

## Introduction to Leaf Beetles (Chrysomelidae)

There are approximately 281 species of leaf beetles in the UK. This guide is an introduction to 17 species found in this family. It is intended to be used in combination with the beetle anatomy guide and survey and recording guides.

Colourful and often metallic beetles, where the 3rd tarsi is heart shaped. Species in this family are 1-18mm and are oval or elongated oval shaped. The plants each beetle is found on are usually key to their identification.

Many of the species of beetles found in Scotland need careful examination with a microscope to identify them. This guide is designed to introduce some of the leaf beetles you may find and give some key

### Dead nettle leaf beetle (*Chrysolina fastuosa*)

5-6mm

This leaf beetle is found on hemp nettle and dead nettle plants. It is beautifully coloured with its typically metallic green base and blue, red and gold banding. The elytra are densely punctured.

#### Where to look -

Found mainly in wetlands from March to December from the Central Belt to Aberdeenshire and Inverness



© Ben Hamers

### Rosemary leaf beetle (*Chrysolina americana*)

6-8mm

The Rosemary beetle is a recent invasive non-native species introduced to the UK through the international plant trade. This beetle is metallic red/burgundy with green striping. There are lines of punctures typically following the green stripes.

#### Where to look -

Found in nurseries, gardens and parks. Feeds on lavender and rosemary in particular. There have been records in Edinburgh but this beetle is spreading.



© Matt Shardlow

## Heather beetle (*Lochmaea suturalis*) and Willow leaf beetle (*L. cuprea*)

These species are very similar looking small brown beetles with black heads.

The Willow leaf beetle has an entirely black head without a paler spot in front of the eyes, a relatively dull pronotum and the suture (meeting of wing cases down the middle of the back) is not narrowly darkened.

The Heather beetle has variably coloured elytra, a yellow or brownish spot in front of the eyes, shiny pronotum with the suture usually being narrowly darkened.

### Where to look -

The Heather beetle is found on heathers and related shrubs in wet habitats whereas the Willow leaf beetle is found on willows and other shrubs in wet habitats. Both are found year round throughout Scotland.



© Roger Key

## Bloody-nosed beetle (*Timarcha tenebricosa*)

10-20mm

Though not commonly found in Scotland, this beetle is well worth keeping an eye out for when in the right area. Its distinctive feet and shape are only added to by it occasionally living up to its name by exuding a red liquid from the front of the face when alarmed. This is thought to deter predators.

### Where to look -

Currently only found in Dumfries and Galloway around the Solway Firth. Found year round in open sites and hedgerows. Often feeding on the leaves and stems of bedstraw plants.



© Dan TP

## Cereal leaf beetle (*Oulema melanopus/rufocyanea*)

4-5mm

These two beetles are easily confused so it is best to record them as *O.melanopus/rufocyanea*. These beautiful beetles have green/blue, densely punctured elytra, a red thorax and a black head. They have red legs and an elongated body.

### Where to look -

Agricultural land and grassland. Found across most of Central and Southern Scotland all year round.



© Ben Hamers



## *Chrysolina staphylaea*

5-9 mm

A small reddish-brown (burgundy) slightly metallic beetle with light pitting across the elytra.

### Where to look -

Found in a variety of habitats across Scotland on common plants such as Creeping thistle. March to October is the best time to look for this beetle.



© Roger Key

## *Galeruca tanacetii*

6-11 mm

Can be confused with oil beetles, when the females are laden with eggs. It is distinguished by the time of year as the oil beetle species found in Scotland (violet, short necked and black) are adults from March to June. The heart-shaped 3rd tarsi will also help differentiate this beetle from oil beetles. This beetle is entirely black, with marked elytra.

### Where to look -

Mainly grassland, sometimes on heathlands and other dry open habitats, from June to October. Particularly found around Yarrow, Devil's bit scabious and Common knapweed. Found everywhere in Scotland apart from the Islands, far North and the Borders.



© Jane Bowman

## Lesser striped flea beetle (*Phyllotreta undulata*)

2-3mm

A very small black beetle with a vertical yellow stripe on each wing case.

### Where to look -

Found all year round, near plants in the mustard and cabbage family, such as Garlic mustard and Cuckoo flower and in gardens and allotments. southern Scotland and the East coast up to Nairn.



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## *Luperus longicornis*

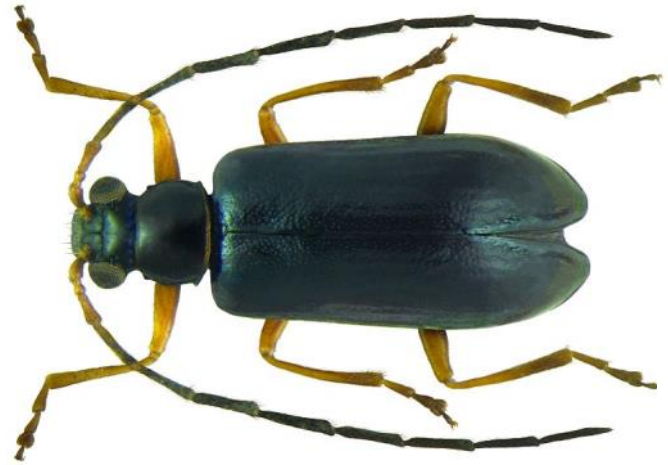
4-5mm

This beetle has very long antennae, the first four segments of which are paler than the rest which are black.

The main body of the beetle is black or dark brown, whereas the legs are brown, of a similar colour to the paler antenna segments.

### Where to look -

Feeding on birch and willow in wet habitats, including wet woodlands and heathlands. Found in the Highlands, West and Southern Scotland.



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## Thistle tortoise beetle (*Cassida rubignosa*)

6-8mm

Tortoise beetles have a very characteristic shape with short antennae and a flattened body with a lip running around. The Thistle tortoise beetle is mostly green with a dark triangle mark on the elytra around the scutellum. Sometimes with other small marks across the exoskeleton.

### Where to look -

Found in habitats with plants in the daisy family, particularly thistles. Found in Eastern, Central and Southern Scotland.



© Claudia Watts

## Pale tortoise beetle (*Cassida flaveola*)

4-6mm

A typical tortoise beetle shape with an almost translucent lip running around the edge. Pale brown or yellowish beetle often with dark spots on the wing cases.

### Where to look -

Found on Pinks, Stitchworts and other plants in the Caryophyllaceae family all year round, over Central Highlands, East, Central and Southern Scotland.



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## Reed Beetles (*Plateaumaris discolor/sericea*)

These reed beetles occur in a variety of metallic colours, where *P. discolor* has a roughly sculptured line running down its thorax, *P. sericea* has a well defined line running down the thorax.

**Where to look** - commonly found across all of Scotland between March and December with a population peak in June. *P. discolor* is found in wetlands such as bogs, particularly associated with sedges. *P. sericea* however is found in distinctly non-acidic wetland sites where it is often seen on emergent vegetation.

*Plateaumaris discolor*



6-9mm

© Roger Key

*Plateaumaris sericea*



7-10mm

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## Reed Beetle (*Donacia simplex*)

7-8mm

This reed beetle is likely to be the most commonly found *Donacia* species across the UK. Its elytra are a metallic copper but silver underneath.

**Where to look** -

Found in the Western Isles and from the Central Belt and into Southern Scotland. These beetles are seen between March and November, particularly in waterside vegetation, such as Bur-reed.



© Nigel Jones

## Green dock beetle (*Gastrophysa viridula*)

4-8mm

A metallic green and sometimes, gold, bronze (and very rarely blue) beetle, females of this leaf beetle can have an extremely large swollen abdomen when heavily laden with eggs, as shown in the photo.

**Where to look** -

Found across Scotland year round. Look particularly in habitats containing Dock and sorrel plants as this beetle specialises on those plants.



© Andrew Whitehouse

## Four-spotted leaf beetle (*Clytra quadripunctata*)

7-11mm

A black thorax, orange wing cases with 2 large spots and 2 smaller spots nearer the pronotum. Particularly hairy on the underside of the abdomen

### Where to look -

A nationally scarce beetle that is found in the Cairngorms, particularly in woodlands near wood ant nests. The adults can be found on Oak, Birch, Hawthorn and Willow. But can also be found on flowers, leaves and bracken. Found from April to December.



© Roger Key

## Black birch pot beetle (*Cryptocephalus labiatus*)

2-3mm

A shiny black beetle with yellowish legs that can be partially dark brown or black, and long antennae.

### Where to look -

Common and widespread species found in most habitats, particularly on Birch and other trees. Found from March to November



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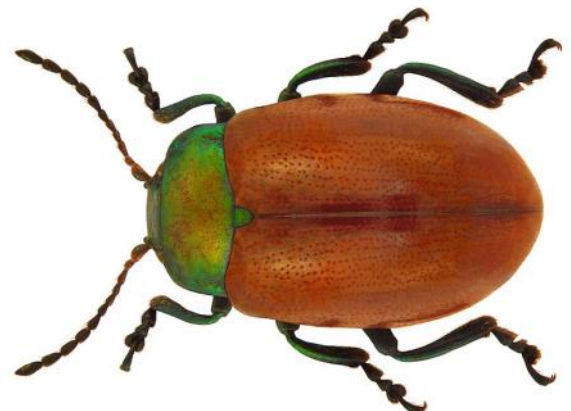
## Knotgrass leaf beetle (*Chrysolina polita*)

6-9mm

A metallic green thorax and scutellum, with metallic red/chestnut elytra and greenish-black legs.

### Where to look -

Found mostly on mint plants in various habitats from gardens to wetlands. All year round but particularly from May to July.



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## Leaf beetle larvae

Leaf beetle larvae often have specific food plants they are associated with, and they often feed on the same plants as adults, making it essential to note down the plant species you find them on.

Leaf beetle larvae have three thoracic segments each with a pair of legs ending in a claw. The abdomen has ten segments, the last of which is always narrow, and sometimes extended.



Leaf beetle larvae © Roger Key

## Leaf beetle facts

- There are an estimated 40,000 leaf beetles of 2,500 genera worldwide!
- Leaf beetles can live 2 or more years.
- Although it looks like leaf beetles have 4 tarsal segments on each foot they actually have 5.
- Leaf beetles are often highly specialised to their host plants.



*Cryptocephalus hypocharidis* © Ben Hamers

## Resources

- **Buglife** - [www.buglife.org.uk](http://www.buglife.org.uk)
- **Field Studies Council** produces a series of fold out guides and more in depth AIDGAP keys to leaf beetle families. [www.field-studies-council.org](http://www.field-studies-council.org)
- Pelagic Publishing - **Leaf Beetles, Naturalists handbooks 34**, by D Hubble (2017)
- Pisces Publications - **Atlas of the Seed and Leaf Beetles of Britain and Ireland**, by ML Cox (2007)
- **UK Beetles** [www.ukbeetles.co.uk/chrysomelidae](http://www.ukbeetles.co.uk/chrysomelidae)
- **Leaf Beetle Recording Scheme**  
[www.coleoptera.org.uk/chrysomelidae/home](http://www.coleoptera.org.uk/chrysomelidae/home)



Ten-spotted pot beetle © Roger Key





