forked, bristles medium.



Hypera meles. Flat scales deeply forked, bristles long.

Aedeagus



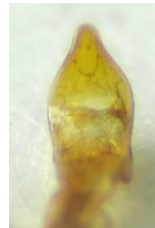
melancholica



postica



plantaginis



meles

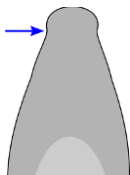


venusta



nigrirostris

The best way to separate *melancholica* and *postica*, but otherwise not particularly useful.



Hypera melancholica constricted behind the tip, with a slightly expanded flange after the constriction.



Hypera postica gradually tapered to tip, with barely a constriction, and no flange.

Side views, with insets of femurs (left) and scales on wing-cases (right, showing width of about three intervals).

Blunt scales. Bristles very short. Pronotums narrow, shoulders more prominent.

Hypera conmaculata



Like, *rumicis*, does not appear bristly because the bristles are so short and hardly raised. Rostrum smooth and shining beyond antennae.

Hypera rumicis



Like, *conmaculata*, does not appear bristly because the bristles are so short and hardly raised. Rostrum dull and scaled beyond antennae.

Blunt scales. Bristles long.

Brachypera zoilus



Rostrum squat, short and very thick. Bristles may be strongly raised, as here, or flatter (like *dauci*). Legs may be banded.

Brachypera dauci



Bristles long, but only slightly raised. Legs banded.

Forked scales. Bristles very long and upright.

Hypera pastinacae

Very long, upright bristles all over wing-cases, pronotum, and head.

Forked scales. Bristles long but hardly raised.

Hypera arator



Bristles medium to long, but almost flat or only very slightly raised. Neat stripes.

Forked scales. Bristles long, raised at rear, flat or slightly raised in front half. Rostrums shorter and thicker. Femurs with forked scales and hair-scales.

Hypera postica



Bristles long, raised at rear.

Hypera plantaginis



Bristles long, raised at rear. Dark patch on sides.

Forked scales. Bristles long, raised at rear, flat or raised in front half. Rostrums narrower. Femurs with hair-scales only.

Hypera meles



Bristles long, slightly raised at rear.

Hypera venusta



Bristles long, raised at rear. Dark patch on sides.

Hypera nigrirostris







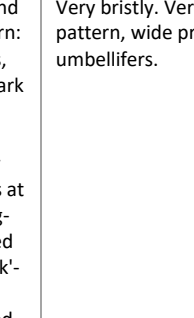










Bristles long, raised at rear. Bristles on pronotum hardly raised. Rather plain. Green or orange-brown. ??White bristles in odd intervals, pale sandy or brown bristles in even intervals.

Hypera ononidis



Bristles long, raised at rear and in front half. Bristles on pronotum raised. Rather plain. Green or orange-brown. ??White bristles in all intervals.





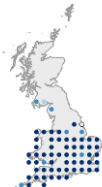
Summary guide to the species, using characters mostly visible in the field. Images to scale.

<p><i>Hypera rumicis</i></p>  <p>Long rostrum. Pronotum narrow at base, shoulders prominent. Does not look bristly. On docks. Rostrum wrinkled or punctured and with many scales beyond antenna bases.</p>	<p><i>Hypera conmaculata</i></p>  <p>Long rostrum. Pronotum narrow at base, shoulders prominent. Does not look bristly. Wetland umbellifers. Like rumicis, but rostrum smooth and bald beyond antenna bases.</p>	<p><i>Brachypera zoilus</i></p>  <p>Chunky. Short and very thick rostrum. Wing-cases mottled. Looks bristly and slightly ribbed.</p>	<p><i>Brachypera dauci</i>*</p>  <p>Distinctive and strong pattern: whitish sides, often with dark chevrons pointing to middle. Four black streaks at front of wing-cases. Banded legs. On stork'-bills. Looks slightly ribbed.</p>	<p><i>Hypera pastinacae</i>***</p>  <p>Very bristly. Very rare. Chequered pattern, wide pronotum. On umbellifers.</p>
<p><i>Hypera arator</i></p>  <p>Neat, crisp stripes. Zip pattern down middle. Does not look bristly. Looks slightly ribbed at front.</p>	<p><i>Hypera miles</i>*</p>  <p>Does not look bristly. Wing-cases mottled. Rostrum rather short.</p> <p>© Lech Borowiec</p>	<p><i>Hypera diversipunctata</i>**</p>  <p>Does not look bristly. Wing-cases long. Eyes more rounded than other Hypera.</p> <p>© Lech Borowiec</p>	<p><i>Hypera melancholica</i>*</p>  <p>Almost identical to postica, but larger.</p> <p>© Lech Borowiec</p>	<p><i>Hypera postica</i></p>  <p>Dark mark in centre, sometimes dark mark at sides. Looks bristly at rear. Pronotum with curved sides.</p>
<p><i>Hypera plantaginis</i></p>  <p>Dark mark at sides. Looks bristly at rear. Pronotum sides very swollen, almost heart-shape.</p>	<p><i>Hypera meles</i></p>  <p>Pronotum sides very swollen, but widest further back than in <i>plantaginis</i>, not heart-shape. Long rostrum.</p>	<p><i>Hypera venusta</i></p>  <p>Smallest Hypera. Dark mark at sides, and short dark stripes at front. Looks bristly at rear. Pronotum with curved sides, but not looking outlandishly swollen.</p>	<p><i>Hypera nigrirostris</i></p>  <p>Usually green, but may be orange-brown. Looks bristly at rear. Wing-cases rather plain, only faintly mottled or striped. Pronotum narrower than in <i>venusta</i>.</p>	<p><i>Hypera ononidis</i>*</p>  <p>Very like <i>nigrirostris</i>, but on rest-harrows. Wing-cases look bristly except at front. Usually orange-brown, but may be green. Bristles more numerous than <i>nigrirostris</i>, and more raised in front half.</p>


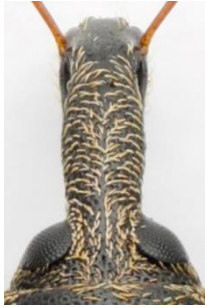
Hypera and Brachypera (continued)

Two species with **narrower pronotums**, emphasising the square shoulders. **Dark legs** and rostrums. Flat scales **blunt**, square-ended or only very **slightly notched**. **Short** thick bristles on wing-cases.

A species that is probably long-extinct. Like the other species on this page, it has **dark legs** and rostrums. Flat scales **blunt**, square-ended or only very **slightly notched**.

	<i>Hypera rumicis</i>	<i>Hypera conmaculata</i>	<i>Hypera arundinis</i> ***
			 © Lech Borowiec
Size	4.0-5.5 mm	4.9-5.8 mm	6.5-7.5 mm
Flat scales*	Blunt, square-ended or very slightly notched.	Blunt, square-ended or very slightly notched.	Blunt, square-ended or very slightly notched.
Bristles *	Short , rather thick, slightly raised at rear. Like <i>conmaculata</i> , but rostrum dull, densely punctured to the tip , with many scales beyond the antenna bases . First stria joined to tenth at rear (curved towards suture in <i>conmaculata</i>). Common in open ground with docks.	Short , rather thick, slightly raised at rear. Rostrum smoother and shining beyond the antenna bases : very faintly punctured, and with few or no scales, contrasting with part before antennae, which is punctured and has many scales. Usually in wetlands. Was called <i>Hypera pollux</i> .	Short, curved . Overall yellow appearance, as though dusted with pollen, with a small dark patches on some intervals. Wing-cases narrower at front, shoulders more rounded , less prominent than in <i>rumicis</i> and <i>conmaculata</i> . Extinct . Its foodplant is scarce and much declined; hardly any large populations remain, so it is unlikely that the weevil survives.
			
Compare	<i>Brachypera dauci</i> (distinctive pattern; legs banded; bristles long; pronotum wider). <i>Brachypera zoilus</i> (rostrum shorter; bristles long; pronotum wider; larger; wing-cases ribbed). Other <i>Hypera</i> (pronotums wider, with sides more rounded; scales forked or notched; bristles longer).		
Foodplants	Docks <i>Rumex</i>	Umbellifers Apiaceae in wetlands (especially <i>Apium</i> , <i>Berula</i> , and <i>Oenanthe</i>).	Greater Water-parsnip <i>Sium latifolium</i>



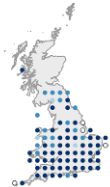
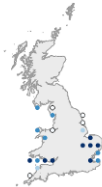

*on wing-cases: scales elsewhere may differ.

	Hypera rumicis First stria joins tenth stria, forming a chevron.		Rostrum beyond antenna bases punctured, and with many scales.		Hypera conmaculata First stria curves towards the suture and continues more or less to the tip of the wing-case. It does not join with stria 10 to form a chevron (the biggest chevron is formed by stria 2 and stria 9).		Rostrum beyond antenna bases smoother and bald or with few scales.
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Hypera and Brachypera (continued)

Two large species. Flat scales **blunt**, square-ended or only very **slightly notched**. **Long bristles** on wing-cases, may be raised or almost flat. Odd intervals slightly raised, so wing-cases appear slightly **ribbed**.




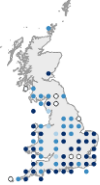

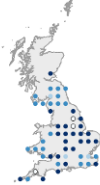

A **very rare** species. Strongly **mottled** wing-cases, with **many long erect bristles throughout the wing-cases, head, and pronotum**, and **deeply notched** oval flat scales.

	<i>Brachypera zoilus</i>	<i>Brachypera dauci</i> *	<i>Hypera pastinacae</i> ***
			
Size	6.8-8.5 mm	4.9-6.5 mm	4.4-5.2 mm
Flat scales*	Blunt, square-ended or very slightly notched.	Blunt, square-ended or very slightly notched.	Oval with deeply notched tip.
Bristles*	Long, raised or slightly raised at rear, sometimes raised in front.	Long, slightly raised at rear.	Very long, erect all over wing-cases.
	<p>Rostrum thick and short, thicker and shorter than any other <i>Hypera</i> (relative to body size). Large, broad body. Often mottled with black patches. Tibiae dark brown or blackish.</p> <p>Open ground. Widespread but not very common.</p> 	<p>Distinctive pattern: triangular pale patch on each side of wing-cases, bordered with dark chevron; pale stripe down centre; four black patches at front of wing-cases, and scattered small black patches elsewhere. Tibiae red-brown. At least hind legs with bands of pale scales, sometimes on other legs too.</p> <p>On open, disturbed, sandy ground with stork's-bill.</p> 	<p>The bristliest Hypera, many long erect bristles over all of wing-cases and pronotum. Pronotum very wide, almost heart-shape, similar to <i>plantaginis</i>, but wider and more swollen than any other <i>Hypera</i>. Body proportionately long and narrow. Wing-cases not ribbed, strongly mottled, appearing chequered. Rostrum long.</p> <p>Very rare on cliffs in Kent only.</p> 
Compare	<i>Hypera pollux</i> and <i>conmaculata</i> (pronotums narrower; smaller; rostrums longer, narrower; bristles much shorter; wing-cases not ribbed). <i>Brachypera dauci</i> (distinctive pattern; tibiae paler, red-brown; wing-cases more strongly ribbed; rostrum narrower). <i>Hypera arator</i> (smaller; scales forked; neater stripes; rostrum and wing-cases narrower; tooth on inside of front tibiae). <i>Hypera pastinacae</i> (see account). Other <i>Hypera</i> (rostrums narrower; smaller; scales forked). Broad-noses <i>Liophloeus tessulatus</i> (rostrum wider, widening at tip; scape longer; scales oval, narrower; no erect bristles on intervals).	<i>Brachypera zoilus</i> (different pattern; tibiae darker; wing-cases weakly ribbed; rostrum shorter, thicker). <i>Hypera arator</i> (scales forked; neat stripes; wing-cases narrower; tooth on inside of front tibiae; tibiae darker; bristles shorter, raised only slightly and only at rear; legs unbanded). <i>Hypera pastinacae</i> (scales forked; bristles longer and more of them; wing-cases mottled, lacking pattern; pronotum wider; legs unbanded). <i>Hypera pollux</i> and <i>conmaculata</i> (pronotums narrower; bristles much shorter; wing-cases not ribbed; legs black, unbanded). Other <i>Hypera</i> (scales forked; different pattern or plain; wing-cases not ribbed; legs unbanded).	<i>Brachypera zoilus</i> (larger; scales blunt or very slightly notched; bristles shorter, fewer; pronotum not wide and swollen; rostrum shorter and thicker; wing-cases slightly ribbed; body proportionately wider and shorter). <i>Brachypera dauci</i> (scales blunt or very slightly notched; bristles shorter, fewer; pronotum not wide and swollen; body proportionately wider and shorter; wing-cases slightly ribbed; pronotum narrower). Other <i>Hypera</i> (bristles not so long, fewer, mostly in rear half; less strongly mottled; pronotums not so wide and swollen - except <i>plantaginis</i>).
Foodplants	Clovers <i>Trifolium</i> .	Stork's-bills <i>Erodium</i> .	Wild Carrot <i>Daucus carota</i> .

*on wing-cases: scales elsewhere may differ.

Hypera and *Brachypera* (continued)





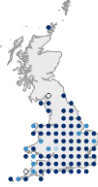
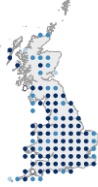
Three species with **forked scales**, and **bristles almost flat**, only slightly raised in rear half of wing-cases.

	<i>Hypera arator</i>	<i>Hypera miles</i> *	<i>Hypera diversipunctata</i> **
		 © Lech Borowiec	 © Lech Borowiec
Size	4.9-6.1 mm	5.3-5.8 mm	5.2-5.6 mm
Flat scales*	Forked to about half way.	Forked to about half way.	Forked to half way or deeper.
Bristles*	Medium, mostly flat , slightly raised at rear.	Medium, mostly flat , slightly raised at rear	Medium, mostly flat , slightly raised at rear.
	<p>Wing-cases slightly ribbed (odd intervals slightly raised, especially at front). Distinctive pattern: narrow, neat stripes down wing-cases, dark stripe at front of third interval, pale stripes down pronotum, and pattern like black zip teeth along suture. The only <i>Hypera</i> with a small tooth half way along inside of front tibiae (see inset; less obvious in female). Dark legs. ??Sides of pronotum extended slightly forward, like ear muffs.</p>   <p>Open ground, often in sandy places.</p>	<p>Pronotum with rounded sides. Often has dark patch on centre of pronotum and front of wing-cases. Rest of wing-cases usually mottled. Legs usually dark. Pattern may be similar to some other <i>Hypera</i> with scales forked to half way or deeper (<i>plantaginis</i>, <i>postica</i>, <i>melancholica</i>), but <i>miles</i> has bristles almost flat. Front face of femurs with hair-scales and forked scales.</p>  <p>Grasslands, open ground. Was called <i>Hypera suspiciosa</i>.</p>	<p>Wing-cases rather long, often widest slightly behind the middle (rather straight-sided or widest nearer the front in other <i>Hypera</i>). Mottled, or rather plain. Bristles numerous, scattered untidily across the interval, not in a neat single row, almost flat, only slightly raised in the rear half of wing-cases. Eyes more rounded than in most <i>Hypera</i>, wide oval in side view, and further apart on top view. Front face of femurs with hair-scales only. ??Double tooth on tip of tibiae.</p>  <p>Open ground, grasslands, wetlands. Scarce.</p>
Compare	<p><i>Hypera pollux</i> and <i>conmaculata</i> (pronotums narrower; bristles shorter; scales blunt or only very slightly notched; wing-cases not ribbed). <i>Brachypera</i> (scales blunt or only very slightly notched; wing-cases less neatly striped, mottled; no tooth on inside front tibiae). <i>Hypera miles</i> (no tooth on inside front tibiae; wing-cases mottled, not neatly striped; centre stripe of pronotum less prominent; wing-cases not ribbed). <i>Hypera diversipunctata</i> (no tooth on inside front tibiae; wing-cases plain or mottled; wing-cases not ribbed). Other <i>Hypera</i> (wing-cases not ribbed, plain or more mottled, less neatly striped; bristles longer and more erect in rear half; tibiae paler; no tooth on inside front tibiae).</p>	<p><i>Hypera pollux</i> and <i>conmaculata</i> (pronotums narrower, straighter; bristles shorter; scales blunt or only very slightly notched). <i>Brachypera zoilus</i> (larger; scales blunt or only very slightly notched; thicker, shorter rostrum; pronotum less rounded). <i>Brachypera dauci</i> (scales blunt or only very slightly notched; distinctive pattern; legs banded; wing-cases ribbed). <i>Hypera arator</i> (neat stripes and zip pattern; wing-cases slightly ribbed; tooth on inside of front tibiae). <i>Hypera diversipunctata</i> (see account). Other <i>Hypera</i> (scales often more deeply forked; bristles longer and more erect in rear half; ??tibiae paler).</p>	<p><i>Hypera pollux</i> and <i>conmaculata</i> (narrower pronotums; bristles shorter; scales blunt or only very slightly notched). <i>Brachypera zoilus</i> (scales blunt or only very slightly notched; thicker, shorter rostrum). <i>Brachypera dauci</i> (scales blunt or only very slightly notched; distinctive pattern; legs banded; wing-cases ribbed). <i>Hypera arator</i> (neat stripes and zip pattern; wing-cases slightly ribbed; tooth on inside of front tibiae). <i>Hypera miles</i> (wing cases not so narrow when comparing same sex, more tapered at rear; bristles in neat rows of one; eyes flatter). Other <i>Hypera</i> (bristles longer, fewer, in neat rows of one, more erect in rear half; eyes closer together, less rounded, narrower in side view).</p>
Foodplants	Pink family <i>Caryophyllaceae</i> .	Legumes.	Chickweeds and stitchworts <i>Stellaria</i> , <i>Cerastium</i> , <i>Myosoton</i> .

*on wing-cases: scales elsewhere may differ.

Hypera and Brachypera (continued)






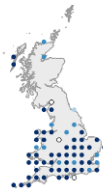
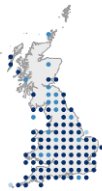

Three species with **forked scales**, and **long raised bristles** in the rear half. **Femurs** (at least on front face) with hair-scales **and forked scales**; *this is the most reliable distinction from the species on the next page*. Tibiae orange-brown. Scales deeply forked to over half way, but with an **undivided, solid base**.

	<i>Hypera melancholica</i> *	<i>Hypera postica</i>	<i>Hypera plantaginis</i>
	 © Lech Borowiec		
Size	5.8-6.7	3.9-5.3 mm	4.0-4.8 mm
Flat scales*	Forked to half way or deeper.	Forked to half way or deeper.	Forked to half way or deeper.
Bristles*	Long, raised in rear half of wing-cases.	Long, raised in rear half of wing-cases.	Long, raised in rear half of wing-cases.
	<p>Almost identical to <i>postica</i>, but larger. Pronotum very slightly more pinched in at rear, with slightly straighter sides at extreme rear. Aedeagus distinct.</p> <p>Uncommon in open and disturbed ground in the south-east.</p> <p>Was called <i>Hypera fuscocinerea</i>.</p> 	<p>Dark patch down front half of middle of wing-cases.</p> <p>Pronotum with rounded sides, but not outlandishly swollen or wide.</p> <p>Common in open and disturbed ground, but rare in the north.</p> 	<p>Dark patches at sides of wing-cases, very short dark stripe on either side at front. Pronotum outlandishly wide and swollen at sides, widest just in front of the middle and more tapering to rear (appears more heart-shape than in <i>meles</i>).</p> <p>Common in grasslands and open ground.</p> 
Compare	<p><i>Hypera plantaginis</i> (wing-cases with dark sides, paler centre; pronotum wider, more swollen). <i>Hypera meles</i> (pronotum wider, more swollen; rostrum longer; wing-cases plain or slightly mottled, without dark centre; no forked scales on femurs). <i>Hypera venusta</i> (usually smaller; wing-cases with central dark patch usually shorter, sides darker; no forked scales on femurs; rostrum proportionately longer and thinner). <i>Hypera nigrirostris</i> and <i>onoidis</i> (wing-cases plain or faintly mottled; no forked scales on femurs). <i>Hypera arator</i> (wing-cases ribbed; distinctive pattern; tooth on inside of front tibiae; bristles mostly flat). <i>Hypera miles</i> (darker tibiae; bristles mostly flat). <i>Hypera diversipunctata</i> (bristles mostly flat, untidy, not in neat rows of one; eyes wider, more rounded, and further apart).</p>		<p><i>Hypera meles</i> (pronotum widest at or behind middle; femurs with no or only one or two forked scales; usually lacks dark patches at sides; rostrum longer). <i>Hypera diversipunctata</i> (bristles mostly flat, untidy, not in neat rows of one; abdomen longer; eyes more rounded, further apart). <i>Hypera miles</i> (usually more mottled, without solid dark patches on sides; darker legs; bristles almost flat). <i>Hypera pastinacae</i> (chequered, without dark side patches; long-bristly over whole upperside). Other <i>Hypera</i> (pronotums less swollen, not so wide).</p>
Foodplants	Medicks <i>Medicago</i> and perhaps other legumes.	Medicks <i>Medicago</i> and perhaps other legumes.	Bird's-foot-trefoils <i>Lotus</i> .

*on wing-cases: scales elsewhere may differ.

Hypera and *Brachypera* (continued)



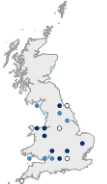
Four species with **deeply forked v-shape scales**, and **long raised bristles** in the rear half. **Femurs with hair-scales only**; this is the most reliable distinction from the species on the previous page. Tibiae orange-brown. Scales usually more deeply forked than in the species on previous page, the whole scale more or less v-shape with almost no unforked base, but in *meles* the scales can have a substantial unforked base.

	<i>Hypera meles</i>	<i>Hypera venusta</i>	<i>Hypera nigrirostris</i>	<i>Hypera ononidis</i> *
				
Size	3.9-4.8 mm	3.1-3.8 mm	3.3-4.4 mm	3.9-4.6 mm
Flat scales*	Forked almost to base.	Forked almost to base.	Forked almost to base.	Forked almost to base.
Bristles*	Long, raised in rear half of wing-cases.	Long, raised in rear half of wing-cases.	Long, raised in rear half of wing-cases.	Long, raised in rear half of wing-cases.
	<p>Pronotum wide and swollen at sides, but not as tapered at rear as in <i>plantaginis</i>, widest at or behind middle. Pattern variable, but when fresh may recall <i>arator</i>, with dark streaks at base and sides, stripes, and slight zip pattern down suture, but is not as neat and zip usually less distinct. However, can appear almost plain when fresh or old. Rostrum proportionately longer and more slender than in most of the other species with raised bristles, not so pinched in at base as in <i>venusta</i>.</p>  <p>Open ground and disturbed places. Formerly scarce, seems to be increasing, and is now not uncommon across much of the south.</p>	<p>Wing-cases with dark patches at sides, like <i>plantaginis</i>, but often with more solid short dark patch at front of wing-cases. Mottled with dark patches.</p> <p>Common in grasslands and open ground in the south.</p> 	<p>Wing-cases rather plain, only faintly mottled. This and <i>ononidis</i> are the only vivid green Hypera, but both are variable: orange-brown <i>nigrirostris</i> do occur, often on rest-harrows, leading to confusion with <i>ononidis</i>. Erect white bristles in ??odd intervals in rear half of wing-cases (brown bristles in even ones).</p> <p>Common in grasslands and open ground.</p> 	<p>Very like nigrirostris. Often orange-brown, but can be green, so colour is not very useful. Differs from <i>nigrirostris</i> in pronotum slightly wider and more rounded at sides; erect bristles longer, extending more to front half of wing-cases; erect white bristles in all intervals, not just the odd ones.</p> <p>On and around rest-harrows.</p> 
Compare	<p><i>Hypera postica</i> and <i>melancholica</i> (pronotums narrower; many forked scales on femurs; rostrums proportionately shorter and thicker). <i>Hypera plantaginis</i> (pronotum widest at or in front of middle, narrower and more tapered at rear; many forked scales on femurs; rostrum shorter). <i>Hypera venusta</i>, <i>nigritarsis</i>, and <i>ononidis</i> (pronotums narrower; rostrums usually not so long). <i>Hypera arator</i> (wing-cases ribbed; distinctive pattern; tooth on inside of front tibiae; bristles mostly flat). <i>Hypera miles</i> (larger; ??darker tibiae; bristles mostly flat; rostrum thicker). <i>Hypera diversipunctata</i> (bristles mostly flat; eyes wider, more rounded, and further apart).</p>	<p><i>Hypera plantaginis</i> (pronotum wider, more swollen; larger; many forked scales on femurs). <i>Hypera meles</i> (larger; pronotum wider, more swollen). <i>Hypera nigrirostris</i> (wing-cases plain or faintly mottled, often green; pronotum narrower, sides not so rounded). <i>Hypera ononidis</i> (wing-cases plain or faintly mottled, lacking dark patches at sides; larger; more bristles in front half of wing-cases). <i>Hypera arator</i> (wing-cases ribbed; distinctive pattern; tooth on inside of front tibiae; bristles mostly flat). <i>Hypera miles</i> (larger; ??darker tibiae; bristles mostly flat, untidy; rostrum thicker). <i>Hypera diversipunctata</i> (larger; bristles mostly flat; eyes wider, more rounded, and further apart). <i>Hypera postica</i> and <i>melancholica</i> (usually larger; sides of wing-cases not so dark; many forked scales on femurs; rostrum proportionately shorter and thicker).</p>	<p><i>Hypera plantaginis</i> (pronotum wider, more swollen; larger; many forked scales on femurs). <i>Hypera meles</i> (pronotum wider, more swollen; rostrum longer; usually larger). <i>Hypera venusta</i> (wing-cases with dark sides on, more strongly mottled, pronotum slightly wider and more rounded at sides). <i>Hypera arator</i> (wing-cases; ribbed, distinctive pattern; tooth on inside of front tibiae; bristles mostly flat). <i>Hypera miles</i> (larger; darker tibiae; bristles mostly flat; rostrum thicker; pronotum more swollen). <i>Hypera diversipunctata</i> (larger; bristles mostly flat and untidy; eyes wider, more rounded, and further apart).</p>	<p>Differs from other species by the same features as <i>nigrirostris</i>, except similar in size to <i>meles</i>, and pronotum similar to <i>venusta</i>. The characters that separate <i>ononidis</i> and <i>nigrirostris</i> are not clear, and there may be as much variation within the species as there is between them. There are no differences in the aedeagus, and DNA analysis does not separate them.</p>
Foodplants	Clovers <i>Trifolium</i> .	Various legumes.	Clovers <i>Trifolium</i>	Rest-harrows <i>Ononis</i>

*on wing-cases: scales elsewhere may differ



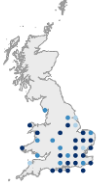

Limobius

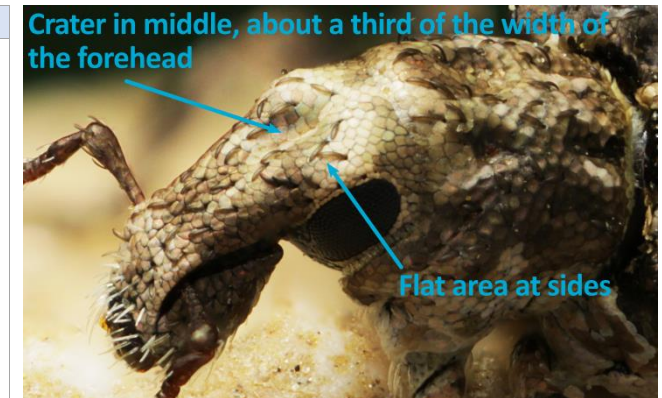
Obvious **square shoulders**, wing-cases rather **straight-sided**. **Thick rostrum**. Hairs and **notched or forked scales** on body. **No tooth** on the front femur. **Six** segments in the filament. On **stork's-bills and crane's-bills**. **Uncommon**. **Compare** *Dorytomus* (tooth on underside of front femur; usually on or around trees; not so bristly). *Hypera* (seven segments in filament; only *pastinacae* has such long erect bristles over the whole of the wing-cases).

	<i>Limobius mixtus</i> ***	<i>Limobius borealis</i> **
		 <p>© Lech Borowiec</p>
Size	2.7-3.8 mm	2.5-3.0 mm
Flat scales*	Oval.	Notched.
Bristles *	Long, erect.	Long, erect.
	<p>Wing-cases appear ribbed, dark bar across middle at the rear.</p> <p>Very rare on coastal sand and shingle.</p> 	<p>Mottled.</p> <p>Grasslands, open ground, open scrub. Scattered but very uncommon.</p> 
Compare	<i>Limobius borealis</i> (scales notched; no dark bar; wing-cases not ribbed; bristles longer). <i>Hypera</i> and <i>Brachypera</i> (no dark bar; species with long bristles have forked scales or are much larger).	<i>Limobius mixtus</i> (scales notched; dark bar across middle at rear; wing-cases ribbed; bristles shorter). <i>Hypera</i> and <i>Brachypera</i> (larger; not so bristly; seven segments in the filament).
Foodplants	Stork's-bills <i>Erodium</i> .	Crane's-bills <i>Geranium</i> .

Gronops

Pronotum with two rows of **deep craters**. Wing-cases with **ridges and bumps**. Body and legs **covered in round scales**. **Crater between eyes**. Third segment of tarsi **narrow**, barely lobed. Narrow pronotum, **prominent square shoulders**. Rather short and wide rostrum. No hook at the end of the front tibiae. **Compare *Bagous*** (aquatic; no craters on pronotum; rostrums narrower; legs not covered in round scales; hook at the end of the front tibiae). Almost all other weevils have a wide, heart-shape third segment in the tarsi. Broad-noses (heart-shape third segment in tarsi; none is completely covered in flat scales, including the legs and rostrum, or has the same craters on the head and pronotum; pronotums often wider).

	<i>Gronops lunatus</i> *	<i>Gronops inaequalis</i> ***
		
Size	3.1-3.9 mm	3.9-4.7 mm
	<p>Strange weevil, with narrow feet, round flat scales, and long recurved or flat paddle scales. Narrow crater on forehead. Prominent bump on rear of each wing-case, the rest of the surface uneven with hollows and ridges down the back. The almost total covering of scales gives the weevil a skeletal look.</p> <p>On the ground in sandy places and saltmarshes.</p> 	<p>Like <i>lunatus</i>, but larger. The whole head between the eyes is caved in rather than just a narrow crater occupying the middle third. Wing-cases rougher, less clearly ridged but with more bumps and warts. Pronotum proportionately wider.</p> <p>Very scattered and rare. In waste ground, shorelines. May be occasional introduction rather than a native established species.</p> 
Foodplants	Spurreys <i>Spergularia</i> , and other Caryophyllaceae.	Oraches <i>Atriplex</i> and other Chenopodiaceae.



Gronops lunatus has a crater occupying about a third of the width of the forehead. In *Gronops inaequalis* almost the whole width of the head between the eyes is caved in to form a crater, so there is only a very narrow rim rather than a wide flat area at the sides.









Gronops lunatus has craters on the pronotum and ridges down the wing-cases. Note too the narrow feet, without the wide lobes on the third segment, and the legs covered in scales.

Bagous and Hydronomus

Aquatic. Third segment of tarsi **narrower** than in most other weevils, not heart-shape, at most only very slightly lobed at tip. Covered in **strange flat round barnacle-like warts**, each with a **hole in the centre**. Tiny short recurved bristles on the odd intervals. **Legs slender.** **No** tooth on the underside of the front femur. **Hook** at the end of the front tibiae. All are **uncommon or rare** and rarely found. Wing-cases often with a **bump at rear**, or at least appearing **pinched in** from above **at rear end**. **Compare** *Gronops* (several craters on pronotum and one between the eyes; rostrum thicker; legs covered in round scales; no hook at the end of the front tibiae). *Stenopelmus rufinatus* (rostrum shorter than most *Bagous*, red beyond antenna bases; normal flat scales, not barnacles; no hook at tip of front tibiae).

Often variably covered or encrusted with a mud-like secretion, which may obscure the barnacle warts, creating confusing variation in colour and texture. This is a difficult genus, with several tricky groups of similar species. You may need to visit a museum and compare your specimen with a reference collection, especially if you have a very rare species.

Three **narrower species**, with longer and more slender bodies, wing-cases not much wider than pronotums. **Compare** *Hydronomus alismatis* (also rather narrow, but has hairier tarsi; no keels on underside of throax).





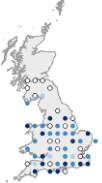



	<i>Bagous tubulus</i> **	<i>Bagous tempestivus</i> **	<i>Bagous czwalinai</i> ***
	 © Lech Borowiec	 © Lech Borowiec	
Size	2.6-3.6 mm	2.3-3.6 mm	2.8-3.3 mm
	<p>The longest and narrowest <i>Bagous</i>. Pronotum almost as wide as wing-cases. Rostrum long and slender, antennae inserted closer to base than in other <i>Bagous</i>.</p> <p>Ditches and drains, often in grazing marshes.</p> 	<p>Slight bump on rear of wing-case, but not as strong as in <i>nodulosus</i>. Tibiae not touched along the inner edge. Wing-cases almost straight-sided. Third segment of tarsi only slightly as wide as the second.</p> <p>Ditches, pools and marshes.</p> 	<p>Slight bump on rear of wing-case, but not as strong as in <i>nodulosus</i>. Wing-cases wider behind the middle. Third segment of tarsi wider than the second.</p> <p>Pools and bogs in the New Forest only.</p> 
Compare		<i>Bagous tubulus</i> (longer and narrower; pronotum almost as wide as wing-cases; antennae inserted closer to base of rostrum).	<i>Bagous tempestivus</i> (wing-cases straight sided or widest at the middle; third segment of tarsi hardly wider than second).
Foodplants	Semi-aquatic grasses.	Unknown.	Unknown.

Bagous and Hydronomus (continued)

No keels on underside of thorax. **Hairy tarsi**, with many short hairs on upper surface. **Narrow body**, and even narrower pronotum, so shoulders prominent.








Short and squat, with very narrow, slender antenna clubs.

Large species with **prominent bumps** on rear of wing-cases. Note that some other species (*limosus* etc.) can have a small bump on the fifth interval.

	<i>Hydronomus alismatis</i> *	<i>Bagous petro</i> ***	<i>Bagous binodulus</i> ***	<i>Bagous nodulosus</i> ***
		 © Lech Borowiec	 © Lech Borowiec	 © Lech Borowiec
Size	2.7-3.5 mm	2.7-2.9 mm	4.0-5.5 mm	4.2-5.9 mm
	<p>Hairy tarsi and no keels on underside of thorax identify this species.</p> <p>Widespread in the south.</p> 	<p>Distinctive small size and squat shape. Pronotum much wider than long. Antenna club narrow. Broad striae with large punctures.</p> <p>Probably extinct. In hog pools with bladderworts.</p> 	<p>A prominent bump on rear of third and fifth intervals.</p> <p>Probably extinct. On Water-soldier in the Broads.</p> 	<p>A prominent bump on rear of fifth interval. There may be a slight hump on the third, but it is much smaller. Tibiae often toothed on inner edge.</p> <p>Ditches and pools with Flowering-rush. Very rare.</p> 
Compare	<i>Bagous</i> (keels on underside of thorax; tarsi with up to dozen hairs on each segment, but not covered in hairs).	Other <i>Bagous</i> (wider antenna clubs; usually pronotum narrower and longer pronotums; narrower striae and smaller punctures).		<i>Bagous colligensis</i> and <i>subcarinatus</i> (pronotums with straighter sides)
Foodplants	Water-plantains <i>Alisma</i>	Maybe bladderworts <i>Utricularia</i>	Water-soldier <i>Stratiotes aloides</i>	Flowering-rush <i>Butomus umbellatus</i>

Not Yet Ready






Bagous and Hydronomus (continued)

	<i>Bagous argillaceus</i> ***	<i>Bagous diglyptus</i> ***	<i>Bagous lutulosus</i> ***	<i>Bagous frit</i> ***
				
	© Lech Borowiec	© Lech Borowiec		© Lech Borowiec
Size	2.7-4.7 mm	2.0-3.2 mm	2.2-2.8 mm	2.7-3.8 mm
	<p>Extraordinary varnished appearance, scales forming tiled surface on wing-cases, which looks smooth and polished. Tiny recurved hair scales in rows along interstices. Rostrum tapered to antennae and less recurved than in many other species.</p> 	<p>Thicker tibiae. Intervals slightly raised, forming ridges down wing-cases.</p> <p>Probably extinct. Only known from a few floodplains and rivers.</p> 	<p>Small. Interstices forming ridges. Hind tarsi with short, bead-like segments. Tibiae smooth along inner edge, legs rather stocky. Pronotum with faint, shallow, broad hollow down the middle. Compare <i>brevis</i>, which also has a hollow, but is larger and has longer segments in the hind tarsi.</p> 	<p>Like a larger <i>lutulosus</i>. Pronotum with faint, shallow, broad hollow down the middle.</p> 
Compare				
Foodplants	Unknown.	Meadow <i>Saxifraga granulata</i>	Unknown	Bog-bean <i>Menyanthes trifoliata</i>

Not yet ready

Bagous and Hydronomus (continued)








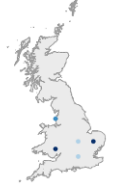


Five similar and confusing species. Three have a unique feature that will separate each from the others: wide, cratered striae of *limosus*; long hind tarsi of *subcarinatus*; shallow hollow on pronotum of *brevis*. This leaves *collignensis* and *longitarsis*, which are difficult.

	<i>Bagous limosus</i>	<i>Bagous subcarinatus</i>	<i>Bagous collignensis</i>	<i>Bagous longitarsis</i>	<i>Bagous brevis</i>
	 © Lech Borowiec	 © Lech Borowiec	 © Lech Borowiec	 © Lech Borowiec	 © Lech Borowiec
Size	2.5-3.4 mm	3.2-3.6 mm	2.4-2.7 mm	2.4-2.7 mm	2.6-3.2 mm
Compare	Fifth interstice may have small nubbin at rear. Striae wider, interstices forming more prominent ridges than <i>subcarinatus</i> , <i>collignensis</i> , and <i>brevis</i> , and punctures between them wider , like craters. Pronotum with narrowed front rim, then swollen at front sides before narrowing to rear, wider at front than in other species. Tibiae with broad-based bristles but not teeth.	Fifth interstice may have small nubbin at rear. Hind tarsi longer and more slender , than in others in this table, segments longer.	Fifth interstice may have small nubbin at rear. Shorter hind tarsi than <i>subcarinatus</i> . See <i>brevis</i> and <i>longitarsis</i> .		Fifth interstice may have small nubbin at rear. Pronotum wider than <i>subcarinatus</i> and <i>collignensis</i> , with faint, shallow, broad hollow down the middle (this needs light from the right angle to be seen easily, but even without it, the pronotum looks flatter on top than in <i>collignensis</i> and other species without a hollow). Scape shorter than in those two species.
Foodplants	Pondweeds <i>Potamogeton</i>	Maybe hornworts <i>Ceratophyllum</i>	Water-milfoils <i>Myriophyllum</i>	Water-milfoils <i>Myriophyllum</i>	Lesser Spearwort <i>Ranunculus flammula</i>

Not yet ready



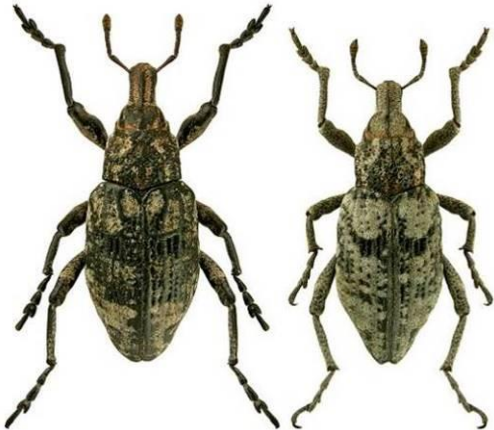
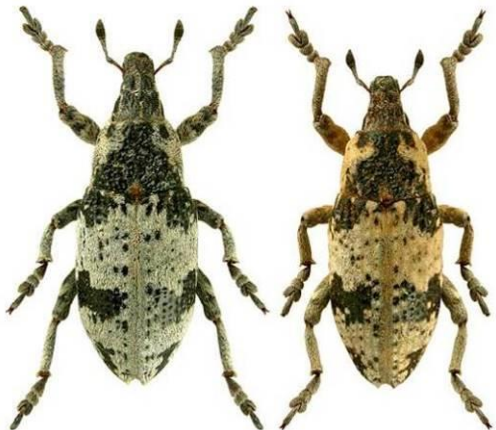




Bagous and *Hydronomus* (continued)

Five species with **wider third tarsal segments**, more like those of most weevils, but not lobed at the tip. Rostrum longer and less recurved than many of the other *Bagous*.

	<i>Bagous glabrirostris</i> ***	<i>Bagous lutulentus</i> *	<i>Bagous lutosus</i> ***	<i>Bagous puncticollis</i> ***	<i>Bagous robustus</i> ***
					
Size	2.5-3.3 mm	2.2-2.3 mm	3.5-5.4 mm	3.5-4.0 mm	3.5-5.0 mm
	<p>Long rostrum. Pronotum with straighter sides, narrower compared with wing-cases than <i>lutulentus</i>. Tarsi and tibiae red-brown.</p> 	<p>Long rostrum. Tarsi often, but not always, darker than tibiae. Pronotum sides more rounded than in <i>glabrirostris</i> or <i>robustus</i>, but this is not an obvious feature and <i>glabrirostris</i> and <i>lutulentus</i> can be hard to separate.</p> 		<p>Larger than <i>glabrirostris</i> and <i>lutulentus</i>. Each wing-case with a slight diagonal depression near the base, forming a shallow v, deeper than in other <i>Abagous</i>. This is not obvious, but it is marked by bends in the striae. Scales smaller than in <i>glabrirostris</i> and <i>lutulentus</i>, four or five across each interstice (three, sometimes four in the other two).</p> 	<p>Like a large, robust <i>lutulentus</i>. Scape with slightly darker tips.</p> 
Compare					
Foodplants	Unknown	Horseshoe vetch <i>Vicietum</i>	Maybe bur-reeds <i>Sparganium</i>	Unknown	Maybe water-plantains <i>Alisma</i>

Cleonis, Conioleonus, and Bothynoderes

Some of our **largest and most spectacular** weevils, **densely scaled**, with **distinctive patterns**, pronotums rather wide, and **long abdomens**. **Rostrums wide**. **Compare** Broad-noses (none has a pattern like these; either longer antennae, less densely scaled; more prominent shoulders and shorter abdomens). *Rhinocyllus conicus* (bristly; body broader; rostrum shorter; wing-cases arched at top; antenna segments wider). *Larinus* (patchily scaled; bodies broader; rostrums smoother, not grooved). *Pissodes* (large pits on wing-cases; patchily scaled; rostrums longer and narrower). *Hypera* (more obvious shoulders; different patterns; rostrums narrower).

	<i>Cleonis pigra</i> *	<i>Conioleonus nebulosus</i> ***	<i>Conioleonus turbatus</i> ***	<i>Bothynoderes affinis</i> ***
		 © Lech Borowiec	 © Lech Borowiec	 © Lech Borowiec
Size	9.0-14.8 mm	11.5-14.5 mm	9.0-13.5 mm	6.0-11.00 mm
	<p>Grey and black. Rostrum with three grooves down the top, and one down each side. Wider pronotum, so the whole body looks rather like a long oval, with only a weak waist.</p> <p>Sandy ground with thistles, mostly by the coast.</p> 	<p>Grey and black, with rusty tone around head and suture. Rostrum with one ridge down the centre. Narrower pronotum. Has more of an angry expression than the gentle face of <i>Cleonis pigra</i>. Bump in front of the base of each of the front legs, like a pair of boobs.</p> <p>Very rare on heaths.</p> 	<p>Similar to <i>nebulosus</i>, but may lack the rusty tone. Rostrum with one ridge down the centre. Does not have the bumps in front of the base of the front legs, so appears flat-chested. The dark marks on the wing-cases are slightly curved forwards where they meet the suture, so they meet the suture at more of a right angle than a diagonal.</p> <p>Heathland. Probably extinct, but perhaps never an established resident.</p> 	<p>A smaller species, with a distinctive pattern: largely pale wing-cases with two or three large dark patches, those at the front joining with a blotch on the pronotum to form an upside down V or Y. Rostrum with a single ridge down the centre that branches into a Y at the base of the antennae.</p> <p>Sandy places and open ground. Extinct, or more likely rare immigrant, never established.</p> 
Compare	<i>Conioleonus nebulosus</i> (rusty tones on head and front of body; only one ridge down rostrum; pronotum narrower). <i>Conioleonus turbatus</i> (only one ridge down rostrum; pronotum narrower).	<i>Cleonis pigra</i> (no rusty tones; three grooves down top of rostrum; wider pronotum). <i>Conioleonus turbatus</i> (no boobs).	<i>Cleonis pigra</i> (three grooves down top of rostrum; wider pronotum). <i>Conioleonus turbatus</i> (prominent boobs).	Distinctive pattern, but to be sure, check the ridge on the rostrum.
Foodplants	Thistles <i>Cirsium</i> and <i>Carduus</i>	Uncertain. May be Heather <i>Calluna vulgaris</i>	Unknown	Chenopodiaceae

Larinus





Mottled with **patches of scales**. **Pronotum funnel-shape**, wide at rear. Wing-cases forming **double arch** at front. Rostrum without ridges or grooves down top. **Compare** *Dorytomus* (pronotum narrower at rear). Broad-noses: *Barynotus* and *Tropiphorus* (rostrums wider; wing-cases widest behind middle; scales round or oval, not hair-like; wing-cases not arched at front).

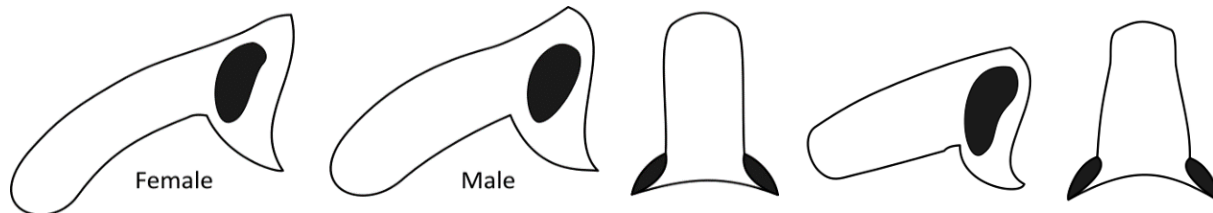
Rhinocyllus conicus

Matted hair-scales. **Long, shaggy bristles** on pronotum and legs. **Short** rostrum. Wing-cases forming **double arch** at front.

Lixus

Very **long, narrow** weevils, often with a notch where wing-cases meet at rear. Several British species, but all now extinct apart from one. Other species occasionally appear in imported vegetables.

	<i>Larinus carlinae</i>	<i>Larinus turbinatus</i> ***	<i>Rhinocyllus conicus</i>	<i>Lixus scabricollis</i> *
				
Size	4.8-9.5 mm	4.0-9.0 mm	4.2-6.7 mm	4.5-6.0 mm
	Sides rather straight . Formerly uncommon, but appears to be increasing and spreading. Grasslands, gardens, open ground with thistles. <i>Was called Larinus planus.</i>	Like <i>carlinae</i> , but body broader , especially at front , more tapering at rear : humpty-dumpty shape. Rostrum straighter and more wedge-shape, with wider base, tapering to tip . Grasslands and other open ground with thistles. A recent arrival, established around the Thames Estuary. Should be looked for elsewhere.	Has the appearance of a bedraggled sheep. Grasslands, gardens, open ground with thistles. Increasing and spreading.	Beautiful rhubarb and custard colours in life, but this soon wears off. A recent arrival, now established on Sea Beet along the coast. May or may not have arrived naturally.
Compare	Distinctive shape and pattern, but see <i>turbinatus</i> .	Distinctive shape and pattern, but see <i>carlinae</i> .	Broad-noses (none has the shape, double arch, and matted appearance of <i>Rhinocyllus</i>).	<i>Limnobaris</i> (proportionately wider; white narrow scales above; white round scales on underside; rostrums longer and narrower; not notched at rear end).
Foodplants	Thistles <i>Cirsium</i> and <i>Carduus</i>	Thistles <i>Cirsium</i> and <i>Carduus</i>	Thistles <i>Cirsium</i> and <i>Carduus</i>	Sea Beet and cultivated beet <i>Beta vulgaris</i> , and other Chenopodiaceae



Larinus carlinae. In side view, rostrum curved, slightly wider towards tip. In top view, more or less same width throughout.

Larinus turbinatus. In side view, rostrum almost straight, narrowed towards tip. In top view, wider at base, tapering towards tip.









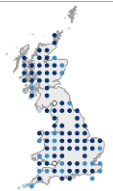

The red and yellow colours of *Lixus scabricollis* are soon worn away, leaving the black surface showing through.

Liparus

Huge, black weevils, with **convex** outlines. Tooth on underside of front femurs. **Large hook** on end of front tibiae. **Rostrums long**, slightly **narrowed in the middle**. **Compare** *Otiorhynchus* (scape longer; rostrums shorter and wider, more flaring at tip). *Hylobius* (sides straighter; different patterns; punctures larger).

Hylobius




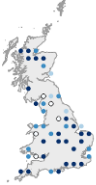
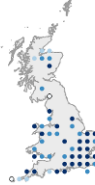



Large. Distinctive patterns. Rather **straight-sided wing-cases**, prominent shoulders. Tooth on underside of front femurs. **Large hook** on end of front tibiae.

	<i>Liparus coronatus</i> *	<i>Liparus germanus</i> ***	<i>Hylobius abietis</i>	<i>Hylobius transversovittatus</i> ***
	 © Lech Borowiec	 © Lech Borowiec		
Size	10.0-12.6 mm	12.5-15.0 mm	8.0-13.4 mm	7.5-11.2 mm
	<p>Few or no tufts of hair-scales on wing-cases. Pronotum with pin-prick punctures only.</p> <p>Tall grasslands, roadsides, open places.</p> 	<p>Our biggest weevil. Many tufts of yellow hair-scales on wing-cases. Pronotum with pin-prick punctures and larger crater-like punctures.</p> <p>Tall grasslands, roadsides, open places</p> 	<p>Black surface (beware brown immatures). Few or only inconspicuous hair-scales on scutellum, appears same colour as surface.</p> <p>Common around pines and other conifers, often at night.</p> 	<p>Red-brown surface. Scutellum covered in large hair-scales, appears white or yellow.</p> <p>Very rare in peaty wetlands.</p> 
Compare	<i>Liparus germanus</i> (many patches on wing-cases; two sizes of punctures on pronotum).	<i>Liparus coronatus</i> (few or no patches on wing-cases; only tiny punctures on pronotum).	Broad-noses: <i>Otiorhynchus</i> (antennae longer; different patterns; rostrums wider, pinched in at middle; wing-cases more oval). <i>Pissodes</i> (large pits on wing-cases; smaller; rostrum longer, flatter tip, antennae inserted further back).	
Foodplants	Cow Parsley <i>Anthriscus sylvestris</i> and perhaps other umbellifers	Hogweed <i>Heracleum sphondylium</i> and perhaps other umbellifers	Conifer stumps	Roots of Purple Loosestrife <i>Lythrum salicaria</i>

Pissodes






Pits on wing-cases much **larger and longer** in the middle. **Long rostrums**. Pronotums narrow at front, as wide as wing-cases at rear. No tooth on underside of front femurs. **Patches of oval scales**. On **conifers**. Compare *Hylobius* (smaller, single-size punctures on wing-cases; rostrum shorter, antennae inserted near tip).

A difficult genus. Some of the characters used in keys, like the shape and puncturing of the pronotum, seem to vary as much within species as between them. Another explanation is that there are unrecognised species or misidentified specimens hidden in British collections.

	<i>Pissodes pini</i> *	<i>Pissodes castaneus</i> *	<i>Pissodes validirostris</i> ***
			 © Lech Borowiec
Size	6.1-9.3 mm	5.5-7.0 mm	5.0-6.3 mm
	<p>Surface dark purple-brown. Scales on wing-cases all one colour, off-white to pale yellow, narrow oval. Scales on sides long broad ovals. Scattered but local in pine woods and plantations.</p> 	<p>Surface deep mahogany red-brown. Both yellow scales and white scales, slightly wider and blunter oval than in <i>pini</i>. Sides of pronotum slightly straighter at rear than in <i>pini</i>, not so curved inwards, but this character varies within each species almost as much as it does between them. Scales on sides wider and more round than in <i>pini</i> or <i>validirostris</i>. Rear of pronotum and front of wing-cases with sinuous double curve, appearing more wavy (straighter, or evenly curved, in the other two species). In similar places to <i>pini</i>, but more common.</p> 	<p>Surface deep red-brown. Both yellow scales and white scales. Very like castaneus, but rostrum usually black; scales on side of thorax and between middle and hind legs narrower, clearly long broad oval rather than round. Very rare in Scottish pine woods.</p> 
Compare	<i>Pissodes castaneus</i> and <i>validirostris</i> (on average smaller; surface redder; scales of two colours; pits on wing-cases slightly smaller; ??base of rostrum with punctures crowded across whole width).	<i>Pissodes pini</i> (on average larger; surface darker; scales only one colour; pits on wing-cases slightly larger; ??base of rostrum with narrow smooth line without punctures, punctures slightly more spaced out; scales on sides narrower, exposing more of the surface).	<i>Pissodes pini</i> (on average larger; surface darker; scales only one colour; pits on wing-cases slightly larger).
Foodplants	Pines <i>Pinus</i> .	Pines <i>Pinus</i> .	Pines <i>Pinus</i> .
Scales on sides			

Leiosoma

Three **small, very shiny**, usually **black** weevils (*deflexum* may be brown), with **orange-brown feet and antennae** (but antenna clubs dark). Surface strongly punctured, often appearing rippled. Rostrum **thick but long**, curved. **Tiny scutellum. Rounded sides**, shoulders not very prominent, but waist obvious. Front of wing-cases often **crimped**. Tiny hair-scales on wing-cases. **Compare** *Anoplus* (no claws; surface duller; pronotum proportionately smaller). Ceutorhynchids: *Rutidosoma globulus* (scales on wing-cases and legs wider; body rounder; rostrum narrower; usually on aspens).

	<i>Leiosoma deflexum</i>	<i>Leiosoma oblongulum</i> *	<i>Leiosoma troglodytes</i> ***
			
Size	2.4-3.0 mm	2.5-3.1	1.8-2.4 mm
	<p>Patch of white scales between mid and hind legs. Femurs with tiny tooth on underside (this is easiest to see on the front femurs, by looking at the from in front and slightly above, but before you decide it is not there, tilt the weevil so you see the legs through different angles, and use high (20×) magnification).</p> <p>Common in wetlands, grasslands, and woods.</p> 	<p>Patch of white scales between mid and hind legs. No tooth on femurs. Body narrower than in the other two species, more pointed at rear.</p> <p>Uncommon in woods and grasslands.</p> 	<p>Smaller. No patch of white scales on underside. No tooth on femurs. Tibiae usually browner than in the other two species.</p> <p>Very rare. Woods, wetlands, grasslands.</p> 
Compare	<i>Leiosoma oblongulum</i> (no tooth on femurs; body narrower). <i>Leiosoma troglodytes</i> (smaller; no white patch; no tooth on femurs; tibiae usually browner).	<i>Leiosoma deflexum</i> (tiny tooth on femurs; body wider). <i>Leiosoma troglodytes</i> (smaller; no white patch; tibiae usually browner).	<i>Leiosoma deflexum</i> (larger; tiny tooth on femurs; no white patch). <i>Leiosoma oblongulum</i> (larger; no white patch; body narrower).
Foodplants	Buttercups <i>Ranunculus</i> , anemones <i>Anemone</i> , Marsh Marigold <i>Caltha palustris</i>	Buttercups <i>Ranunculus</i> , Wood Anemone <i>Anemone nemorosa</i>	Unknown





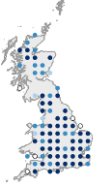
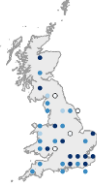
The tooth on the underside of the femurs of *Leiosoma deflexum* immediately separates it from the other two species, but it is tiny and easily overlooked.


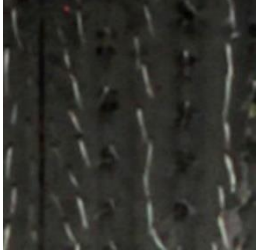




Leiosoma deflexum and *oblongulum* have a patch of white scales between the mid and hind legs.

Anoplus





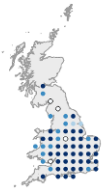
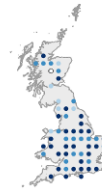
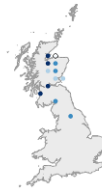
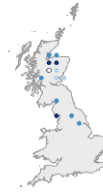
Two **tiny** weevils with **no claws**, so the feet look blunted. **Black** with a **white scutellum**. **On trees**. **Compare** All other weevils have claws. Some flea weevils look similar, but they jump, have claws, and usually have rostrums tucked under their heads.

	<i>Anoplus plantaris</i>	<i>Anoplus roboris</i>
		
Size	1.7-2.2 mm	2.3-2.8 mm
	<p>Pronotum smooth and shining between the punctures. Wing-cases with very fine hair-scales.</p> <p>Common on and around birches.</p> 	<p>Pronotum rough and dull between punctures. Wing-cases with broader, more obvious scales.</p> <p>Widespread but uncommon on and around Alder.</p> 
Foodplants	Birches <i>Betula</i>	Alder <i>Alnus glutinosa</i>




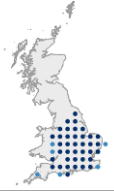
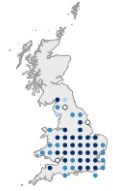
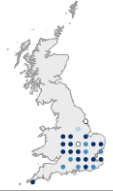
<i>plantaris</i>		
	<i>Anoplus plantaris</i> . Pronotum smooth and shining between punctures	<i>Anoplus plantaris</i> . Scales on wing-cases fine, hair-like.
<i>roboris</i>		
	<i>Anoplus roboris</i> . Pronotum rough and dull between punctures.	<i>Anoplus roboris</i> . Scales on wing-cases thicker and blunter.

Magdalis

Black, metallic, or brown weevils. Wing-cases rather **long**, often widest near the rear, so appearing saggy, often with a **double arch** at the front. **Small hook** at the end of the front tibiae. Wing-cases with minute, fine hair-scales only, **appearing unscaled**, surface of wing-cases **finely wrinkled**. **On trees**. Compare *Limnobaris*, *Baris*, *Aulacobaris*, and *Melanobaris* (wing-cases smoother; more sausage-shape, with rounder fronts and rears; antenna clubs blunter and more rounded). Elongate *Mecinus* (more sausage-shape; five segments in filaments). Most other similar weevils have obvious scales.

	<i>Magdalis armigera</i>	<i>Magdalis carbonaria</i> *	<i>Magdalis duplicata</i> **	<i>Magdalis phlegmatica</i> **
			 © Lech Borowiec	
Size	2.8-5.1 mm	3.1-6.2 mm	3.0-4.7 mm	3.1-6.1 mm
Scape	Dark	Dark	Dark	Dark
Front femur	Prominent tooth	Prominent tooth	Prominent tooth	Prominent tooth
Eyes	Almost flat	Almost flat	Almost flat	Rounded, protruding.
Pronotum	Horns at front.	Horns at front.	Slightly swollen at sides.	Narrow.
Intervals	No punctures on intervals. Intervals much wider than the striae. Wing-cases slightly shining, but duller than in <i>carbonaria</i> , not glossy, and more or less flat surface .  Female shown here. Male has thicker rostrum, swollen beyond the antenna bases, similar to male <i>carbonaria</i> shown. On hedgerow elms and in woods.	No punctures on intervals. Intervals and striae about the same width , wing-cases look slightly ribbed . Wing-cases shining and glossy .  Male shown here. Female has narrower rostrum, hardly swollen beyond the antenna bases. On and around birches.	One or two rows of punctures on intervals . Wing-cases metallic blue or green .  Mostly in Scottish pine woods, but also in plantations in northern England.	One or two rows of punctures on intervals . Wing-cases metallic blue or green .  Mostly in Scottish pine woods, but also in plantations in northern England.
Compare	<i>Magdalis carbonaria</i> (striae wider, slightly raised into low ribs; wing-cases more shining; pronotum very slightly less constricted at rear; horns subtly smaller).	<i>Magdalis armigera</i> (striae narrower, intervals flatter; wing-cases duller and rougher looking; pronotum very slightly more constricted at rear; horns subtly larger).	<i>Magdalis phlegmatica</i> (pronotum narrower; eyes rounder). All other <i>Magdalis</i> (wing-cases black).	<i>Magdalis duplicata</i> (wider, more swollen; eyes flatter). <i>Magdalis memnonia</i> (similar shape, but wing-cases black; front of wing-cases more strongly arched). All other <i>Magdalis</i> (wing-cases black or brown).
Foodplants	Twigs and decaying wood of elms <i>Ulmus</i>	Decaying wood of birches <i>Betula</i>	Sapwood of pines <i>Pinus</i>	Sapwood of pines <i>Pinus</i>

Magdalis (continued)

	<i>Magdalis cerasi</i>	<i>Magdalis ruficornis</i>	<i>Magdalis barbicornis</i> *
			 © Lech Borowiec
Size	2.4-4.2 mm	2.4-3.8 mm	3.1-4.1 mm
Scape	Dark	Yellow-brown.	Yellow-brown.
Front femur	No tooth or tiny tooth	No tooth.	No tooth.
Eyes	Almost flat	Rounded	Rounded to almost flat.
Pronotum	Swollen at sides	Bump on each side just behind the middle	Slightly swollen at sides
Intervals	No punctures on intervals.		
	Wing-cases look very rough , almost granulated. Male has very long club , longer than the filament (shared only with <i>barbicornis</i>). Scrub, woods, hedgerows. 	Rather slender , wing-cases straighter at front than in other black species (apart from <i>barbicornis</i>). Scrub, woods, hedgerows. 	Male has very long club , longer than the filament, so is easily told from all other <i>Magdalis</i> apart from <i>cerasi</i> . Female differs from <i>ruficornis</i> in wider head, longer, more curved rostrum, and no bump on side of pronotum. Scrub, woods, hedgerows. 
Compare	<i>Magdalis ruficornis</i> (wing-cases less rough, straighter at front; scape yellow; pronotum less swollen at sides; eyes more rounded; body narrower; rostrum shorter). <i>Magdalis armigera</i> and <i>carbonaria</i> (horns on front of pronotums; pronotums less swollen at sides; wing-cases less rough; prominent tooth on front femurs).	<i>Magdalis cerasi</i> (wing-cases rougher, more arched at front; scape dark; pronotum strongly swollen at sides; eyes flatter; body wider; rostrum longer). <i>Magdalis armigera</i> and <i>carbonaria</i> (horns on front of pronotums; scapes dark; prominent tooth on front femurs).	<i>Magdalis cerasi</i> (wing-cases rougher, more arched at front; scape dark). <i>Magdalis armigera</i> and <i>carbonaria</i> (horns on front of pronotums; scapes dark; prominent tooth on front femurs).
Foodplants	Oaks <i>Quercus</i> and perhaps other trees	Trees of the rose family Rosaceae	Trees of the rose family Rosaceae







On the underside of the front femur, *Magdalis cerasi* may have a tiny tooth that is little more than a slightly more pointed wart.



Magdalis armigera and the other species on the previous page have an obvious prominent tooth.

Magdalis (continued)





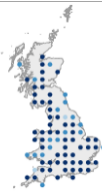
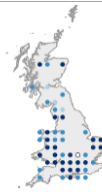
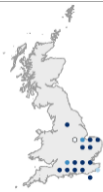
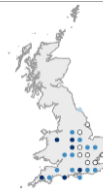
Two non-native species with **narrow pronotums**, shape like *phlegmatica*.

	<i>Magdalis memnonia</i>	<i>Magdalis rufa</i>
	 <p>© Lech Borowiec</p>	 <p>© Lech Borowiec</p>
Size	4.5-8.2 mm	3.5-5.5 mm
Scape	Dark	Red-brown
Front femur	Prominent tooth.	No tooth or a tiny tooth.
Eyes	Almost flat	Rounded to almost flat.
Pronotum	Narrow.	Narrow.
Intervals	One or two rows of punctures on intervals.	One or two rows of punctures on intervals.
	<p>Rather similar in shape to <i>phlegmatica</i>, but wing-cases black and more strongly arched at front.</p> <p>Introduced. Scarce but scattered in the south-east.</p> 	<p>The only brown <i>Magdalis</i>. Young individuals of other species may be brown, but only <i>rufa</i> has all of these: a narrow pronotum like <i>phlegmatica</i>; punctures on the intervals; and no tooth front femurs.</p> <p>Introduced. In Surrey only. Very rare.</p> 
Compare	<i>Magdalis phlegmatica</i> (wing-cases blue or green; eyes more rounded; front of wing-cases straighter).	Other <i>Magdalis</i> (wing-cases black or metallic). Beware immatures of other <i>Magdalis</i> .
Foodplants	Pines <i>Pinus</i>	Pines <i>Pinus</i>

Smooth -baris: *Limnobaris*, *Aulacobaris*, *Melanobaris laticollis*, and *Baris analis*

Long, thin, **sausage-shape** weevils. **Shoulders hardly apparent**. Short antennae. Six segments in filament. **Rostrum thick and curved**. Wing-cases rather **smooth and shining, black or metallic**, with very short and narrow white scales (*Limnobaris*) or appearing unscaled (actually with hardly apparent, very short fine scales). Six segments in the filament. **Compare** *Wide Mecinus* (bristly or scaled; broader body; rostrum more slender; five segments in the filament). *Mecinus janthinus* (five segments in the filament; wing-cases narrower and straighter-sided, surface not so smooth and shining; pronotum with sides more rounded, curving in at rear). *Mecinus pyrastrer* (wing-cases with straighter sides, surface more rippled, not so smooth and shining; five segments in the filament; long hair-scales on wing-cases). *Mecinus collaris* (round scales on pronotum; rostrum straighter; five segments in the filament). *Magdalis* (finely wrinkled wing-cases; with pronotum less rounded at front; wing-cases usually squarer rear, often sagging behind the middle; antenna clubs more pointed and narrower). *Smicronyx* (often patterned with scales; obvious waist and prominent shoulders). *Lixus scabricollis* (proportionately longer and narrower; not shining; pointed, notched rear). *Brachonyx pineti* (orange; coarse hair-scales; bulging eyes).

The two **longest and narrowest** species. **Black** wing-cases with **readily visible white hair-scales**. Underside covered with **oval white scales**. Rostrum arises smoothly from forehead. Two **metallic blue** species. Scales on wing-cases minute and hardly visible even under microscope. No scales on underside.




	<i>Limnobaris dolorosa</i>	<i>Limnobaris t-album</i>	<i>Aulacobaris picicornis</i> *	<i>Aulacobaris lepidii</i> *
				 <small>© Lech Borowiec</small>
Size	3.4-5.2 mm	3.2-4.3 mm	2.8-3.9 mm	3.3-4.0 mm
	Both <i>dolorosa</i> and <i>t-album</i> have rows of white-hair-sales on wing-cases. These are slightly thicker and longer on average in <i>dolorosa</i> , but there is much variation with the species, and the scales are easily worn off. Sections of the underside evenly covered with white scales (see next page).  Widespread in saltmarshes, sedgebeds and other tall wetland vegetation.	Very like <i>dolorosa</i> . Section between mid and hind legs less densely scaled the others, creating a white hammer-shape (the τ of <i>t-album</i>) when seen from the side. Other differences in shape and scales are subtle and only hold on average. Shape of aedeagus is the safest way to separate the two.  In similar places to <i>dolorosa</i> , but less common.	Bright metallic blue . Wing-cases widest around the middle. In open, disturbed ground with Mignonette on base-rich soils. 	Like <i>picicornis</i> , but less brightly coloured ; wing-cases more tapered at rear, widest in front of middle; ??pronotum more sparsely punctured. In wetlands. 
Compare	Elongate <i>Mecinus</i> (no oval white scales on abdomen underside; wing-cases more rippled and less smooth; five segments in filament). <i>Magdalis</i> (no oval white scales; not sausage-shape).		<i>Mecinus janthinus</i> (narrower wing-cases, with straighter sides; surface rough; five segments in the filament; hair-scales larger, obvious). <i>Magdalis</i> (pronotum black, not metallic blue; surface rougher; antenna clubs narrower and more pointed). Apions (antennae straight; some may be metallic blue and elongate, but they are not sausage shape). Other weevils are not sausage shape and metallic blue.	
Foodplants	Sedges <i>Carex</i>	Sedges <i>Carex</i>	Mignonette <i>Reseda lutea</i>	Water-cress <i>Nasturtium</i> , yellow-cresses <i>Rorippa</i> , and other wetland Brassicaceae

Smooth -baris (continued)

Two **black** species. . Scales on wing-cases minute and hardly visible even under microscope. No scales on underside.

Cosmobaris scolopacea

Like the smooth -baris weevils, but **smaller** and with pattern of **yellow and whitish scales**.

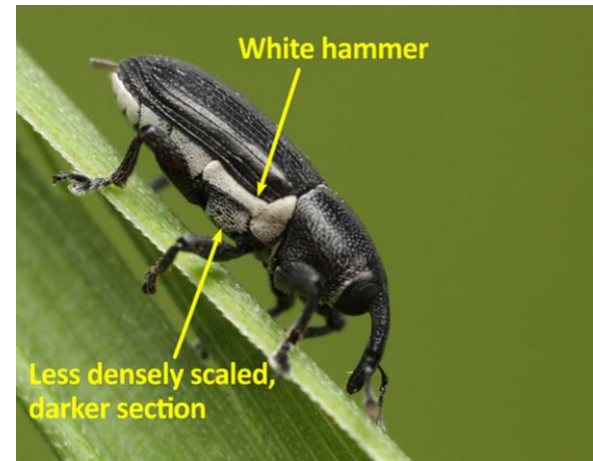
	Melanobaris laticollis***	Baris analis***	Cosmobaris scolopacea**
	 © Lech Borowiec		 © Udo Schmidt
Size	2.7-3.9 mm	2.9-3.8 mm	2.3-3.3 mm
	All black. Pronotum large smooth and shining, with only very fine and sparse pin-prick punctures. Shorter and broader than other -baris. Rare on open ground and in grasslands.	Wing-cases black with red-brown rear half . Very rare on soft cliffs in Dorset and the Isle of Wight.	A tiny weevil, with a distinctive shape and pattern. Uncommon in saltmarshes , mostly around the Thames Estuary.
Compare	<i>Aulacobaris</i> (narrower; metallic blue; more strongly and densely punctured; pronotums smaller). <i>Baris analis</i> (rear red-brown; pronotum smaller and more densely punctured).	Other -baris (all black or all metallic blue).	<i>Limnobaris</i> (longer, larger, and narrower; scales on wing-cases narrow, in rows, all white). <i>Smicronyx</i> (may have similar pattern, but not sausage-shape, obvious shoulders and waist).
Foodplants	Hedge Mustard <i>Sisymbrium officinale</i> and other Brassicaceae	Common Fleabane <i>Pulicaria dysenterica</i>	Sea-purslane <i>Atriplex portulacoides</i>



Limnobaris dolorosa
All sections of the underside are densely covered in white scales.



Aedeagus




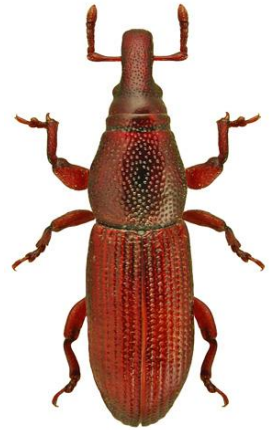
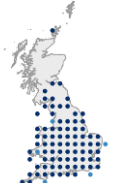

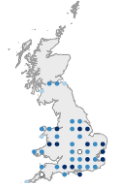
Limnobaris t-album
The section between the mid and hind legs is less densely scaled and darker, emphasising a white hammer shape above it (the τ of t-album).



Aedeagus

Euophryum and Pantarthrum


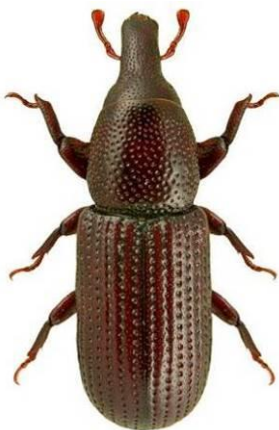


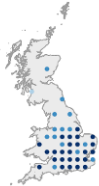



Long, narrow bodies, beady eyes. Long pronotums. Five segments in the filament. Compare *Ferreria marqueti* (no eyes; expanded tibiae; antennae inserted near tip of rostrum). *Phloeophagus*, *Stereocorynes*, *Pseudophloeophagus*, and *Pselactus* (wider; eyes flatter; seven segments in the filament).

	<i>Euophryum confine</i>	<i>Euophryum rufum</i>	<i>Pentarthrum huttoni</i>
			 © Lech Borowiec
Size	2.5-3.6 mm	2.5-3.2 mm	2.9-4.0 mm
	Both <i>Euophryum</i> species have a flange around the rear of the wing-cases. A New Zealand species, introduced and now common in dead and decaying wood, natural and artificial, indoors or out. 	Very like confine , but has a tiny flange at the base of the antennae. Another New Zealand species. In dead and decaying wood. Much scarcer than <i>confine</i> , and not often found outdoors. 	No flange around the bottom of the wing-cases. In timber and furniture. Usually in or around buildings. 
Compare			
Foodplants	Dead and decaying wood.	Dead and decaying wood.	Dead and decaying wood.

?? need illustration of rostrum bases to show flange.




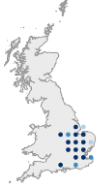


Phloeophagus, Stereocorynes, Pseudophloeophagus, and Pselactus

Wood-boring weevils with **long but thick rostrums**. Seven segments in filament. Compare *Euophryum* and *Pentarthrum* (narrower; beady eyes; five segments in the filament). *Ferreria marqueti* (no eyes; longer rostrum; expanded tibiae).

	<i>Phloeophagus lignarius</i>	<i>Stereocorynes truncorum</i>**	<i>Pseudophloeophagus truncorum</i>***	<i>Pselactus spadix</i>*
	 © Lech Borowiec	 © Lech Borowiec	 © Lech Borowiec	 © Lech Borowiec
Size	2.8-3.6 mm	3.0-3.7 mm	2.9-3.8 mm	2.6-3.8 mm
	<p>Rounded eyes. Third segment of tarsi cone-shape, at the tip much wider than second segment.</p> <p>In rotting wood and under bark of trees.</p> 	<p>Eyes more or less flat, on the underside of the head, so hardly visible from above. Antenna club almost hairless, with strange blunt tip. Stubby rostrum.</p> <p>Under bark, in heart-rot, and wood mould of trees.</p> 	<p>Eyes more or less flat, on the underside of the head, so hardly visible from above. Slender antennae, club wider than filament, but still slender, pointed, hairy.</p> <p>In driftwood, under bark, and in rotting wood of trees.</p> <p>Was called <i>Pseudophloeophagus aeneopiceus</i>.</p> 	<p>Long erect hairs on pronotum and wing-cases. Sides of pronotum and wing-cases less straight.</p> <p>In driftwood, groynes, and other timber by the sea.</p> 
Compare	<p><i>Stereocorynes truncorum</i> (rostrum stubbier; eyes flat; tarsi slender, third segment not wider; antenna club blunt and hairless). <i>Pseudophloeophagus truncorum</i> (rostrum stubbier; antenna club slender; eyes flat; shinier). <i>Pselactus spadix</i> (long erect hairs on and wing-cases; pronotum and sides of wing-cases more rounded).</p>	<p><i>Phloeophagus lignarius</i> (rostrum longer; eyes rounded; third tarsal segment wider; antenna club rounded to pointed, hairless). <i>Pseudophloeophagus truncorum</i> (antenna club slender, narrow and hairy). <i>Pselactus spadix</i> (long erect hairs on pronotum and sides of wing-cases more rounded).</p>	<p><i>Phloeophagus lignarius</i> (rostrum longer; eyes rounded; antennae thick, club not much wider than filament; duller). <i>Stereocorynes truncorum</i> (antenna club blunt and hairless). <i>Pselactus spadix</i> (long erect hairs on pronotum and wing-cases; pronotum and sides of wing-cases more rounded).</p>	<p><i>Phloeophagus lignarius</i>, <i>Stereocorynes truncorum</i>, and <i>Pseudophloeophagus truncorum</i> (no hairs on wing-cases or pronotum; sides straighter).</p>
Foodplants	Dead and decaying wood of broadleaved trees and ivy.	Dead and decaying wood of broad-leaved trees.	Rotten wood.	Timber that has been immersed in salt-water.

Cossonus and Rhopalomesites

Long, narrow bodies, small head. **Rostrum expanded** at tip or at base of antennae. **Seven** segments in the filament. **Larger** than the species on the previous two pages. Compare *Euophryum* and *Pentarthrum* (smaller; rostrums not expanded; five segments in the filament). *Phloeophagus*, *Stereocorynes*, *Pseudophloeophagus*, and *Pselactus* (smaller; rostrums not expanded; wing-cases proportionately shorter; pronotums proportionately not so long). *Ferreria marqueti* (no eyes; expanded tibiae; smaller)




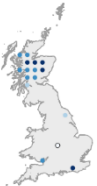


	<i>Cossonus linearis</i> **	<i>Cossonus parallelepipedus</i> ***	<i>Rhopalomesites tardii</i> *
	 <p>© Lech Borowiec</p>	 <p>© Lech Borowiec</p>	<p>Female illustrated; Male has rostrum swollen at tip, like <i>Cossonus</i> but swollen part longer, more chisel-shape.</p>  <p>© Udo Schmidt</p>
Size	4.4-5.1 mm	4.3-6.6 mm	4.3-10.5 mm
	<p>Pronotum with ??coarse punctures. In rotting wood, stumps, and under bark, especially of poplars and willows.</p> 	<p>Pronotum shining and smooth with sparse punctures. In rotting wood, stumps, and under bark, especially of poplars, willows, and elms.</p> 	<p>Pronotum densely punctured. Female has antennae on expanded teeth at base of rostrum. Male has chisel-shape tip to rostrum, the expanded part longer than in <i>Cossonus</i>. In driftwood, under bark, in stumps, tree trunks, boughs, and logs. Was called <i>Rhopalomesites tardyi</i>.</p> 
Compare	<i>Cossonus parallelepipedus</i> (pronotum??). <i>Rhopalomesites tardii</i> (larger; rostrum different shape).	<i>Cossonus linearis</i> (pronotum??). <i>Rhopalomesites tardii</i> (larger; rostrum different shape).	<i>Cossonus</i> (smaller; pronotums shorter, more shining; swollen tip of male rostrum shorter; female rostrum swollen at base).
Foodplants	Rotten wood.	Rotten wood.	Rotten wood.

Rhyncolus and Conarthrus

Body long and narrow, but **rostrum short and broad**. Seven segments in the filament. Compare *Phloeophagus*, *Stereocorynes*, *Pseudophloeophagus*, and *Pselactus* (longer, narrower rostrums; bodies proportionately shorter and wider). *Euophryum* and *Pentarthrum* (narrower rostrums; five segments in the filament).

Ferreria marqueti

The only weevil with **no eyes**. Very **wide, expanded tibiae**. Antennae inserted near tip of rostrum, scape long.






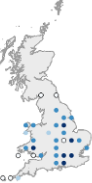
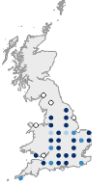

	<i>Rhyncolus ater</i> **	<i>Conarthrus littoralis</i>	<i>Conarthrus praeustus</i>	<i>Ferreria marqueti</i>
				 © Udo Schmidt
Size	3.2-4.2 mm	2.8-3.1 mm		1.9-3.1 mm
	<p>Distinctive shape: short, broad rostrum, thick antennae. Scape straight.</p> <p>In pine wood, logs, stumps, and under bark. Rarely in broad-leaves. Mostly in Scotland.</p> 	<p>Very long, tight, pronotum. Scape slightly curved.</p> <p>In dead wood by the sea. An Australian species, found on a few occasions in Somerset and Kent.</p> 	<p>??</p> <p>Only in hot houses in Cornwall. Not found in the wild, probably not worth including.</p>	<p>A rarely found subterranean species. May not be native, but it is rarely encountered without underground traps, so it could have been overlooked outside the gardens and parks where it is most often reported. Rare.</p> 
Compare	<i>Conarthrus littoralis</i> (smaller; pronotum proportionately longer; scape curved; rostrum longer).	<i>Rhyncolus ater</i> (larger; pronotum proportionately shorter; scape straight; rostrum shorter).		All other weevils have eyes. Similar-looking species do not have expanded tibiae.
Foodplants	Dead and decaying wood, usually of conifers	Dead wood.		Unknown.

Dryophthorus corticalis

The only weevil with **four** segments in the filament. Rather uneven outline, with slightly wavy sides to wing-cases, **pronotum constricted at front** to form tight collar.

Sitophilus

Antennae inserted at base of long rostrum. Pronotum disproportionately large, wider than the wing-cases and almost as **long**, strongly punctured. **Eyes flat.** Compare No other weevils have such long pronotums compared to rest of body, and antennae inserted at base of rostrum.

	<i>Dryophthorus corticalis</i> ***	<i>Sitophilus granarius</i>	<i>Sitophilus oryzae</i>	<i>Sitophilus zeamais</i>
	 © Lech Borowiec			 © Lech Borowiec
Size	3.2-3.6 mm	3.1-3.4 mm	2.3-3.9 mm	2.6-4.2 mm
	<p>Feet narrow, slender. Eyes flat. Rostrum wide and rather lumpy, with a blunt, flat end like the nose of a clanger. Antennae inserted near base. Wing-cases with uneven texture from dense and rather large punctures and rough surface, tapering towards the rear.</p> <p>Very rare in old trees.</p> 	<p>Pronotum with widely-spaced long oval punctures. Wing-cases with narrow rows of punctures between wider, smooth ridges.</p> <p>In stored food and grain. Usually indoors.</p> 	<p>Pronotum with densely packed round punctures. Wing-cases with wide rows of punctures between narrower, rippled, low ridges. Aedeagus with smooth, evenly rounded back.</p> <p>In stored food and grain. Usually indoors.</p> 	<p>Very like oryzae. ??Aedeagus with two grooves down the back.</p> <p>In stored food and grain. Usually indoors. Not separated from oryzae until the 1960s.</p> 
Compare	<i>Phloeophagus lignarius</i> (eyes rounder; wing-cases blunter; seven segments in filament; third segment on tarsi wider). <i>Stereocorynes truncorum</i> (wing-cases blunter and smoother; seven segments in filament). <i>Pseudophloeophagus truncorum</i> (wing-cases blunter; seven segments in filament; antennae narrower, clubs more pointed). <i>Pselactus spadix</i> (long hair-scales; seven segments in filament, wing-cases blunter).	<i>Sitophilus oryzae</i> and <i>zeamais</i> (wing-cases with rippled or wrinkled ridges; pronotum with closer, more circular punctures).	<i>Sitophilus granarius</i> (wing-cases with smoother intervals; pronotum with sparser, long oval punctures).	
Foodplants	Heart-rot of trees.	Grain and seeds.	Grain and seeds.	Grain and seeds.

Version notes

1.01. Added female *Tychius stephensi* and *picrostris*.