

Genus *Aphodius*

Source Material

Translation and adaptation by Mike Hackston of the German key by Krell & Fery (1992) *Die Käfer Mitteleuropas*, Vol. 13, Supplement 2:200-243. Distribution data from various sources including the National Biodiversity Network and Lane & Mann (2016) GB Scaraboidea IUCN Review

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).

- Subgenus **ACROSSUS** Mulsant, 1842
 - depressus* (Kugelann, 1792)
 - luridus* (Fabricius, 1775)
 - rufipes* (Linnaeus, 1758)
- Subgenus **AGOLIINUS** Schmidt, 1913
 - lapponum* Gyllenhal, 1808
 - nemoralis* Erichson, 1848
- Subgenus **AGRILINUS** Mulsant & Rey, 1870
 - ater* (De Geer, 1774)
 - constans* Duftschmid, 1805
 - rufus* (Moll, 1782)
 - sordidus* (Fabricius, 1775)
- Subgenus **AMMOECIUS** Mulsant, 1842
 - brevis* Erichson, 1848
- Subgenus **APHODIUS** Illiger, 1798
 - fimetarius* (Linnaeus, 1758)
 - foetens* (Fabricius, 1787)
 - foetidus* (Herbst, 1783)
 - pedellus* (De Geer, 1774)
- Subgenus **BODILUS** Mulsant & Rey, 1870
 - ictericus* (Laicharting, 1781)
- Subgenus **CALAMOSTERNUS** Motschulsky, 1860
 - granarius* (Linnaeus, 1767)
- Subgenus **CHILOTHORAX** Motschulsky, 1860
 - conspurcatus* (Linnaeus, 1758)
 - distinctus* (Müller, O.F., 1776)
 - paykulli* Bedel, 1907
- Subgenus **COLOBOPTERUS** Mulsant, 1842
 - erraticus* (Linnaeus, 1758)
- Subgenus **ESYMUS** Mulsant & Rey, 1870
 - merdarius* (Fabricius, 1775)
 - pusillus* (Herbst, 1789)
- Subgenus **EUORODALUS** Dellacasa, G., 1983
 - coenosus* (Panzer, 1798)
- Subgenus **EUPLEURUS** Mulsant, 1842
 - subterraneus* (Linnaeus, 1758)
- Subgenus **LABARRUS** Mulsant & Rey, 1870
 - lividus* (Olivier, 1789)
- Subgenus **LIMARUS** Mulsant & Rey, 1870
 - zenkeri* Germar, 1813
- Subgenus **LIOTHORAX** Motschulsky, 1860
 - niger* (Illiger, 1798)
 - plagiatus* (Linnaeus, 1767)
- Subgenus **MELINOPTERUS** Mulsant, 1842
 - consputus* Creutzer, 1799
 - prodromus* (Brahm, 1790)
 - punctatosulcatus* Sturm, 1805
 - sphacelatus* (Panzer, 1798)
- Subgenus **NIMBUS** Mulsant & Rey, 1870
 - contaminatus* (Herbst, 1783)
 - obliteratus* Sturm, 1823
- Subgenus **OTOPHORUS** Mulsant, 1842
 - haemorrhoidalis* (Linnaeus, 1758)
- Subgenus **PHALACRONOTHUS** Motschulsky, 1860
 - quadrimaculatus* (Linnaeus, 1761)
- Subgenus **PLAGIOGONUS** Mulsant, 1842
 - arenarius* (Olivier, 1789)
- Subgenus **PLANOLINUS** Mulsant & Rey, 1870
 - borealis* Gyllenhal, 1827
 - fasciatus* (Olivier, 1789)
- Subgenus **SIGORUS** Mulsant & Rey, 1870
 - porcus* (Fabricius, 1792)
- Subgenus **TEUCHESTES** Mulsant, 1842
 - fossor* (Linnaeus, 1758)
- Subgenus **VOLINUS** Mulsant & Rey, 1870
 - sticticus* (Panzer, 1798)

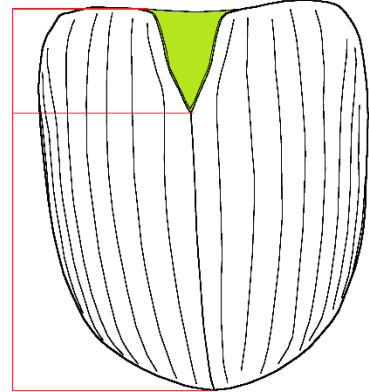
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Genus *Aphodius*

- 1 Scutellum long and pointed, extending between a fifth and a third of the length of the elytra measured along the suture.2



- Scutellum short, extending about a tenth of the length of the elytra and sometimes a little less.5

2 Base of the elytra flattened with the level of the scutellum lower than the level of the elytra.3

Base of the elytra not flattened but convex; scutellum more or less level with the elytra.4



- 3 Head with three tubercles. Length 6-7.5 mm. Striae of the elytra as wide as the intervals between them; intervals strongly convex. Subgenus *Eupleurus*.
..... ***Aphodius subterraneus***

Once a common species but now rare, possibly extinct with the last records from East Yorkshire in the 1950s.



- Head with a single tubercle which is often indistinct. Length 6-9 mm. Subgenus *Colobopterus*.
..... ***Aphodius erraticus***

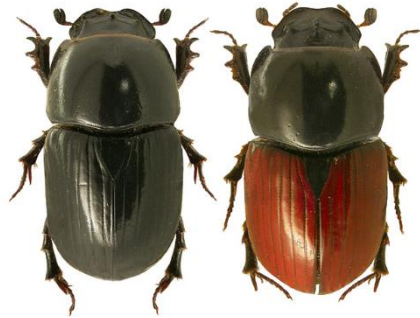
Common in most of England and Wales but becoming much less so northwards.



- 4 Larger more convex species, length usually 10-13 mm. Elytra uniformly black or rarely uniformly reddish-brown. Subgenus *Teuchestes*.

..... ***Aphodius fossor***

Common in most of England and Wales but becoming much less so northwards. Very rarely the length may be as little as 6 mm. The central and lateral tubercles on the top of the head are conspicuous and pointed.



Smaller less convex species, length 3.5-5.0 mm. Elytra reddish-brown towards the tip and also a small area brownish over the shoulders. Subgenus *Otophorus*.

..... ***Aphodius haemorrhoidalis***

Common in most of England and Wales but becoming much less so northwards.



- 5 Seventh and ninth intervals of the elytra united towards the tip to form a raised, blunt ridge which extends nearly to the tip. Length 2.5-3.0 mm. Subgenus *Plagiogonus*. ***Aphodius arenarius***

Local in south-eastern England northwards to Cambridgeshire. In dry open habitats on sand and chalk. Formerly much more common; only recorded from seven sites between 1990 and 2015 – on the Carmarthenshire coast, the Brecks in Norfolk and from the east of Kent.



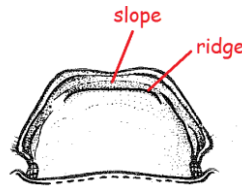
Seventh and ninth intervals not forming a united ridge.6



- 6 Head strongly convex in side view with a blunt transverse ridge in the front half, in front of which the surface of the head slopes almost vertically. Frons without tubercles. Head full and without punctures except for the rear quarter which has fine punctures and is shining. Subgenus *Ammoecius*

..... ***Aphodius brevis***

Very local and difficult to find on sand dunes historically from Birkdale dunes near Stockport and recently only at Ainsdale sand-hills in Lancashire. No tubercles on the head; head dull and without punctures except for the posterior quarter which has fine punctures and is shining.



Head flattened or only slightly convex, usually without a transverse ridge.7

7 Front margin of the pronotum bordered.
..... ***Aphodius zenkeri***

Smaller species, length 4-5 mm. Cheeks more weakly angled with the front of the eyes; head punctured and with three tubercles (more distinct in males). Subgenus *Limarus*. Scattered records in England south of the Humber and Wales.



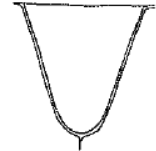
Front margin of the pronotum without a border.8



8 Scutellum pentagonal with the sides in the basal half parallel or slightly convergent.9
Line drawings from Krell & Fery (1992); photograph from Lompe (2010)



Scutellum triangular, evenly tapering from the base to the tip with straight or curved sides.17



- 9 Base of the pronotum with a border, although sometimes this is so fine that it is only visible when viewed from behind.10

Base of the pronotum without a border or if a border is present it is more or less broadly missing in the middle. Fringe of bristles at the end of the hind tibiae short and equal in length.[16](#)

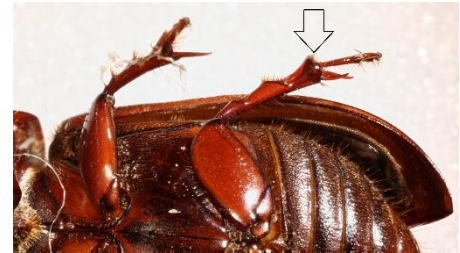
Line drawing from Krell & Fery (1992)



10 Apical bristles of the hind tibiae, short, robust and uniform in length.
Frontal suture with more or less distinct tubercles.11
Line drawing from Krell & Fery (1992)



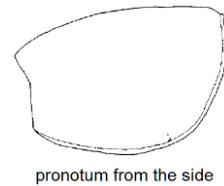
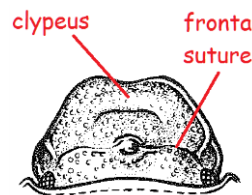
Tip of the hind tibiae with a mix of longer thinner and shorter thinner bristles.
(These bristles may be much longer than illustrated).13
Line drawing from Krell & Fery (1992); photograph Mike Hackston (2016)



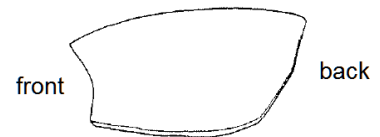
- 11 Frontal suture with three clear tubercles. Clypeus with punctures that run into one another as wrinkles. Viewed from the side the border of the pronotum is clear all around the curved edge. Subgenus *Calamosternus*.

..... ***Aphodius granarius***

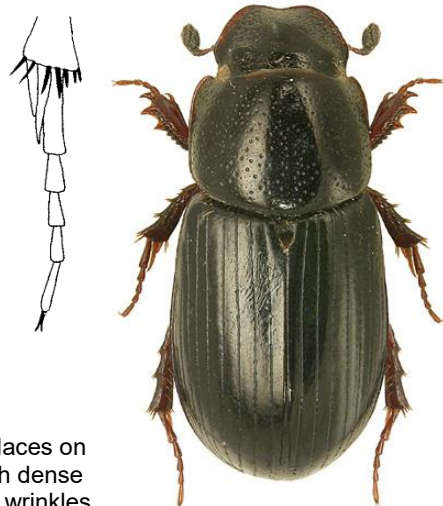
Common in southern England but becoming quickly uncommon northwards. Often in dung that is on paths and bare soil rather than grass. Frontal suture with three clear tubercles (much clearer in males). Elytra with punctures along the striae; intervals with microscopically fine punctures or clearly and densely punctured. Sides of the pronotum clearly with two sizes of punctures – towards the centre of the pronotum the larger punctures are usually largely absent but may be densely punctured. Coloration quite variable. Sides of the pronotum sometimes with a reddish patch. Body may be blackish-brown with the sides of elytra paler brown. Elytra may be reddish brown except for the suture and the sides which are darker. First segment of the hind tarsus about as long as the upper terminal spur of the hind tibiae but shorter than the next two segments combined. Length 3-5 mm. Line drawing from Krell & Fery (1992)



Frontal suture with at most indistinct tubercles towards the sides and without a tubercle in the middle. Clypeus not as above, rarely very weakly wrinkled. Pronotum viewed from the side, with the basal border disappearing as it has been displaced onto the rear surface. Subgenus *Liothorax*.12



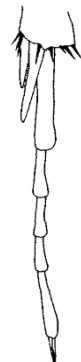
- 12 Segments of the hind tarsus comparatively broader. First segment of the hind tarsus as long as or very slightly longer than the upper terminal spur of the hind tibia. Elytra completely black with a metallic shine, or black with a red longitudinal streak on each which may be enlarged to leave just the suture dark. Intervals of the elytra more or less flat with almost a silky sheen, not or only microscopically punctured. Length 3.0-4.5 mm.



..... ***Aphodius plagiatius***

Very local in southern and central England and Wales in damp places on coast. Legs reddish-brown to brown. Head distinctly convex with dense fine punctures in the middle which become stronger and run into wrinkles towards the sides of the clypeus. Pronotum with a mix of larger and small punctures. Elytra with fine, sometimes sharply angled stria with punctures along them, although these are small and sometimes difficult to make out. The intervals are not raised and are have scattered microscopically fine punctures. Sutural stria deepened towards the rear. Line drawing from Krell & Fery (1992)

Hind tarsi comparatively long and slender. First segment of the hind tarsus usually about 1.3 times as long as the upper terminal spur of the hind tibia. Moderately shining black usually without any metallic sheen. Intervals of the elytra only weakly convex to almost flat. Head more strongly punctured with most of punctures on top about as large as on those on the pronotum. Length 4-5 mm.



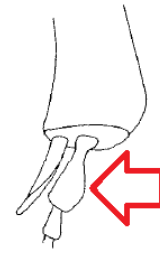
..... ***Aphodius niger***

Rare in the New Forest mostly around one pond feeding on decaying material in damp soil. First segment of the hind tarsus as long as the three next segments combined. More elongate shining black species. Head more distinctly convex with fine punctures which are sparse in males and dense in females, becoming coarser towards the sides and the front. Pronotum with scattered punctures which are a mix of large and small. Elytra with fine punctures along the striae and with the intervals not raised and microscopically finely punctured. Line drawing from Krell & Fery (1992)

- 13 First segment of the hind tarsus broadened, much thicker than the subsequent segments. Upper terminal spur of the hind tibia flattened in the apical half. Hind tibiae of males clearly broadening. Subgenus *Euorodalus*

..... ***Aphodius coenosus***

Sides of the pronotum reddish. Elytra reddish-brown or chestnut-brown. Rest of body black. Sometimes the elytra are red with reddish patches; very rarely the shoulders and tip of the elytra are red; sometimes also with red patches behind the middle in the centre of the elytra with a red patch towards the base of the second interval or with the entire body black. Head with dense coarse punctures. Very local in southern and central England, and Wales. Normally in dry and exposed areas with plenty of sun. Line drawing from Krell & Fery (1992)



First segment of the hind tarsi, terminal spur of hind tibia and hind tibia itself not as above.14

- 14 Intervals of the elytra clearly convex. Front margin of the clypeus with at most a slight trace of a border. Terminal spurs of the front tibia similar in form, pointed. Subgenus

Esymus.15

Body comparatively elongate, weakly convex in section. Elytra brown with a black stripe along the suture or completely pitchy black. Base of the pronotum bordered; scutellum small, its base usually narrower than the two neighbouring intervals. Apical spurs of the middle and hind tibiae unequal.



Intervals of the elytra flat or almost so. Front margin of the clypeus always more or less clearly bordered. Terminal spurs of the front tibia in males with a hooked or curved tip. Subgenus *Phalacrothous*. Elytra black, each with a well-defined reddish mark at shoulder, and a larger one near the apex.

..... ***Aphodius quadrimaculatus***

Formerly widespread but has declined greatly. Last recorded on down-land in East Sussex in 1988 and possibly extinct.



- 15 Elytra orange-brown with the suture more or less broadly darkened. Comparatively more elongate. Length 3.5-5 mm.

..... ***Aphodius merdarius***

First segment of the hind tarsus slender and longer than the next two segments combined. Head with fine punctures. Pronotum with a mix of larger and small punctures, becoming sparser towards the front. Intervals of the elytra weakly convex with fine and scattered punctures. Male metasternum with a broad and deep impression.



- Elytra black with or without a reddish patch, or generally reddish-black. Comparatively more compact. Length 3-5 mm.

..... ***Aphodius pusillus***

Local but widespread species. Front angles of the pronotum usually translucent reddish. Head densely punctured. First segment of the hind tarsus long and slender, as long as the next two segments combined.



- 16 Upper surface black. Frontal suture without tubercles, at most with a swelling in the middle of the head.12

Upper surface yellowish. Elytra and pronotum with a vaguely defined dark patch. Frontal suture with three tubercles.

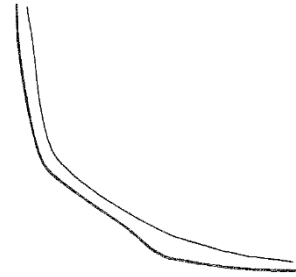
Subgenus *Labarrus*.

..... ***Aphodius lividus***

Local on pasture and down-land in south-east and eastern England, but very rarely recorded in the last fifty years. Probably exists in very local population densities. Sometimes the dark patch on the pronotum is smaller than illustrated and the black on the elytra hardly distinct. In some specimens the pronotum is completely black and the elytra are black except for the sides and the second interval. Head densely and coarsely punctured. Pronotum with numerous fine punctures with scattered larger ones intermixed. Striae of the elytra with fine punctures; intervals not raised and with microscopically fine punctures. First segment of the hind tarsus shorter than the upper terminal spur of the hind tibia and longer than the next two segments combined. Upper terminal spur of the hind tibia broader in the middle. Length 3.5-5 mm.



17 Pronotum obliquely truncated between the sides and the basal margin, often with a border in this area); sometimes the truncation is broadly rounded towards the side margins so that only a short straight section can be seen at the hind angle. Pronotum in males almost always with a depression in the middle towards the front. Elytra brownish-yellow to dark red brown, sometimes with spots (rarely uniformly black).



Subgenus *Aphodius*.18

Line drawing from Krell & Fery (1992)

Hind angles of the pronotum not obliquely truncate but evenly rounded (in some specimens the shape of the hind margin of the pronotum may be misinterpreted as truncate). Pronotum in males without an impression.21



- 18 Pronotum black with the front angles and sometimes the sides paler. Elytra reddish or reddish-brown.19

Pronotum uniformly black. Elytra pale yellowish-brown or with a large or small elongate darker patch on the top or black apart from the brown tip. Length 5.5-8.0 mm.

..... ***Aphodius foetidus***

Fairly common in the south but becoming rarer northwards. Legs dark brown. Front angles of the head and the cheeks broadly rounded.

Pronotum with coarser punctures scattered amongst the general fine punctures, becoming denser towards the sides (in males these coarser punctures are absent from the middle of the pronotum). Intervals of the elytra finely and sparsely punctured. First segment of the hind tarsi rather longer than the upper terminal spur of the tibiae and almost as long as the rest of the segments of the tarsus combined.



- 19 Underside of the abdomen black, sometimes with the last segment red. Elytra red to reddish-brown or rarely black. Reddish patches around the front angles of the pronotum occasionally lacking. Tip of the elytra dull, without punctures but with a distinct microscopic sculpture.20

Abdomen yellowish-brown to reddish-brown contrasting with the black underside of the thorax. Very similar to *A. fimetarius* but with the pronotum relatively longer and the elytra shorter. Front angles of the pronotum and almost the whole side margin reddish. Rear part of the reddish-brown elytra sometimes with an almost black patch with indistinct edges, which may be so extensive that it only leaves the sides pale. Length 6-8 mm.

..... ***Aphodius foetens***

Local but widespread. Tubercles on the frons indistinct, rather transverse. Impression toward the front of the pronotum in males very weak and sometimes almost absent. Sides of the pronotum with a thick border; the thickly-bordered hind angles are obtuse with the border extending forwards and deeply along the margin. Lines of punctures on the elytra stronger and deeper than those in the other lead. Tips of the elytra with punctures and shining. First segment of the hind tarsi rather shorter than the upper terminal spur of the hind tibia. Legs reddish-brown to red.



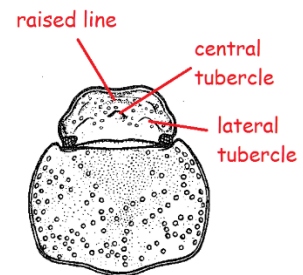
20 Coloration tending to be more of a paler yellow-brown shade.

Males: when everted the endophallus of the aedeagus extends to the base of the right section of the dorsal strut between the parameres. Tip of the aedeagus different (see below). Head with the cheeks quite clearly projecting, their edges parallel at the base. Pronotum with a distinct, more or less triangular depression at the front in the middle.

Females: coarse punctures on the pronotum less clearly developed, usually completely absent from the centre or with distinct areas without punctures each side of the middle line.

..... ***Aphodius fimetarius***

Common species. Head finely punctured. Tubercles towards the sides of the frons as high as or only slightly shorter than the middle one. In front of the tuberculate area is a more or less curved transverse slightly raised line. The rounded cheeks extend only a little beyond the eyes. Sides of the pronotum with a narrow border and with denser coarse punctures than elsewhere. Hind angles of the pronotum weakly truncated and before this slightly curved. Elytra with the lines of punctures distinct and deep. First segment of the hind tarsi as long as the upper terminal spur of the hind tibia



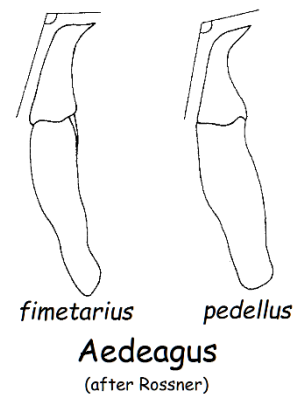
Coloration more distinctly red.

Males: when everted the endophallus of the aedeagus is indistinct and pale at the base of both parts of the dorsal strut between the tips of the parameres. Tip of the aedeagus different (see below). Head with the cheeks clearly projecting, the margins divergent towards the base.

Female: coarser punctures on the pronotum denser, becoming only slightly less so towards the centre and without areas without punctures.

..... ***Aphodius pedellus***

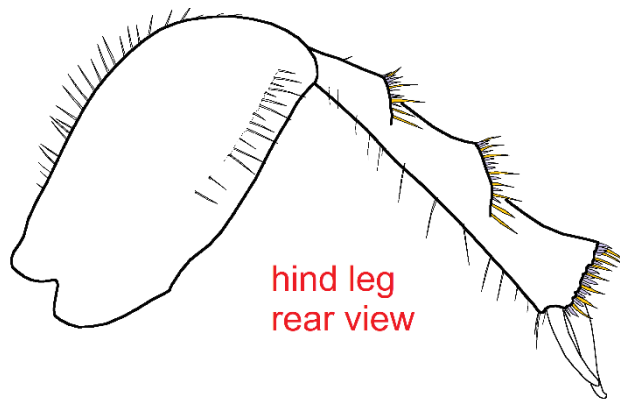
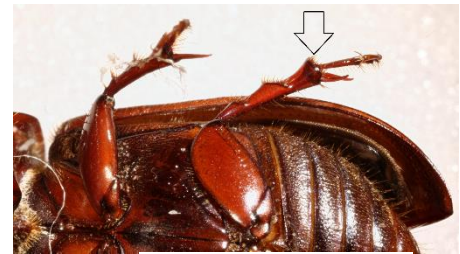
Extremely similar to *A. fimetarius* but with a different arrangement of chromosomes. The nature of the microscopic sculpture at the tips of the elytra is different.



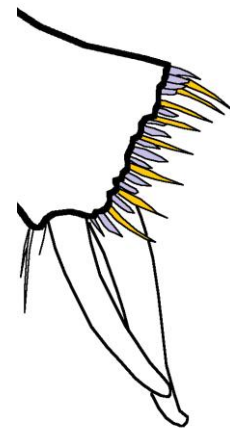
21 Apical bristles of the hind tibiae, short, robust and uniform in length (a few slightly longer bristles are sometimes present) OR with short, somewhat robust bristles of irregular length, but in this case not with regularly distributed longer bristles (i.e. the bristles are never clearly in two size classes). Apical bristles on the middle tibia of a similar character but not as well-marked. In old specimens almost all these bristles may be broken off, particularly the somewhat longer ones, and in these cases both alternatives should be checked.22
 Line drawing from Krell & Fery (1992)



Apical bristles of the hind tibiae with a mix of long and short bristles which fall easily into two size classes.23
 Line drawing from Krell & Fery (1992). Photograph Mike Hackston (2016)



hind leg
 rear view



22 Base of the pronotum without a border.

..... ***Aphodius zenkeri***

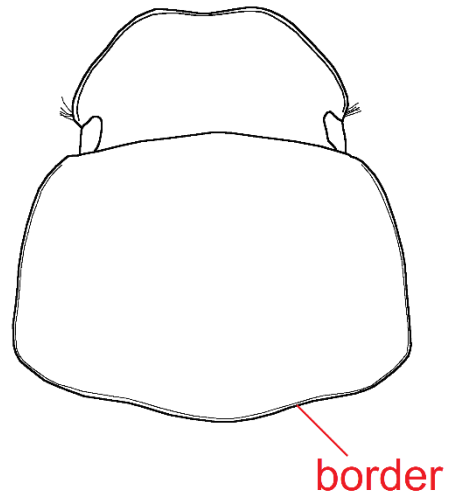
Smaller species, length 4-5 mm. Cheeks more weakly angled with the front of the eyes; head punctured and with three tubercles (more distinct in males).

Subgenus *Limarus*. Scattered records in England south of the Humber and Wales.

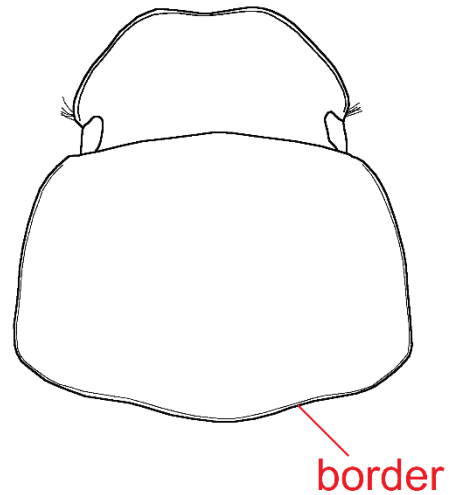


Base of the pronotum usually with a complete border; rarely this border is more or less broadly interrupted in the middle.[37](#)

Subgenera *Agrilinus*, *Agoliinus*, *Planolinus* and *Bodilus*



23 Base of the pronotum with a border (i.e. with a narrow beading along the rear edge). Frontal suture with or without tubercles.24

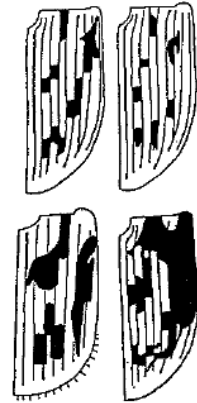


Base of the pronotum without a border. Frontal suture without tubercles.34

24 Elytra black, reddish brown, sometimes reddish or pale brown with a darker suture, or with paler bands or patches on a darker background.25

Elytra yellowish-brown with black, well-defined markings or with large, dark, shadowy patches which may be very clear or scarcely darker than the background. Pronotum usually with paler margins.26

Line drawings from Krell & Fery (1992)



25 Cheeks not protruding further than the eyes. Distinctive in having the striae of the elytra as wide as the intervals between them; intervals with punctures that run together to form wrinkles. Subgenus *Sigorus*.

..... ***Aphodius porcus***

Widely distributed in England and Wales but highly localised and declining, occurring at only 13 locations since 1990 from Cumbria to Surrey. On unimproved pasture and wood pasture. Possibly associated with *Geotrupes stercorarius*.



Cheeks clearly protruding further than the eyes or if cheeks do protrude further than otherwise disagreeing with the above.14



- 26 Elytra yellowish-brown with small black patches which may combine to form oblique longitudinal bands (rarely merging into bigger patches).27

Elytra yellowish-brown each with a darker shadowy central patch, usually large and with reasonably distinct edges; these patches are sometimes very dark and obvious so that only the base, the shoulders and the area around the suture appear pale. Subgenus *Melinopterus*.31

Longish species, moderately convex in section. Head and pronotum black or blackish brown. Sides of the pronotum sometimes paler. Elytra pale brown (except in melanic forms) with only the suture narrowly darkened; top of the elytra with a darker shadowy patch which has stronger punctures (along with denser hairs in males). Base of the pronotum bordered, rarely interrupted in the middle. Underside black, punctured and hairy. Scutellum and sometimes the thorax paler in colour. Terminal spurs of the middle and hind tibiae unequal.



27 Upper surface of the head with long upright hairs towards the front, which may become abraded to a very few. Head and pronotum with a weak metallic shine. Pronotum (viewed from directly above) with indistinct, broadly rounded hind angles. Subgenus *Nimbus*.28

Upper surface of the head bare. Head and pronotum without a metallic shine. pronotum with bluntly rounded hind angles but which are clearly distinct. Subgenus *Chilothorax*.29



28 Sides of the pronotum without long hairs, sometimes with isolated microscopic hairs (scarcely visible at x35 magnification). Elytra elongate, evenly convex and with clear hairs at least towards the rear. Margin of head and sides of the pronotum (especially in the front angles) reddish. Elytra pale brown with black patches, three in the front half and three behind the middle; seventh and eighth intervals with an elongate patch, sometimes extending to the ninth. The darker patches may be reduced or be combined with one another. Head and pronotum with a mix of larger and smaller punctures. Cheeks extending beyond the eyes. First segment of the hind tarsi longer than the upper terminal spur of the hind tibiae and as long as the two following tarsal segments. In males the central part of the pronotum does not have the coarser punctures. Lower terminal spur of the middle tibiae with a blunt tip. Length 4.5-7.0 mm.



..... ***Aphodius obliteratus***

Very local autumn species in England and southern Scotland.

Sides of the pronotum with longer hairs, the top with scattered fine punctures. Elytra clearly hairy all over, each elytron with seven dark patches. Sometimes these patches are only indistinct or fewer than seven. First segment of the hind tarsi in males as long as the three following segments combined; in females as long as the two following segments.



..... ***Aphodius contaminatus***

Common and widespread, often very common in autumn.



29 Clypeus with a red patch each side or the whole front margin is broadly bordered red. Sides of the pronotum reddish. Elytra yellowish-brown with the suture darkened and with black streaks. Front margin of the clypeus bordered. Head with very coarse, almost wrinkled punctures, with weak tubercles on the frons. Intervals of the elytra flat with fine dispersed punctures. Underside black except for the abdomen and femora which are pale reddish-brown. First segment of the hind tarsus longer than the upper terminal spur of the hind tibia and as long as the next three segments combined. Length 4-5 mm.

..... ***Aphodius conspurcatus***

Very local in England and Wales, becoming rarer to the north and south. Lower photograph from Lompe (2010)



Clypeus black.30



30 First segment of the hind tarsus as long as the next two segments combined. Head with a more or less angled notch between the cheeks and the clypeus, more easily seen from the side. Outline of the elytra more elongate; intervals 7-9 black in the front half of the elytra; dark dash at the front of the elytra present at the base of interval four as well as five. Pronotum black except for the sides and sometimes the front angles which are translucent reddish. Elytra dark orange-brown with darker patches forming two interrupted curved transverse bands. The patches are variable and may be reduced or more extensive so that the front part of the elytra are black apart from paler patches over the shoulders. Head with dense punctures towards the front which merge to form wrinkles. Base of the scutellum with a few punctures. Elytra with fine rows of punctures; intervals more clearly punctured towards the rear. Length 3.5-4.5 mm.



..... ***Aphodius paykulli***

Very local but widespread, on pasture, wood pasture, down-land and dune grassland, though almost exclusively on light well-draining soils. Adults are mainly active in late autumn, with a few lasting until early spring, most records between October and April. Previously widespread across England and Wales, with very few Scottish records and with a regional stronghold in the south-eastern counties (Surrey, Sussex and Kent). Significant declines noted which indicate that it had largely disappeared from Scotland, northern England, the Midlands and south central and southwest England by the mid-1960s. Line drawing from Krell & Fery (1992)

First segment of the hind tarsi almost as long as the three following segments combined. The dark patch in the fifth interval extends right to the base of the elytra. Head and pronotum black, only reddish towards the sides. The yellowish-brown elytra have short sparse bristles towards the sides and tip, with darker patches and dark along the suture. Often the dark patches are enlarged and linked to each other so that only a few paler areas remain; this can result in the fusion of all the patches on the front half of the elytra so that the basal half appears dark, or the whole elytra may be black with the exception of the shoulders and the tip. In addition the number of punctures may also be reduced. Head in males finely punctured with the punctures running into one another forming wrinkles. Front margin of the head slightly concave. In males the pronotum is less convex than in females. Punctures on the pronotum coarse, although in males they are finer in the middle. Intervals on the elytra weakly convex and extremely finely punctured. Length 3.5-5.5 mm.

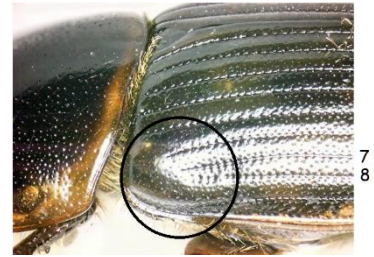


..... ***Aphodius distinctus***

Local in England becoming rarer to the north; populations appear to fluctuate greatly.



- 31 8th striae on the elytra extending towards the base as far as the seventh or almost so, sometimes (almost) merging together. If the 8th stria is shorter, then reaching almost to the shoulders of the elytra as coarse punctures (not always a distinct character). Frontal suture in males with clear tubercles. Head completely dark.32
 Photograph from Lompe (2015)



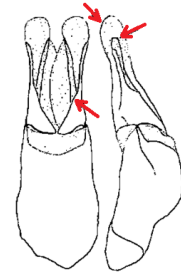
- 8th striae on the elytra ceasing towards the base far before the seventh, ending in one large puncture (very rarely with up to three large punctures) in the direction of the shoulders of the elytra – never in a row of coarse punctures (check both elytra). Frontal suture in males with or without tubercles. Head with dark or pale patches.33



- 32 Base of the pronotum black, only narrowly paler at the sides and/or forming a small paler patch at the front angles. Overall appearance darker. Top of the pronotum with a mix of larger and smaller punctures at the sides, the larger ones quite dense. Upper terminal spur of the hind tibiae longer than the first segment of the tarsus. Metasternum in males convex over its entire width; in females with a heart-shaped impression which is sometimes greatly reduced in small specimens. Length 4-6 mm.

..... ***Aphodius punctatosulcatus***

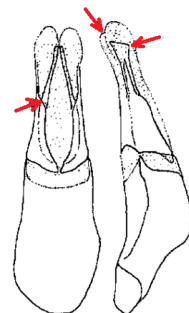
Formerly known from Kent but not recorded since 1938, thus **probably extinct**. The points shown with arrows on the diagrams of the aedeagus appear to be constant between the species. The inner paramere branch viewed from the side is not broadened apically and is often indistinctly tipped. The apical membrane is simple, sometimes vertically notched apically (could be an artefact). Inner edge of the outer paramere branch is about straight from the base to the outer edge. The outer branch of the paramere is sometimes more clearly sclerotised than in the other species and is not shorter than the inner branch (viewed from above). Line drawing from Krell & Fery (1992)



Base of the pronotum paler, sometimes dark reddish but always distinct (as long as lighting is good), very rarely reduced around the middle; sides more broadly pale-edged. Elytra pale brown with a dark shadowy patch which does not extend to the first and second intervals towards the base OR it is dark and covers most of the surface of the elytra. General appearance paler. Elytra finely hairy, although these are sometimes restricted to the tip in females and only clear with good magnification. Upper terminal spur of the hind tibiae as long as or slightly longer than the first segment of the tarsi.

..... ***Aphodius sphaelatus***

Aedeagus somewhat variable but constant differences are arrowed. Common species on various dung and rotting vegetation. Line drawing from Krell & Fery (1992).



33 Head black with a clearly defined yellow patch each side; finely punctured. Base of the pronotum translucent reddish. Male frontal suture with more or less clear tubercles. Front margin of the head slightly concave. Pronotum with a mix of larger and smaller punctures towards the sides and finer punctures only towards the middle in males. In females the pronotum has larger and smaller punctures all over; hind angles truncate. Only males have three tubercles on the frontal suture. Elytra with very short hairs in males and bare in females. Length 3.0-4.5 mm.



..... ***Aphodius consputus***

Very local in early spring in the extreme south east of England. Pale brown elytra have a shadowed darker spot which is sometimes very indistinct or absent. Intervals on the elytra only slightly convex with fine dispersed punctures, although they are denser towards the tip. First segment of the hind tarsus longer than the upper terminal spur and almost as long as the three following tarsal segments.

Head completely black (occasionally reddish towards the side or with a reddish patch each side). **Males** with the frontal suture without tubercles, although sometimes with clear but low swellings. Terminal spur of the front tibiae blunt and hooked at the tip, sometimes the hook reduced to a point. Front margin of the head straight; pronotum broader than the elytra; pronotum almost shining and with only the sides and base with coarser punctures. Metasternal plate broadly bare in the middle. **Females** with the frontal suture absent or rudimentary towards the sides. Front of the head weakly concave with a mix of smaller and coarser punctures, thus appearing duller. Pronotum narrower than the male with dense, coarse punctures, those on the top rather finer than those at the sides. Inner terminal spur of the front tibiae sharp-pointed. Length 4-7 mm.



..... ***Aphodius prodromus***

Common and widespread. Elytra yellowish-brown with a large darker middle patch of variable intensity which never reaches the first interval OR the elytra are completely yellowish-brown OR there is a second smaller patch beyond the middle patch OR the whole elytra are dark. Elytra short hairy. First segment of the hind tarsus as long as the upper terminal spur of the hind tibiae and as long as the three following segments of the tarsus.

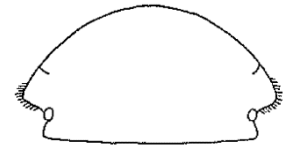


- 34 Elytra pale brown with a more or less dark shadowy patch in the middle. Elytra with hairs towards the sides and tip but these rub off with age. Pronotum pale at the sides and often also along the base. Subgenus *Melinopterus*.[31](#)

Longish, moderately convex species with black or blackish brown head and pronotum. Elytra pale brown (except in melanic forms), only narrowly darkened along the suture. Upper surface of the elytra with darker shadowy patches which have more distinct punctures and which in males have denser hair. Base of the pronotum bordered, only rarely interrupted in the middle. Underside black, punctured and hairy. Femora and sometimes the underside of the thorax paler in colour. Terminal spurs of the middle and hind tibiae unequal. The species of this subgenus are very similar and females can scarcely be distinguished.

Otherwise coloured, usually darker. Head relatively large and semicircular with the cheeks right angled before the eyes. Subgenus *Acrossus*.[35](#)

Line drawing from Krell & Fery (1992). Medium-sized to large species. Body weakly convex in section, black to reddish brown. Elytra rarely mottled dark or pale. Head relatively large, usually with fine punctures. Cheeks pointed, projecting in front of the eyes. Pronotum with a thickened border along the sides; base without a border and with rounded hind angles. Scutellum broadly triangular. Striae on the elytra almost without punctures; intervals almost flat. Apical terminal spurs on the middle and hind tibiae unequal. First segment of the front tarsi longer than the second.



35 Larger species, 10-13 mm. Side border of the pronotum distinctly and broadly thickened but with its inner edge not clearly marked by a groove. Entire body brown or reddish brown, shining. Club of the antennae brownish yellow. Legs pale brownish-red. Relatively elongate species. Upper spur of the tip of the hind tibiae as long as the first segment of the hind tarsus which itself is about as long as the next three segments combined. Top central part of the pronotum with minute punctures grading to coarser ones towards the sides.



.....
 ***Aphodius rufipes***
 Common and widespread.



Smaller species, 6-9 mm. Side margin of the pronotum with a narrow beading which is marked by a clear groove. Club of the antennae dark. First segment of the hind tarsus almost as long as the last four segments combined. Pronotum with distinct pin-prick like punctures all over; some may be deeper than others.36



36 Top of the pronotum with both coarse and fine punctures. Elytra shortly hairy towards the rear; second and fourth interval broader than the first and the third in the rear half. Elytra shining, only dull and bristly towards the tip. Upper terminal spur of the hind tibiae as long as the first segment of the hind tarsi; first segment of hind tarsi longer than the three following segments of the tarsus. In males the terminal spur of the front tibiae is clearly downwardly curved and truncate.



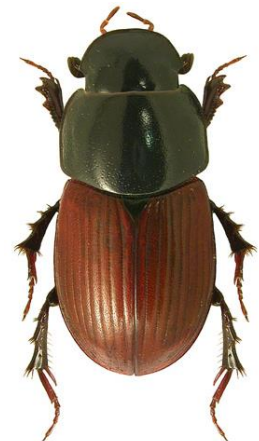
..... ***Aphodius luridus***

Locally common and widely distributed in Great Britain on cow and sheep dung in exposed habitats. Elytra yellowish-brown each with seven or fewer rectangular spots, or there are no patches and only the suture and the striae are black. Sometimes the darker patches may be elongated and merge with one another forming a single darkened area; the front part of the elytra may be black with the rear half yellow or the entire elytra are black, only paler at the sides and tip or only narrowly paler in the middle of the sides; finally they may be yellowish brown with the sides and tips black with darkened stripes in the third and fifth interval towards the front.

Top of the pronotum evenly covered with fine punctures. Elytra bare towards the rear except for tiny pale bristles that arise from the punctures on the intervals; all intervals in the last third of the elytra the same width – in particular the fourth interval does not become broader towards the tip. Elytra more coarsely punctured, red, with a black patch on each or uniformly black or black with brown margins or reddish shoulder patches. Legs blackish-brown.

..... ***Aphodius depressus***

Widespread in Britain, becoming commoner north of the Thames. One of the commonest species of the genus in Scotland.



pronotum

37 Length 4-7 mm. Coloration mainly paler. Pronotum with the sides and sometimes also the base clearly and broadly paler. Head with paler colour for a good part. Front margin of the clypeus never angled but always rounded next to the border which is more or less weak.38



Length 3-6 mm. Coloration usually black or dark brown. Front margin of the clypeus angled or rounded. Elytra often paler than the head and pronotum. Head at most with the sides translucent reddish.40



38 Tips of the elytra dull with at most very fine microscopic punctures. Upper terminal spur of the hind tibia shorter than the first segment of the hind tarsus. Head and pronotum black with the exception of the paler margin. Elytra pale brown, without darker markings and without hair. Front angles of the clypeus rounded. Sides of the pronotum with long hairs. Intervals of the elytra finely and sparsely punctured. First segment of the hind tarsus shorter than the three segments after it combined. Length 5.5-8 mm.



..... ***Aphodius sordidus***

On dry, sandy or chalky pastures, mainly near the coast. It is found on coastal grassland and sand-substrate upland pasture in the northern part of its range and in Wales. Elsewhere, it is also found on lowland pasture on free-draining soils, including Breck grassland and on dunes. Formerly local but has declined greatly. Recorded from ten scattered sites since 1990. Colour forms occur on the Continent with black markings on the elytra.

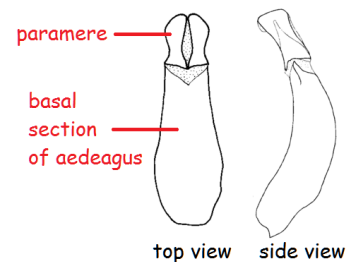
Tips of the elytra shining, with distinct punctures.39



39 Upper terminal spur of the hind tibia shorter than the first segment of the hind tarsus. Head and pronotum black with only their sides paler. Elytra pale yellowish-brown, shining. Head finely punctured and with a weakly indicated longish swelling. Front margin of the clypeus broadly bordered with the front corners rounded. Frons with three tubercles. Elytra with the striae with fine punctures and intervals weakly raised; intervals with fine and scattered punctures, becoming deeply and denser towards the tips. First segment of the hind tarsus as long as the next three segments combined. Length 4-6 mm. Male aedeagus with the parameres much shorter compared to the elongated basal section.

..... ***Aphodius ictericus***

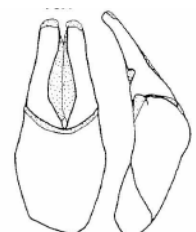
Local in England and Wales south of the Humber. Line drawing from Krell & Fery (1992)



Upper terminal spur of the hind tibia as long as or longer than the first segment of the hind tarsus. Intervals of the elytra becoming raised towards the tips; striae broad and deeper towards the tip. Dark brown. Head towards the front and pronotum towards the sides yellowish. Scutellum with a broad dark border. Elytra yellowish-brown or reddish-yellow or with a more or less large blackish-brown or black patch. Sometimes the elytra are blackish-brown apart from a paler margin or the sides and tip of the elytra are darkened. Central part of the pronotum sparsely and finely punctured in males and in females with a mix of larger and smaller punctures. First segment of the hind tarsus as long as the upper terminal spur. Apical bristles on the middle and hind tibiae short, thick and uniform in length. Length 5-7 mm. Male aedeagus with the parameres nearly as long as the basal section.

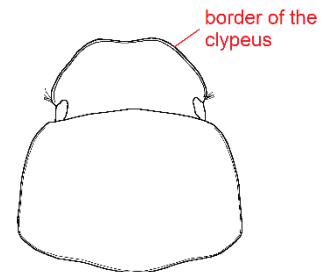
..... ***Aphodius rufus***

Widely distributed in Great Britain, locally common. Line drawing from Krell & Fery (1992)



40 Front margin of the clypeus raised on both sides of the clear border and angled or weakly triangularly rounded, never broadly rounded (view from above and at an angle from behind). Subgenus *Agoliinus*).41

Front margin of the clypeus broadly rounded and at most indistinctly raised on both sides of the (usually weak) border.[42](#)



- 41 Clypeus with a curved transverse swelling. Length 4.5-5.5 mm. Elytra widening from the shoulders towards the apex; head with front margin indistinctly reddish; elytra sometimes indistinctly reddish at the base; striae very finely punctured. Length 5.0-5.5 mm.

..... ***Aphodius nemoralis***

Scotland, Lake District and upland Wales; rare in deer dung.



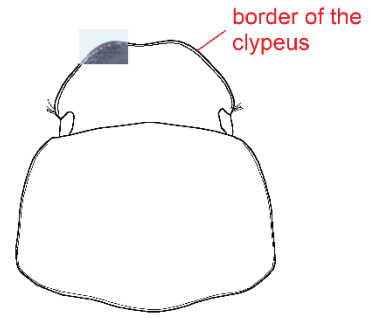
Clypeus without a curved transverse swelling at most slightly raised with a granular texture towards the front. Length 5-8 mm. Elytra parallel-sided, indistinctly reddish contrasting with the black pronotum. Head entirely black although sometimes with the sides slightly paler. Length 5-8 mm.

..... ***Aphodius lapponum***

Local, northern England, North Wales, Scotland, Ireland.

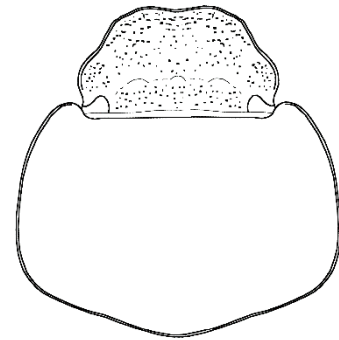


- 42 Clypeus uniformly punctured, without a tendency of the punctures to run together to form wrinkles.
 Subgenus *Planolinus*.43



Clypeus with punctures that run together to form wrinkles or completely wrinkled. Subgenus *Agrilinus*.
44

Small to medium-sized species, slightly convex in section with a bare upper surface. Front margin of the pronotum concave. Frons with a more or less distinct tubercle (more so in males). Cheeks projecting beyond the eyes. Central part of the pronotum with punctures of two types; hind angles obtuse; base with a border. Scutellum triangular and punctured. Elytra often with a tooth at the shoulder angle; elytra broadening from the base. The two apical spurs of the middle tibiae are equal as are those of the hind tibiae.



43 Tip of the elytra dull and lacking punctures. Head with the punctures finer than those on the pronotum and with a central tubercle in the middle of the frontal suture.

..... ***Aphodius borealis***

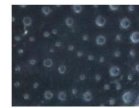
Widely distributed but local.



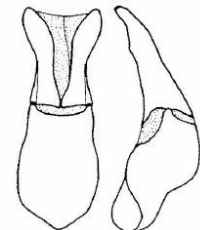
Tip of the elytra shining and punctured. Head with the punctures the same as those on the pronotum and with no more than a slightly raised area in the middle of the frontal suture.

..... ***Aphodius fasciatus***

Pronotum with a dense mix of larger and smaller punctures, evenly all over. Length 3.5-5 mm. Typical form has the head and pronotum brownish-black with the sides of the pronotum paler and the elytra yellowish-red to red but with the suture and scutellum slightly darker. Variety *uliginosus* has irregular darker markings on the centre of each elytron. Variety *transitus* has black elytra with the base, tip and sometimes the suture more or less distinctly paler. Male aedeagus as illustrated. Records widely distributed through Great Britain but uncommon. Line drawing from Krell & Fery (1992)



two types of punctures on the pronotum



44 Intervals of the elytra in the centre smooth and shining with a scarcely visible microscopic sculpture and fine punctures. Pronotum clearly with punctures in two sizes. Head and pronotum black. Elytra black and almost always with a reddish tip, or elytra completely reddish-brown. Length 4-6 mm.

..... ***Aphodius constans***

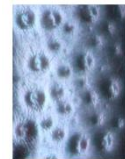
Rather local but widespread



Intervals of the elytra dull or shining but not smooth in the centre, due to the microscopic sculpture which is often weak but always distinct. Pronotum less clearly punctured with a mix of large and smaller punctures. Head, pronotum and elytra almost always completely black (rarely the elytra are reddish-brown). Length 4-6 mm.

..... ***Aphodius ater***

Club of the antennae black. First segment of the hind tarsus as long as the upper terminal spur of the hind tibiae. Common and widely distributed.



punctures on pronotum