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Identification of Drassodes cupreus and D. lapidosus

These two species closely resemble each other and until fairly recently were treated as sub-species of *Drassodes lapidosus*. They are among the most widespread and common species of ground spiders in Britain but distinguishing them requires care.

Males

Probably the most useful distinction between males of the two species lies in the dentition of the chelicerae. In *Drassodes cupreus* there are two large, well separated teeth on the cheliceral retromargin while in *D. lapidosus* there are a pair of very small, closely-placed teeth near the base of the cheliceral retromargin.



Male chelicerae of Drassodes lapidosus and D. cupreus. Arrows show cheliceral dentition.

When viewed laterally, the palpal organs of both species are closely similar and any small differences in the form of the tibial apophysis of the two species are difficult to discern. Males of the two species are more easily distinguished when the palps are viewed ventrally. The cymbium of *Drassodes lapidosus* is longer than that of *D. cupreus*, with the distal portion longer than or at least the same length as the alveolus of the tegulum while in *D. cupreus* it is shorter than the alveolus. The embolus of *D. lapidosus* is straighter and somewhat shorter than that of *D. cupreus* although it is necessary to have both species side by side to appreciate the differences.



Palps of *Drassodes lapidosus* (left) and *D. cupreus* viewed ventrally. Arrows indicate the embolus. Note relative proportion of the length of the distal part of the cymbium to that of the tegulum.

Females

The epigynes of both species are somewhat variable and it is always important to compare those of isolated females with reliably identified voucher specimens. Diagnostic features include firstly the relative width of the two pairs of spermathecae which are visible in the uncleared epigyne. In *Drassodes lapidosus* the width across the anterior pair is smaller than that across the posterior pair while the reverse is the case in *D. cupreus*. Secondly, in *D. lapidosus* the width of the posterior part of the central tongue-like process is greater relative to the total width of the epigyne than is the case in *D. cupreus*.



Epigynes of *Drassodes lapidosus* and *D. cupreus* viewed ventrally. Abbreviations: AS = anterior spermathecae, PS = posterior spermathecae, CT = central tongue-like process.

Appreviations: AS = anterior spermatnecae, PS = posterior spermatnecae, CT = central tongue-like proc

Habitats

Drassodes cupreus is found fairly commonly throughout Britain. It has one of the widest semi-natural habitat spectra of any ground active-spider being found with almost equal frequency in grasslands, heathland, moorland, wetlands and open habitats in woodlands, as well as many different coastal habitats. *Drassodes lapidosus* is by contrast much more common in the southern half of the country, with a patchy and very scattered distribution from Northumberland northwards. It is generally found under stones in dry habitats and is often synanthropic, occurring around buildings, in gardens and post-industrial sites. It is also often frequent on coastal shingle and sand-dunes from which almost a quarter of records in the SRS database are taken.

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