## Key to the British species of tribe Zabrini

Translated from Lompe (2016) and (2018) - the German original is published at http://www.coleo-net.de/coleo/texte/amara.htm and linked pages. English version published here with permission.


## Checklist

From the Checklist of Beetles of the British Isles, 2012 edition, edited by A. G. Duff.
Genus Amara Bonelli, 1810
aenea (De Geer, 1774) fusca Dejean, 1828
anthobia Villa \& Villa, 1833
apricaria (Paykull, 1790)
bifrons (Gyllenhal, 1810)
communis (Panzer, 1797)
consularis (Duftschmid, 1812)
convexior Stephens, 1828
cursitans (Zimmermann, 1832)
curta Dejean, 1828
equestris (Duftschmid, 1812)
eurynota (Panzer, 1796)
famelica Zimmermann, 1832
infima (Duftschmid, 1812)
lucida (Duftschmid, 1812)
Iunicollis Schiødte, 1837
majuscula (Chaudoir, 1850)
montivaga Sturm, 1825
nitida Sturm, 1825
ovata (Fabricius, 1792)
plebeja (Gyllenhal, 1810)
praetermissa (Sahlberg, C.R., 1827)
quenseli (Schönherr, 1806)
familiaris (Duftschmid, 1812)
similata (Gyllenhal, 1810)
fulva (Müller, O.F., 1776)
spreta Dejean, 1831
strenua Zimmermann, 1832
tibialis (Paykull, 1798)
Genus Curtonotus Stephens, 1827
alpinus (Paykull, 1790)
aulicus (Panzer, 1796)
convexiusculus (Marsham, 1802)
Genus Zabrus Claiville, 1806
tenebrioides (Goeze, 1777)

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1 Frons with a single puncture bearing a bristle on top of the head each side just by the eye.


Frons with two punctures bearing bristles each side, the back one often located behind the eye. .......... Genera Amara and Curtonotus


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## Genus Amara

## Key to British species (translated from Lompe (2016)

Differentiated from the species in subfamily Harpalinae and genus Zabrus by the presence of two supraorbital bristles (a few species of the non-British subgenus Leirides only have a single supraorbital). Distinguished from subfamily Pterostichinae by the presence of three or more bristles on the penultimate segment of the labial palps. Also differing from genus Zabrus by having only one long terminal spur on the front tibiae and from subfamily Harpalinae by having the epipleura crosses. The species are numerous and often difficult to distinguish. They live in damp habitats, on cultivated ground and wasteland, both in the uplands and lowlands. They can be found under stones, leaf rosettes, between grass roots and under dense vegetation. Some species are herbivorous (for example being found on the fruiting stages of grasses, cruciferous plants) and some partly carnivorous - probably most species are omnivorous. One or two generations each year.

1 Terminal spur of front tibia split into three AND elytra with a pore/puncture at the base of the abbreviated scutellar stria.
.......... Subgenus Zezea


2 Usually there are two depressions present on each side of the pronotum towards the base. The outer depression is separated from the margin of the pronotum by an oblique ridge which reaches the hind margin (view obliquely from behind). Sometimes the two depressions are united into a single large, distinctly punctured depression. If in
 doubt the pore-puncture on the scutellar stria is absent, the colour is never metallic and the length is always over 6.5 mm . .3

The outer depression towards the base of the pronotum is absent or if present it is not distinctly separated from the side by a ridge. Follow this lead if your specimen has a much deepened, very obliquely comma-shaped or triangular basal depression (pointing towards the hind angles) or if your specimen has only
 two bristles on the prosternal process (this is the backwardly-pointing projection between the bases of the front legs. With or without a porepuncture on the scutellar stria. Colour metallic, black, brown or yellow. Length 4-13 mm. With at most three bristles along the hind margin of the middle femora. . 5
$\qquad$

3 Middle femora with 4-8 bristle-bearing punctures along the hind margin (the bristles easily break off). Process of the prosternum (between the bases of the front legs) bordered and with several bristles towards the tip = subgenus Percosia


Sides of the pronotum not concave in front of the hind angles (rarely with a slight indication). Outer basal depression of the pronotum clearly separated from the inner depression with the outer one usually deeper. The ridge separating the outer from the margin is oblique. Lateral beading of the pronotum, particularly in the rear half, distinctly thickened. Yellowish brown to brownish black. Very variable in size (8.5-13 mm)

## Amara equestris

On dry, sandy or chalky soil, either in open or lightly wooded country, at roots of grass or often under dry leaves. Local and rare but widespread.

Middle femora with only 2 (exceptionally 3) bristles along the hind margin. Process of the prosternum bordered or not but with at most only two bristles. Sides of the pronotum often slightly concave before the hind angles. .4

4 Length more than 10 mm . More elongate species. Process of the prosternum without a border.
.......... Genus Curtonotus


Length less than 10 mm . Broader and shorter species (but if elongate then clearly shorter than 10 mm ). Process of the prosternum bordered.

Genus Amara, subgenus Bradytus


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5 Elytra with a pore/puncture at the base of the abbreviated scutellar stria. .. 6
Check both sides. Sometimes one is missing. Variable species are keyed both ways.
Scutellar stria without a pore/puncture.12

6 Upper surface reddish-brown or blackish-brown, never pure black or metallic. Antennae completely yellow. Femora never black or dark brownish-black. Hind tibiae of males without bristly hairs on the inner surface before the tip.
.......... Amara praetermissa
Subgenus Celia. Pronotum broadest at or behind the middle, scarcely narrowing to the base. The outer basal depression is sometimes also deep, but located higher than the outermost point of the hind angles they are adjacent to. Upper surface distinctly convex in section. Reddish-brown to dark blackish-brown. Striae of the elytra sometimes relatively stronger inscribed but at most only weakly punctured. Length $6-8 \mathrm{~mm}$. The scutellar pore-puncture is commonly absent from one side (but only rarely from both). On sand dunes, chalk grassland, heathland and boulder clay cliffs, spoil heaps and railway tracks. Widely distributed but uncommon.


Upper surface metallic. Antennae dark (usually black) with three clearly differentiated yellowish-red segments at the base. Legs yellow, red or black. Hind tibiae of males with $\pm$ distinct bristles on the inner surface before the tip .. 7 Some species of subgenus Amara key here.

7 Striae of the elytra not becoming deeper towards the tip (the intervals between them may sometimes be weakly convex). Very large ( $9-13 \mathrm{~mm}$ ) relatively flattened species with the legs completely black and with dark antennae with three pale basal segments. The pore-punctures of the scutellar stria are very small. Upper surface usually coppery (rarely greenish, bluish or black)

Amara eurynota
Local on open, light often cultivated ground among weeds etc. Widely distributed.


Striae of the elytra become more deeply incised towards the tip (view from above and then slowly tilt the beetle forwards) and with the intervals between the striae here clearly convex

8 Legs uniformly pale reddish or yellow. Femora not darker than the tibiae.

Amara anthobia
Upper surface dull green to pale bluish-green (rarely almost black). Length $5.5-7.5 \mathrm{~mm}$. The scutellar pore-puncture may be missing from one elytron (rarely from both - such specimens cannot be distinguished from A. lucida except by dissection of males). Usually on sandy, often cultivated soil and gardens. England northwards to Staffordshire and Durham. Probably a relatively recent colonist. Most records in April and May.


Legs either completely black or blackish-brown or the tibiae are pale and only the femora are dark (in this case the femora are always darker than the tibiae).

# 9 Bristle-bearing puncture near the hind angles of the pronotum at least 1.5 times its diameter from the side margin. 

Bristle-bearing puncture near the hind angles of the pronotum at most slightly removed from the margin, usually inserted right on the hind angle. 11

10 Front angle of the pronotum shortly pointed and clearly projecting in front of the front margin (observe the front margin obliquely from the side). Both basal depressions of the pronotum are absent but there is often an indication of the inner depression). Comparatively broader. Elytral striae clearly more incised towards the rear. Femora and tibiae black, with the tibiae scarcely paler. Upper surface usually dark green or blue, rarely black or coppery, smooth and shining. Length 7.5-9.5 mm.

## Amara montivaga

On dry gravel, chalk and sand with weed vegetation, usually near human habitation. Probably a recent colonist; southern England and Scotland


Front angle of the pronotum rounded and usually not projecting in front of the front margin - if it does project a little then it is always clearly rounded. Inner impression at the base of the pronotum usually marked as a streak or group of punctures.
 The scutellar pore-puncture is commonly missing from one or both elytra. Striae of the elytra clearly more incised towards the rear. Femora dark; tibiae pale. Upper surface metallic green, bluish or coppery (very rarely almost black). Length 79 mm

## Amara nitida



On moderately dry gravel, usually mixed with clay, where the vegetation is sparse Scattered localities.

11 Sides of the pronotum rounded in a continuous curve towards the base; pronotum continuing to broaden to shortly before the base (about 4 mm wide at this point); base of the pronotum without punctures with the basal impressions indistinct or absent. Striae of the elytra strongly deepening towards the rear. Femora and tibiae black. Upper surface usually black (specimens from southern Europe are often blue; elsewhere in Europe greenish or rarely coppery brown. Tip of the aedeagus not as drawn out. Length 7.5-10.0 mm.

## Amara ovata



Sides of the pronotum clearly diverging in the front half but only weakly so, if at all, in the rear half, being approximately parallel and about 3.5 mm . wide. Basal impressions of the pronotum clearly marked. Pronotum often with a distinct flattened area near the hind angles. Tibiae at least slightly but usually distinctly paler than the femora. Striae on the elytra deepening less strongly towards the rear. Upper surface usually pale metallic green but sometimes dull (more rarely bluish, pale coppery or black). Tip of the aedeagus
 more drawn out. Length $7.5-10 \mathrm{~mm}$.

## Amara similata


#### Abstract

12 Upper surface metallic, if (more rarely) intensive black then the antennae are completely black or black with the first 1-3 segments pale; not blackish-brown or pitchy brown. Species with black femora (not pale pitchy brown) usually belong here. If combining yellow femora and a metallic upper surface then with the antennae dark and the first three segments clearly paler. Males have brush-like hairs on the under surface of the hind tibiae, just before the tip. Subgenus Amara.13


Upper surface not metallic, usually yellow, brown, reddish brown to blackishbrown (not intensive black). If (more rarely) almost black (cursitans and fusca) then with relatively small eyes bulging hemispherically. Only rarely with a brown background colour with a weak greenish metallic sheen. Antennae either completely yellow or becoming darker from the base to the tip but without a clear differentiation of colour between the basal segments and the rest. Hind tibiae in males never with a brush of hair on the under surface just before the tip. Subgenus Celia.

13 Elytra with the scutellar stria absent or indicated as a faint streak or point. Very small species, $5.0-5.5 \mathrm{~mm}$; under 2.5 mm . wide. Striae of the elytra becoming more incised towards the tip. Outer basal impression of the pronotum distinctly deepened. Femora pitchy-brown to reddishbrown; tibiae paler than the femora. Antennae dark with the first three segments reddish-yellow. Upper surface usually pale to dark coppery (rarely black with a greenish or bluish sheen). .. Amara tibialis
In dry, open, usually sandy country with low vegetation. Common and widespread but somewhat local.


Scutellar striae clearly present. Generally broader than 2.5 mm . .14

14 Legs uniformly yellow (not pale pitchy-brown). Femora not darker than the tibiae
(view from the side, obliquely from the rear). Always with the first three
segments of the antennae reddish-yellow. ........................................................ 15

Legs at least with the femora blackish or pitchy (femora always at least a bit darker than the tibiae) or the legs are uniformly black. Antennae with the first 13 segments pale.

15 Front angles of the pronotum pointed and clearly projecting in front of the front margin (view as indicated by the arrow). Striae becoming more incised towards the rear. Upper surface usually iridescent metallic green (more rarely bluish or almost black). Length 5.5-7.5 mm.

## ........... Amara familiaris

On all kinds of open ground: in meadows, on waste places among weeds, etc. One of the commonest species of the genus. Very common across central Europe.


Front angles of the pronotum rounded and projecting scarcely in front of the front margin; when viewed from the front appears straight. Striae of the elytra deepening towards the rear.
 Upper surface greenish to bluish (rarely almost black). Length 5.0-6.5 mm.

## ........... Amara lucida

On dry grassland, often on sand dunes near the coast. Rather uncommon but widespread.


16 Only the first segment of the antennae is contrasting yellowish-red; remainder of the antennae dark. The striae on the elytra towards the rear are moderately fine and not becoming more incised. (If they become more incised you may have a specimen of lunicollis or curta with unusual colouration on the antennae. These species always have pointed front angles on the pronotum). Legs black; tibiae scarcely paler than the femora. Last segment of the abdomen in females with four pores towards the hind margin. Upper surface almost always pale to dark coppery, rarely black. Tip of the aedeagus slightly thickened and knob-like. Length 7-9 mm.
.......... Amara famelica
Rare and declining, on dry sandy heaths in Hampshire, Berkshire and Surrey. Records are mostly in March and April.

At least with the first two segments of the antennae pale contrasting with the rest. Striae of the elytra deepening towards the rear or not.

# 17 Striae of the elytra fine along their entire length, not deepening towards the rear. Basal two or three segments of the antennae contrastingly pale, remainder dark (never with the tips of the second or third segments black). <br> 18 

Striae of the elytra fine or strong but always becoming more deeply incised towards the rear (sometimes not that clearly). In doubtful cases specimens belong here if they have the bristle-bearing pore away from the edge of the hind angles of the pronotum or if they have the tips of the second or third segments of the antennae black.
.19

18 Only the first two segments of the antennae are contrastingly pale yellowish-red compared to the rest of the antennae which are dark. Base of the pronotum near the hind angles distinctly compressed and flattened, usually punctured; hind angles acutely angled and usually clearly projecting backwards. Legs black; tibiae usually paler than the femora. Upper surface usually pale coppery (rarely darker and very rarely black or green). Length 7-9 mm.

Amara spreta
Very local on dry, loose sand, especially in dunes near the coast. Dorset to Suffolk, northwards to Worcestershire, Staffordshire and Durham. Wales: Glamorgan, Merioneth.


The first three segments of the antennae are yellowish-red contrasting with the rest of the antennal segments which are dark; third segment not darkened towards the tip. Femora dark and tibiae pale. Inner impressions at the base of the pronotum
 different from the rest of the base which is usually lacking punctures, appearing as very distinct longitudinal grooves parallel to one another. Hind angles of the pronotum close to right angled. Upper surface usually pale coppery (rarely darker, sometimes greenish and very rarely iridescent green, completely black or bluish). Length $6.5-8.5 \mathrm{~mm}$.

Amara aenea
A species of dry habitats, on usually sandy ground with sparse vegetation. Common and widespread.


# 19 First two segments of the antennae are pale reddish-yellow and at least the basal half of the third segment (usually the whole of the third segment is also reddish-yellow). 

Third segment of the antennae completely dark including the base; the second segment is usually rather darker than the first segment or is darkened towards the tip.

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20 The bristle-bearing puncture at the base of the pronotum arises from the margin of the hind angles. Upper surface dull, particularly in females. Last segment of the abdomen in females with four pores towards the hind margin. 21

The bristle-bearing puncture at the base of the pronotum is clearly removed from the margin by more than the width of the puncture itself. Upper surface shining in both sexes. Last segment of the abdomen in females with two pores towards the hind margin. Length 6.0-7.5 mm.

## Amara curta

On dry, stony sand or gravel with sparse vegetation, for instance in gravel-pits and in sand-hills near the coast. Rare and very local. Hampshire, Sussex, Kent, Derby, Lancashire, Yorkshire. Ireland.


# 21 Front angles of the pronotum clearly projecting forwards beyond the front margin, but completely rounded. <br> 10 <br> Specimens of Amara nitida will key here if both scutellar pore-punctures are missing. 

Front angles of the pronotum not projecting forwards beyond the front margin, or if projecting they are clearly pointed.22

22 The line of punctures along the eighth stria are almost always continuous on both elytra, very rarely briefly interrupted. Base of the pronotum

usually distinctly punctured with the punctures extending over the basal impressions. Three or four pore-punctures present towards the tip of the seventh stria. Aedeagus more evenly tapering towards the apical section. Upper surface usually black, dark metallic green or dull blue, rarely dark coppery. Length 6.6-9.0 mm.

## Amara convexior

Prefers gravelly soil and is often found in gravel-pits. Locally common and widespread.


The line of bristle-bearing punctures along the eighth stria almost always interrupted on both elytra. Base of the pronotum usually only weakly punctured around the basal impressions. Only two to three bristle-bearing punctures towards the end of the seventh stria of the elytra.
Aedeagus not evenly tapering towards the tip. Length 5.6-7.5 mm
.......... Amara communis
In all kinds of moderately dry, open country and in thin woodland. Often under moss and dry leaves. Not common but widespread.


Bristle-bearing
punctures on the seventh stria (after Paill)

Line of bristle-bearing punctures along the 8th stria (after Paill)


23 Base of the pronotum rather compressed next to the hind angles; both basal impressions are clear and oblique. Hind angles of the pronotum rather rounded towards the tip; the bristlebearing punctures near the hind angles are rather removed from the sides and are closer to
 the hind margin. Legs completely black with the tibiae scarcely paler than the femora. Second segment of the antennae usually darkened for the greater part. Bristlebearing punctures along the eighth stria of the elytra usually not interrupted in the middle. Elytral striae becoming much more incised towards the rear. Last segment of the abdomen in females with two pores towards the hind margin. Upper surface usually intensive black, rarely very dark greenish, bluish or coppery. Length 6.5-8.5 mm

## .......... Amara lunicollis

In meadows, gardens and in open forests, often on peaty soil. Also under moss carpets, on rocks and in heaps of straw. Rather local but widespread.

Base of the pronotum not compressed next to the hind angles; outer basal impression less clear. Hind angles right angled and not rounded at the tip; bristle-bearing puncture arises right in the angle. Tibiae usually clearly paler than the femora. Striae of the elytra deepening towards the tip. Elytra duller (particularly in females). Last segment of the abdomen in females with four pores.

## .......... Amara curta

On dry, stony sand or gravel with sparse vegetation, for instance in gravel-pits and in sand-hills near the coast. Rare and very local. Hampshire, Sussex, Kent, Derby, Lancashire, Yorkshire. Ireland.


24 Elytra with the scutellar striae absent (or only indicated by a slight streak). Sides of the pronotum very evenly rounded from the front to the back. Legs and antennae yellowishbrown; antennae with the first 2-3 segments paler than the rest; tibiae rather paler than the femora. Upper surface yellowish-brown to blackish-brown. Length 4.0-5.5 mm. .......... Amara infima
On dry, open, sandy or gravelly soil, under mats of Calluna, Arctostaphylos, etc. Rare and local from Kent to Dorset and northwards to Bedfordshire and Lincolnshire.


Scutellar striae present. Sides of the pronotum usually not as regularly rounded from the front to the back, being almost parallel-sided towards the rear. .25

2-4 bristles present towards the tip of the process of the prosternum. CARE - these bristles can break off and therefore it is important to check the pore-punctures they arose from. Very rarely only a single pore-puncture or bristle is present. Head measured immediately behind the eyes much wider half the width of the pronotum. Eyes flatter and only slightly projecting (by little more than half the length of the first segment of the antennae). Front angles of the pronotum pointed, weakly to strongly projecting forwards from the front margin.

Amara quenseli
Confined to open country with sandy or gravelly soil, often moraine, and sparse
 vegetation. Eastern Highlands of Scotland. Declining.

No bristles present towards the tip of the process of the prosternum. Head measured immediately behind the eyes at most as wide as half the width of the pronotum. Eyes projecting, often semi-circularly (usually by about the length of the first segment of the antennae).

26 Base of the pronotum with punctures over the basal impressions and across the middle. Small, relatively elongate species with the antennae and legs completely yellow. Pronotum no broader than 2.5 mm , only weakly narrowing towards the front. Upper surface brownish-yellow to reddish-brown.
Length 5.5-7.5 mm.
.......... Amara bifrons
An abundant species of dry habitats, usually on sand with very sparse vegetation.


Base of the pronotum without punctures, or punctures restricted to the basal impressions. If rarely with some punctures in the middle then either the pronotum is broader and distinctly narrowing towards the front or the antennae have only the first segments yellowish and the rest rather darker. .27

27 Compact, relatively short species with the antennae and legs completely yellow and with the pronotum distinctly convex and broad (2.8-3.0 mm). Pronotum with blunt but slightly projecting front angles. Only the outer impression of the pronotum is somewhat deepened, the inner impression marked by a puncture. Upper surface shining reddish-brown to dark pitchy brown with strong striae which become more incised towards the rear. Length 6-8 mm. Amara praetermissa
Subgenus Celia. On sand dunes, chalk grassland, heathland and boulder clay cliffs, spoil heaps and railway tracks. Widely distributed but uncommon. This species will key here if the scutellar pore punctures are missing from both elytra.


Less compact species. Pronotum not distinctly broad and not as strongly convex. Antennae with rather paler basal segments. Femora rather darker than the tibiae. Both impressions towards the base of the pronotum are distinct. .. 28

28 Front angles of the pronotum completely rounded with the sides continuing in a curve into the angles. Antennae rather darkened from the fourth segment on, or completely yellow. Pronotum broadest towards the base and distinctly narrowing from there towards the front in an even curve. The hooks at the tips of the long left paramere are noticeably large.
 Length 7.0-9.5 mm.

## Amara fusca

Very rare on dry, sandy or gravelly soil with sparse vegetation associated with Artemisia campestris which is found in Breckland and dunes near Swansea. Nocturnal and located by inspecting the plants using torches in September to mid-October.

Front angles of the pronotum rounded but the sides do not pass into the angles as smoothly as in fusca; front angles projecting at least a little in front of the front edge. Antennae with the first segment completely pale, the second rather darker and the third almost as dark as the fourth and following segments. Pronotum widest just beyond the middle. Hooks on the tips of the long left paramere smaller. Upper surface pale to very dark pitchy-brown. Length 7-9 mm.

## Amara curtisans

## Subgenus Zezea

1 Pronotum flattened next to the hind angles meaning that the base is not evenly convex; the entire base is strongly to very strongly punctured (exceptionally weakly so). Front angles of the pronotum pointed and clearly projecting forwards from the front margin. Femora pitchy-brown; tibiae pale, yellowish-brown to yellow; sometimes the legs are almost uniformly paler or darker reddish-brown but the femora are always a shade darker than the tibiae. Upper surface metallic green (rarely coppery to blue and very rarely black). Length 6.0-7.5 mm.

Amara plebeja


Usually on firm clay soils, often near water among grass and sedges. Common.

Pronotum not flattened adjacent to the hind angles, the base of the pronotum therefore evenly convex from one side to the other. The short streak-like inner basal impression of the pronotum is very distinct and lies within a thickening at the base. Base of the pronotum without punctures even in the basal impressions. Upper surface usually metallic green or brassy (very rarely uniformly black). More elongate, almost parallel-sided species. Length 8.5-10.0 mm.

## ........... Amara strenua

On the banks of ditches in coastal and flood-plain grazing marshes; rarely recorded inland. Very local and rare in southern England.


## Subgenus Bradytus

Worldwide there are forty species of which nine are only found in North America. There are five species in Central Europe.

Usually reddish brown species with the general appearance of a Harpalus species with the rather heart-shaped pronotum, broadest around the middle and with the sides often concave before the hind angles. Two bristles on the middle femora and without bristles on the process of the prosternum (which is bordered). Males can be differentiated from females by checking the underside of segments 1-3 of the front tarsus. In males they are slightly broader and covered with adhesive hairs underneath. Tip of the aedeagus with a fine furrow near the left-hand edge.

1 Sides of the pronotum evenly rounded to the hind angles or with the rear half
running as a straight line into the hind angles - not at all concave before the
angles. ............................................................................................................... 2

Sides of the pronotum clearly (even if very slightly) concave before the hind angles3

2 Pronotum more rectangular, broader than long, scarcely tapering towards the rear and a little more strongly to the front. The fold marking the outer edge of the outer basal impression is oblique and does not extend to the rear margin of the pronotum being interrupted by the pore-puncture. Elytra relatively short, the ratio of elytra to head+pronotum about 5:4. Hind tibiae of males with a brush of hairs on the inner surface before the tip. Body reddish-brown to blackish-brown. Legs and antennae pale brownish-red. Length 7.0-9.5 mm. Amara consularis
In open country on sand and gravel, sometimes with mixture of humus; often in
 gravel-pits. Very local but widespread.

Sides of the pronotum continuously rounded all the way to the hind angles, rarely the last section is straight but there is never a trace of a concavity. Pronotum broadest in the middle. Inner and outer depression towards the rear of the pronotum rather indistinctly separated from one another with the punctures over the two depressions and the area between similarly punctured (also distinguishing it from the very similar apricaria). Hind tibiae in males without a cluster of hairs on the inner surface before the tip (also distinguishing from apricaria). The frons usually has a fine furrow between the eyes. Rather larger and particularly broader (breadth about 4.0 mm ). Length 8.0-9.5 mm.

.......... Amara majuscula
This species has spread westwards from Asia during the twentieth century reaching Denmark by 1944 and first confirmed in Britain in Norfolk and Worcestershire in 2014-2015. It favours open vegetation with bare ground and soil disturbance, probably feeding on seeds. Lindroth (1986) suggested a strong preference for arable and wasteland. Often attracted to light.

For further details of how to differentiate majuscula from apricaria see Hodge, Telfer, Lane \& Skirrow (2016), The Coleopterist 25(3) 99-105. Amara (Bradytus) majuscula (Chaudoir, 1850) (Carabidae) new to Britain from East Norfolk, West Norfolk and Worcestershire.

3 Upper surface yellow to brownish-red, often with a greenish sheen in fresh specimens. Pronotum broadest at about half way; sides of the pronotum curved s-like; pronotum about twice as wide as long. Combined breadth of the elytra not less than 4 mm . Fold marking the outer edge of the outer impression at the base of the pronotum more oblique. Length $8.0-10.5 \mathrm{~mm}$.

## .......... Amara fulva

Almost confined to dry sand, sometimes mixed with gravel or clay; buried below the surface during the day. It avoids continuous vegetation. Local but widespread, seems to be decreasing in the south.


Upper surface chestnut brown to dark pitchy brown, never with a greenish sheen. Legs and antennae yellowish-red to pale pitchy brown. Pronotum at most 1.5 times as wide as long. On average smaller and particularly narrower with the combined width of the elytra 3.0-3.5 mm. Fold marking the outer edge of the outer impression at the base of the pronotum straighter.
$\qquad$ Amara apricaria


## Genus Curtonotus

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

1 Raised bead running round the edge of the pronotum not reaching the hind angle which is strongly protruding. Shoulder tooth blunt but evident (red arrow). Dark brown with the upper surface faintly bronzed. Antennae, palps and often also legs reddish. Elytra broadest behind middle. Middle tibia of males with 3 spines. Length 11-14.3 mm.
.......... Curtonotus aulicus
In meadows, particularly where composite plants are abundant, which the beetles climb during night in search of fruits. Common and widespread.


Lateral bead of pronotum reaching hind-angle, which is much less protruding. Shoulder-tooth lacking or almost so. Length 8-12 mm. ..... 2


2 Length 10.8-12.2 mm. Antennae entirely pale, the first segment more than twice as long as wide. Lowland species. Upper surface usually more clear bronze, legs more bright reddish. Lateral bead of pronotum thinner, well developed throughout. Male middle tibia with 2 spines. ... .......... Curtonotus convexiusculus
Under seaweed and among sparse vegetation on sand near the shore; also on waste ground further inland. Local but widespread.

Length 8-11 mm. Palps darkened and only the first three segments of the antennae pale; first segment at most twice as long as wide. Mountain species. Black to dark brown, often with a greenish or bronze shine, elytra usually reddish, often bright red with suture and sides dark; legs varying in colour. Pronotum with sides not or barely wavy before
 the toothed hind angles.

## Curtonotus alpinus

Restricted to high mountains in Scotland. Very scarce.


