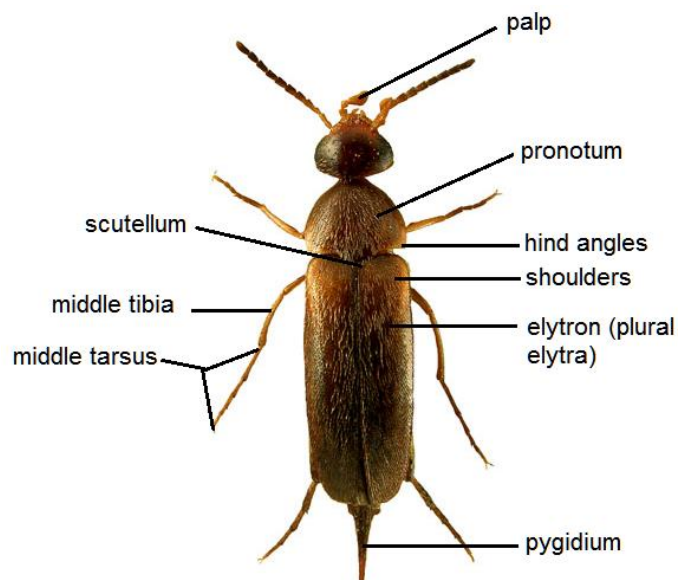


Family Mordellidae

Source Material

Translation and adaptation by Mike Hackston of the German keys by Arved Lompe (2011), with permission (his key derived from K. Ermisch). The German original can be found at <http://www.coleo-net.de/coleo/texte/mordellidae.htm> and linked pages. Some of genus *Mordellistena* is translated from the Dutch (Batten (1976) de Nederlandse Soorten van de Keverfamilie Mordellidae).



Checklist

From the Checklist of Beetles of the British Isles, 2012 edition, edited by A. G. Duff. (Available from www.coleopterist.org.uk/checklist.htm).

Genus **MORDELLISTENA** Costa, A., 1854
brevicauda (Boheman, 1849)
humeralis (Linnaeus, 1758)
neuwaldeggiana (Panzer, 1796)
parvula (Gyllenhal, 1827)
pseudoparvula Ermisch, 1956
pseudopumila Ermisch, 1962
pumila (Gyllenhal, 1810)
pygmaeola Ermisch, 1956
secreta Horák, 1983
variegata (Fabricius, 1798)
acuticollis Schilsky, 1895
nanuloides Ermisch, 1967

Genus **MORDELLOCHROA** Emery, 1876
abdominalis (Fabricius, 1775)
Genus **TOMOXIA** Costa, A., 1853
bucephala Costa, A., 1853
Genus **MORDELLA** Linnaeus, 1758
holomelaena Apfelbeck, 1914
leucaspis Küster, 1849
Genus **VARIIMORDA** Méquignon, 1946
villosa (Schrank, 1781)

Image Credits

The photographs of whole beetles in this key are reproduced from the Iconographia Coleopterorum Poloniae, with permission kindly granted by Lech Borowiec. Other photos are from Arved Lompe's key.

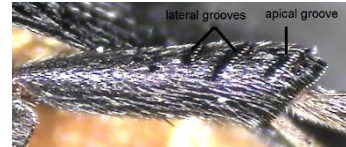


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Family Mordellidae

- 1 Hind tibia with a groove parallel to the hind margin near the tip (= the apical groove – usually short). This is sometimes extended obliquely onto the outer surface of the tibia. Lateral grooves are not present but there is sometimes a dorsal groove which runs parallel to the back of the tibia.2

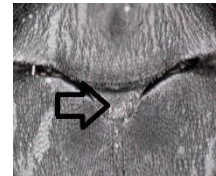
Hind tibia with the apical groove along with one or more lateral grooves. Segments 1-2 of the hind tarsus also with such grooves (sometimes also the third segment). .
.....4



- 2 Scutellum rectangular or trapezoid. Hind tibia with a fine dorsal groove along with the apical groove; fine dorsal groove also present on the first segment of the hind tarsus.
..... ***Tomoxia bucephala***
Most records from south-east England.



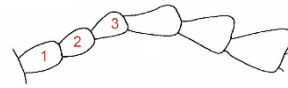
Scutellum triangular with rounded or straight sides.3



- 3 The first three segments of the antennae are thinner and usually shorter than the following segments; the fourth segment is as long as wide as the fifth segment or only slightly narrower. The second to last segment of the front and middle tarsi are deeply notched. Elytra usually with pale markings or bands due to the presence of paler hairs.

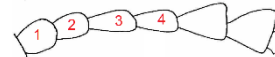
..... ***Variimorda villosa***

Southern England and south Wales, northwards to the Wash



The first four segments of the antennae are thinner and usually also shorter than the following segments. Elytra uniformly coloured without conspicuous patches of paler hair.....

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



- 4 Last segment of the palps axe- or club-shaped in both sexes.
 Genus *Mordellistena*



Last segment of the palps hammer- or nut-shaped in males with a pad of extremely fine hairs on the outer surface (sense organ?). Last segment of palps in females spindle-shaped.

..... ***Mordellochroa abdominalis***
 England and Wales northwards to Yorkshire.



Genus *Mordella*

- 1 Elytra tapering evenly from near the base to the tip.
..... ***Mordella leucaspis***
Southern England, very rare.



- Elytra more parallel-sided at the base, narrowing from about the middle to the tip.
..... ***Mordella holomelaena***
Scattered records in England and south Wales as far north as Cheshire.



Genus *Mordellistena*

The determination of the species of this genus is difficult, not least because some features vary, in particular the grooves on the tibia. The parameres in the male genitalia appear to also be subject to variation and their appearance is very dependent on the angle of observation. The genus is in urgent need of revision.

This key should be treated as very tentative.

- 1 Hind tibia with two thickened bristles at the tip, the smaller one sometimes very short and thin, difficult to see. Subgenus *Mordellistena*.[2](#)

Hind tibia with only a single thickened bristle at the tip. Subgenus *Pseudomordellina*.[11](#)



2 Fourth segment of the antennae as long and wide as the fifth and subsequent segments.3

Fourth segment of the antennae narrower and usually also shorter than the fifth and subsequent segments.5



For the three species in this lead see the supporting information by Mark Telfer (2012) at <http://markgtelfer.co.uk/files/2012/02/Mordellistena-neuwaldeggiana-variegata-and-humeralis-web-version3.pdf>. They are better separated using a suite of characters which is what Telfer's paper seeks to use.

See also Allen, A.A. (1995). On the British *Mordellistena humeralis* (L.) (Col.: Mordellidae) and its allies. *Entomologist's Record and Journal of Variation*, **107**:181-184.

- 3 Uniformly yellowish-brown species, although the folded wings under the elytra make it appear darker. The second to last segments of the front and middle tarsus are broadened and divided into two lobes ('heart-shaped'). Antennae uniformly yellowish-brown. Antennae longer with segment three at least as long as segment two. Length 2.7-4 mm.
..... ***Mordellistena neuwaldeggiana***

The photo on the above webpage shows a much less vibrant colour than this.



Darker coloured. Second to last segment of the front and middle tarsi appearing obliquely sheared-off. Antennae usually shorter with segment three at most as long as segment two.4



- 4 Antennae usually black with the first segments yellowish-red. Variable in colour as *variegata*. Hairs on the elytra lying on the surface appearing black in some lights causing a purple iridescence. Segment three of the antennae shorter and often much smaller than segment two.

..... ***Mordellistena humeralis***

England and Welsh borders northwards to the Wash.



Antennae completely yellowish-red to uniformly darker. Pronotum mostly dark. Elytra black with two conspicuous orange-brown markings over the shoulders. The grey or yellowish hair on the elytra is rather upright, never appearing black and non-iridescent. Length 3.5-4.5 mm. Segment three of the antennae as long as segment two.

..... ***Mordellistena variegata***

Southern England northwards to Lincolnshire. This is a continental specimen – British ones have the shoulder patch better defined at the base of the elytra. See Telfer (2012).



5 Hind tibia with two grooves of different shape and orientation.[6](#)

Hind tibia with three or more short grooves parallel to the hind edge.[7](#)



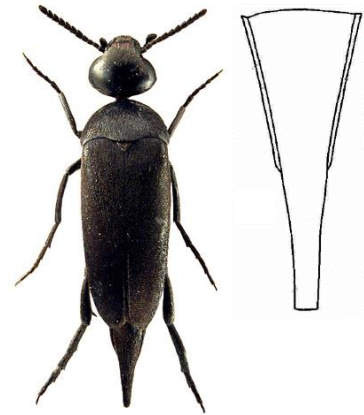
- 6 Rear section of the sides of the pronotum more or less straight so that the hind angles are obtusely angled, often rounded. Length 2.5-3.5 mm.
..... ***Mordellistena parvula***



Last section of the sides of the pronotum at least weakly concave so that the hind angles are acutely angled or weakly obtusely angled but with a pointed corner. Spurs on the hind tibia black or blackish-brown. Elytra with dark hair, sometimes purplish or greenish iridescent about 2.5 times as long as their combined width. Front tibia slightly incurved in males. Females with the mouthparts and legs usually black. Males often have the basal segments of the antennae paler. Length 3.3-4.15 mm
..... ***Mordellistena pseudoparvula***



- 7 Punctures of the elytra coarse and wrinkled. Head and pronotum with fine scattered punctures, appearing shiny. Pygidium relatively short and thick
..... ***Mordellistena brevicauda***
Line drawings from Batten (1976)



Punctures of the elytra finer. Head and pronotum with fine, relatively dense punctures. Pygidium generally very long, slender and more pointed.8



8 Second segment of the hind tarsus with two grooves.9

Second segment of the hind tarsus with three grooves.
..... ***Mordellistena secreta***



- 9 Small species, 2.5-3.5 mm. Elytra 2.7-2.8 times as long as their combined width. Antennae comparatively short, with segments 5-10 about 1.25 times as long as wide. Rear section of the sides of the pronotum almost parallel, in males nearly straight. Front tibia with short inconspicuous rows of cilia. Last segment of the palps slightly narrower and narrowing less strongly towards the base (compared to *pumila*). Pygidium more or less half the length of the elytra.
..... ***Mordellistena pygmaeola***



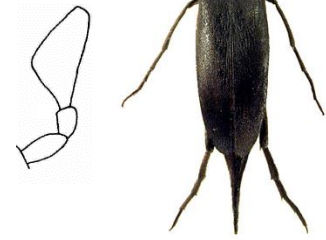
Larger species, more than 3.5 mm. [10](#)



10 In male, segments 5-10 from 1.4-2.0 times as long as wide; in females slightly shorter. Elytra in males about 2.7 times as long as their combined width; in females slightly more. Last segment long-elliptical or long-ovoid. Length 3.5-4.8 mm.

..... ***Mordellistena pumila***

Line drawing from Batten (1976)



In male segments 5-10 shorter, at most 1.25 times as long as wide; in females slightly broader. Elytra 2.5 times as long as their combined width. Last segment of the antennae narrow ovoid. Pygidium narrow, a third to a half the length of the elytra. Last segment of the palps wider. Length 3.6-4.5 mm.

..... ***Mordellistena pseudopumila***



11 Antennae long, if extended they would reach back to beyond the base of the pronotum. Segments 5-10 about twice as long as wide. Pygidium twice as long as the hypopygium, long pointed. Front tibia in males weakly curved, not broadening towards the tip, with some inconspicuous cilia. Length 2.8-3.2 mm.
..... ***Mordellistena acuticollis***



Antennae shorter, if extended not or barely reaching the base of the pronotum. Segments 5-10 of the antennae about 1.6 times as long as wide. Length 2.3-2.8 mm.
..... ***Mordellistena nanuloides***

