Identification of *Philodromus praedatus*

Like many other species *Philodromus* praedatus and *P. aureolus* show variability both in general appearance and in details of genitalia, especially in the degree of sclerotisation. However both species usually have a reasonably consistent appearance in life and once one is familiar with both species in the field, it is possible to <u>provisionally</u> determine them with some degree of certainty. However no species of *Philodromus* in the *aureolus* group should be recorded without the confirmation of voucher specimens examined by microscope, and in the case of females examination of the epigyne dorsally after dissection is usually necessary for absolute determination of *P. praedatus* (and *P. longipalpis*).

In ecological terms *Philodromus praedatus* is usually found on the lower branches of large oak trees in open situations, in woodland clearings, rides, hedgerows, etc whereas *P. aureolus* is more often found on scrub, young oaks, gorse etc.

Females, which present the greatest difficulty in identification

Females of *P. praedatus* have an overall lighter appearance than *P. aureolus* females. In particular the homogeneous dark brown lateral carapace bands found in *P. aureolus* are absent, except sometimes for small dark areas at the extreme rear of the carapace sides. Instead the lateral sides of the carapace are heavily mottled in white or light yellow giving the whole carapace a light coloration. **If you have a** *Philodromus* **with dark unmottled lateral carapace bands, then it is not** *P. praedatus***.**

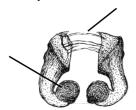
In *P. praedatus* the dark brown sagittate mark on the abdomen does not normally reach the second pair of impressed dots, and chevrons are usually absent or faint. However individuals do occur where the sagittate mark does extend to the second pair of dots and the chevrons are more clearly defined.

Unfortunately the colour markings may be much less clearly defined after the specimens have been stored in alcohol and they would probably be lost altogether after some years.

Like other females of the *aureolus* group the epigyne and vulva can show considerable variation in overall appearance and sclerotisation and this can make determination from the front somewhat unreliable. Also characters can be obscured or appear misleading due to plug matter and debris. However if the epigyne is removed and examined from behind the genitalia are characteristic.

Philodromus praedatus

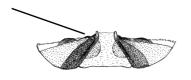
The legs of P. praedatus females are more clearly annulated than those of *P. aureolus* females. All 4 pairs of legs are pale except for dark brown annulations at the distal ends of all the femora and at both ends of tibiae I-III. The patellae may also be darkened distally or at both ends. There is darkening at the distal ends of the metatarsi and at both ends of the tarsi. In *P. praedatus* the copulation ducts are curved outwards posteriorly to more or less enclose the spermathecae. If viewed laterally or posteriorly the spermathecae can be seen to be at more or less the same level as the ducts. Anteriorly the copulation ducts are broad and funnel shaped and when the epigyne is viewed ventrally the posterior part of the funnel can usually be seen projecting underneath into the epigynal channel. In all the specimens that I have examined there have been chitinous ridges crossing the anterior end of the vulva and these are usually visible when the epigyne is viewed ventrally.





female genitalia, dorsal view (left); lateral view (right)



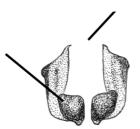


Epigyne, ventral view (left); genitalia, posterior view (right)

P. aureolus

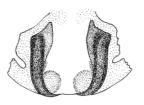
In contrast the leg segments of *P. aureolus* females are brownish with a gradual darkening distally which does not amount to an annulated appearance. The difference is particularly noticeable when the femora of the first two pairs of legs are compared.

Viewed ventrally without dissection the epigyne of *P. aureolus* can be very variable and superficially resemble *P. praedatus*. In *P. aureolus* the copulation ducts are relatively straight and the spermathecae are positioned dorsally to the ducts. Although the copulation ducts broaden they do not appear funnel shaped. Each duct narrows to a forward projection which may curve inwards anteriorly. There are normally no chitinous ridges across the anterior end of the epigyne.





female genitalia, dorsal view (left); lateral view (right)





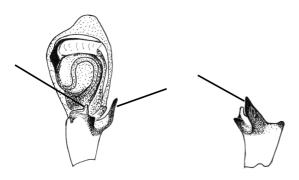
Epigyne, ventral view (left); genitalia, posterior view (right)

Identification of Philodromus praedatus

Males

Philodromus praedatus

Identification of male *Philodromus praedatus* should be straightforward by examination of the ventral and retrolateral apophyses of the palp, which are very clearly distinct with careful examination at different angles.



Male palp, ventral view (left); palpal tibia, mesal view (right) Male palp, ventral view (left); palpal tibia, mesal view (right)

The carapace and abdomen of the male *P. praedatus* is covered with pale yellow or brown hairs, masking the iridescence to be seen on the almost black P. aureolus males.

P. aureolus





The carapace and abdomen of the male P. aureolus is usually iridescent black. Some males of P. aureolus are rather larger than those of *P. praedatus* but this does not seem to be a constant feature.

Author Peter Harvey