

# A field key to Soldier Beetles (Coleoptera: Cantharidae)

By Keith Alexander (1986), with annotations from Martin Harvey (2010)

Start at the first column, follow it down to find the description that fits your specimen, then move to the relevant section of the next column; repeat until identified.

		length (mm)	species		
wing-cases <b>black</b> (or almost so)	head with distinct neck and prominent eyes		11–13 <i>Podabrus alpinus</i> (dark form)		
	metallic blue reflection to wing-cases		12–15 <i>Ancistronycha abdominalis</i>		
	legs entirely black	pronotum entirely dark	smaller	4–5 <i>Cantharis paludosa</i>	
			larger	6–7 <i>Rhagonycha elongata</i>	
		pronotum with reddish or yellow areas	pronotum with narrow yellow sides	8.5–10 <i>Cantharis obscura</i>	
			pronotum reddish, darkened at front and centrally	10–13 <i>Cantharis fusca</i>	
	pronotum entirely yellow or red	legs entirely yellow	scutellum yellow	4.5–7 <i>Cantharis thoracica</i>	
			scutellum black	4.5–7 <i>Cantharis nigra</i> (pale form)	
		hind femora black	disc of pronotum heavily punctured	6–7 <i>Silis ruficollis</i>	
		hind femora yellow or red (can have narrow black ring at distal end)	smaller, with greyish effect to wing-cases (reflexed sides of wing-cases yellow)	5.5–6.5 <i>Cantharis lateralis</i>	
			larger, wing-cases very black appearance	9–12 <i>Cantharis pellucida</i>	
		hind femora with yellow base, and broader black band at distal end		7–11 <i>Cantharis nigricans</i> (part)	
	pronotum entirely black (or very dark)		4.5–7 <i>Cantharis nigra</i> (dark form)		
	pronotum pale, but with darker markings centrally	a cluster of dark patches on pronotum		6–11 <i>Cantharis figurata</i> / <i>Cantharis rufa</i> (dark forms)	
dark area on pronotum is a distinct blotch		greyish effect to wing-cases, narrow body	7–11 <i>Cantharis nigricans</i> (part)		
		black shiny wing cases, large and broad body	9–12.5 <i>Cantharis rustica</i>		
wing-cases predominantly <b>yellow</b>	head with distinct neck and prominent eyes		11–13 <i>Podabrus alpinus</i> (pale form)		
	tip of wing-cases black	red head	8–10 <i>Rhagonycha fulva</i>		
		black head	6–7 <i>Rhagonycha lutea</i>		
	pronotum entirely black		6–7.5 <i>Rhagonycha lignosa</i>		
	pronotum entirely yellow	hind tibia and distal end of femora black		11–14 <i>Cantharis livida</i>	
		legs predominantly yellow	larger	10–12 <i>Rhagonycha translucida</i>	
			smaller	7–8.5 <i>Cantharis cryptica</i> / <i>Cantharis pallida</i>	
	pronotum black and yellow	yellow only at margins of pronotum	larger	7.5–8.5 <i>Cantharis decipiens</i>	
			smaller	femora strongly darkened	4.5–6 <i>Rhagonycha limbata</i>
				femora pale	4.5–6 <i>Rhagonycha testacea</i>
		pronotum mostly yellow, but with a cluster of small dark patches at centre		6–11 <i>Cantharis figurata</i> / <i>Cantharis rufa</i> (pale forms)	

## Critical species

- *Cantharis figurata / rufa*: separation requires close examination of antennae (males) or underside of abdomen (females)
- *Cantharis cryptica / pallida*: separation requires close examination of hairs on wing cases, and colour of palps (see: <http://www.thewcg.org.uk/idaids/ccrypticapallida.htm>)

See the more detailed key by Mike Fitton, available to download from: <http://www.wildlifebcnp.org/ecology-resources.htm>

There are good photos of Soldier Beetles at <http://www.thewcg.org.uk/pages/Cantharidae.htm> and <http://www.kerbtier.de/cgi-bin/enFSearch.cgi?Fam=Cantharidae>

Species	Habitat	Distribution	Phenology
<i>Ancistronycha abdominalis</i>	open woodland / woodland edge	Wales, Yorkshire, Lake District, Scotland; Nationally Scarce/Nb	late May to mid June
<i>Cantharis cryptica</i>	tall vegetation, usually nearwoodland, scrub or hedges	widespread in lowlands	early May to mid August
<i>Cantharis decipiens</i>	predominantly woodland, but more widespread in south	widespread in lowland England and Wales	late April to mid July
<i>Cantharis figurata</i>	wetlands including damp woodland	widespread but very local	late May to end July
<i>Cantharis fusca</i>	damp tall grassland	Yorkshire and parts of south and west England; Red Data Book 3, Rare	May and June
<i>Cantharis lateralis</i>	damp tall grassland, moving into other habitats at end of season	widespread in England	late May to mid August
<i>Cantharis livida</i>	open habitats with tall grass, some trees and scrub	widespread in England and Wales	mid May to end July
<i>Cantharis nigra</i>	marshes and damp meadows	widespread in England and Wales	late May to late July
<i>Cantharis nigricans</i>	damp habitats, no strong preference	widespread in England and Wales	mid May to July
<i>Cantharis obscura</i>	upland open woodland / woodland edge	mainly Wales, Lake District, Speyside; Nationally Scarce/Nb	May and June
<i>Cantharis pallida</i>	wetlands	widespread in England and Wales	late May to early August
<i>Cantharis paludosa</i>	acid peatlands	Wales, northern England, Scotland	late May to mid July
<i>Cantharis pellucida</i>	predominantly woodland, but more widespread in south	widespread	early May to July
<i>Cantharis rufa</i>	lowland marshes, spreading into other open habitats in England	widespread in England and Wales	mid May to mid July
<i>Cantharis rustica</i>	tall grassland, open woodland	widespread in England and Wales	mid May to end June
<i>Cantharis thoracica</i>	fens, reedbeds, marshes	widespread but local in England and Wales	June to mid August
<i>Podabrus alpinus</i>	open woodlands (including pine), especially uplands	widespread, more local in southern lowlands	mid May to late July
<i>Rhagonycha elongata</i>	upland woodland	Scotland only; Nationally Scarce/Na	late May to early July
<i>Rhagonycha fulva</i>	tall vegetation	widespread and abundant in England and Wales	end June to early September
<i>Rhagonycha lignosa</i>	trees and shrubs	widespread	early May to end July
<i>Rhagonycha limbata</i>	open grasslands	widespread	early May to end July
<i>Rhagonycha lutea</i>	open woodland and scrub	local in south-east England; Nationally Scarce/Nb	early June to mid July
<i>Rhagonycha testacea</i>	wet woodland and scrubby marsh	widespread in England and Wales	mid May to end July
<i>Rhagonycha translucida</i>	open woodland and scrub	widespread but very local in England and Wales; Nationally Scarce/Nb	June and July
<i>Silis ruficollis</i>	fens and reedbeds	England and Wales, southern only; Nationally Scarce/Nb	mid June to end July

## Glossary

- **disc** (of pronotum) = the main, central area of the pronotum, excluding the margins
- **distal** = furthest away from the body
- **femora** = one of the three main leg segments – femora is nearest the body, followed by tibia, and then the tarsus at the furthest end of the leg (the tarsus is sub-divided into segments)
- **pronotum** = top, visible part of thorax
- **reflexed** = in relation to the wing-cases, where the side of the wing-case folds under itself to form a narrow ledge; view at an angle from below
- **scutellum** = small, triangular area between the front end of the wing-cases, just behind the pronotum
- **tibia** = one of the three main leg segments – femora is nearest the body, followed by tibia, and then the tarsus at the furthest end of the leg (the tarsus is sub-divided into segments)