

Woodlouse spiders

(*Dysdera* species)



Advancing Arachnology

Tylen Berry



Woodlouse spider (*Dysdera crocata*) tackling a woodlouse

Known for their impressive, long, curved fangs and diet of woodlice, our two species of these distinctive, orange-coloured spiders with a tubular abdomen are also known as 'baked bean' spiders.



Tylian Berry

The Woodlouse spider's enlarged, pincer-like jaws



Helen Smith

A 'township' of Woodlouse spider cells. Inset a female in residence.

How to recognise Woodlouse spiders

Their distinctive shape, colour and lack of pattern, together with large, conspicuous, forward-facing jaws (chelicerae) make these species easy to recognise. When the jaws move apart the long, deep red, pincer-like fangs extend forwards, giving the spider a formidable appearance. Apart from a small difference in size, the two British Woodlouse spiders look very similar. They differ in the number of spines on their legs and features of the male palps; females in these species have no obvious epigyne (see Factsheet 1).

Woodlouse spiders are slow-moving, short-sighted, largely nocturnal hunters – they don't use webs for prey capture. When inactive during the day, they're usually found inside oval white silk cells attached to surfaces under stones or wood.

Within these, they moult and build their egg sacs. Most spider species have eight eyes but the Woodlouse spiders have just six, arranged in a semi-circle. They share this feature with Tube spiders (see Factsheet 9, britishspiders.org.uk/factsheets).

Specialist predators

Very few spider species prey on woodlice; they find them distasteful and have difficulty penetrating their tough armoured plates. Woodlice spiders are beautifully adapted to exploit this abundant food source. Not only do they find woodlice palatable, but they are also able to bite into them by using one of their long fangs to spear the softer underside while the other exerts a pincer-like grip around the armoured upper surface (see front page). These spiders tackle Pill woodlice (*Armadillidium* species), which defend themselves by rolling into a tight, armoured

FACT FILE

Woodlouse spiders (*Dysdera* species)

Body length:

Dysdera crocata
Males, 9-10 mm; females, 11-15 mm

Dysdera erythrina
Males, 7-8 mm; females, 9-10 mm

Appearance:

- Cephalothorax (front section of the body) – Deep red-brown.
- Abdomen (back section) – Unpatterned, usually varying from orangey-

beige to grey but occasionally dark red.

- Legs – Colour similar to the cephalothorax.

Although the males and females are generally very similar, the front pair of legs is markedly longer in adult males of both species. Short, stout spines on the legs can help distinguish the two species (see the book *Britain's Spiders* – details below).

Habitat: Both species are found where woodlice are abundant – for example under logs, tree bark and rubble. *Dysdera crocata* is often found in or near buildings, including in cellars and kitchens, as well as in coastal habitats, gardens and waste ground. *Dysdera erythrina* is more commonly found in permanent grasslands and ancient woodlands.



Josh Phangurha

A courting pair



Josh Phangurha

Female guarding her eggs in a silk cell

ball, by inserting a fang between the armoured plates. Although it's often said that the fangs are used to penetrate woodlouse armour, there is no evidence for this.

The length and strength of the Woodlouse spider's fangs also puts them among the very few of Britain's around 680 spider species that can nip through our skin. They should be handled carefully although their bite, while briefly painful, is not dangerous.

Life cycle

The Woodlouse spider's formidable jaws are important in courtship as well as in prey capture. Both sexes use them during a complex display, which sometimes includes the male bracing his inside those of the female, possibly so that she cannot attack him during mating. The female lays a cluster of around 60 yellow eggs within her own much stronger silk cell. These hatch after 3-4 weeks but it's another month before the mother tears open the egg sac to release the

tiny spiderlings. They take around 18 months to become adult and can then live another 2-3 years. Adults of both Woodlouse spider species are present throughout the year but the numbers of *Dysdera crocata* peak in May and June. *Dysdera erythrina* adults also show an early summer peak but have a second, larger, one in early autumn.

Less formidable relatives

In the same family as *Dysdera* there are two species of *Harpactea*. One is extremely rare but the other, *Harpactea hombergi*, is common and widespread, though patchily distributed in northern Britain. Similar in shape to *Dysdera*, though much less like a baked bean, it's slightly smaller, with a thinner abdomen, dark-banded legs and less conspicuous jaws. This species shares *Dysdera's* nocturnal hunting habit and is often found in the same habitats; their silk cells may be found attached to the same surfaces.



Geoff Oxford



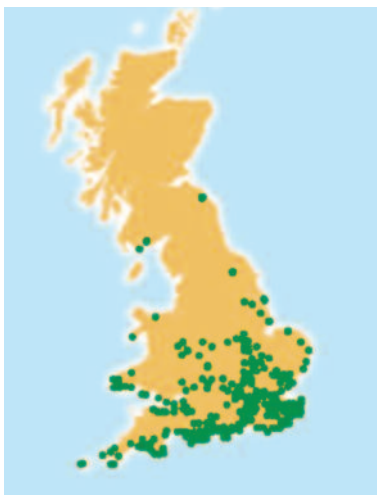
Alan Cann

Dysdera crocata, above, and *Harpactea hombergi* - a small relative of *Dysdera* - right, shown at roughly the same scale



Based on Spider Recording Scheme data 2022

Dysdera crocata in Britain



Based on Spider Recording Scheme data 2022

Dysdera erythrina in Britain

Where are they?

Dysdera crocata is common and quite widely distributed in Britain, although it is absent from much of Scotland and the uplands of Wales and northern England. *Dysdera erythrina* is less common, and largely restricted to southern and eastern Britain, although with scattered records elsewhere.

On heathlands and coastal grasslands, it can be more common than *Dysdera crocata*, particularly where it occurs with high densities of Yellow Meadow Ants *Lasius flavus*. This association may be related to high densities of a species of woodlouse that is found exclusively in ant nests.

For more information

britishspiders.org.uk/srs_Dysdera_crocata

britishspiders.org.uk/srs_Dysdera_erythrina

britishspiders.org.uk/srs_Harpactea_hombergi

Bee, L., Oxford, G. & Smith, H. (2020) *Britain's Spiders*. 2nd edn. Princeton, WILDGuides.

The British Arachnological Society

The BAS is Britain's only charity devoted exclusively to spiders and their relatives. We use science and education to advance the wider understanding and appreciation of arachnids, and to promote their conservation.

Find us at: www.britishspiders.org.uk, on **Twitter @BritishSpiders** and on **YouTube at [youtube.com/c/BritishArachnologicalSociety](https://www.youtube.com/c/BritishArachnologicalSociety)**

Registered Charity - England and Wales No. 1185594, Scotland No. SC050006

