## Identification of Tetragnatha extensa and Tetragnatha pinicola

These two *Tetragnatha* species can be distinguished from all other British representatives of the genus by the light central mark on the sternum. Although they normally differ markedly in size, with males of *T. extensa* being almost twice the length of *T. pinicola*, occasionally very small specimens of *T. extensa* may superficially resemble those of *T. pinicola*. Generally speaking, *T. pinicola* has a more markedly metallic silver dorsal surface to the abdomen than *T. extensa*, although sometimes small specimens of the latter also show this feature.

In males, careful attention should be paid to the tip of the conductor and to the terminal part of the embolus, which lies in a shallow groove in the conductor. It is important to ensure that these structures are viewed in lateral orientation and to note that in all *Tetragnatha* species the palp is often rotated in preserved specimens. The tip of the conductor in both species is semi-translucent (Figs. 1a and 1b). In *T. extensa*, the tip of the conductor is large, leaf-shaped and has a pointed tip (Fig. 1a). By contrast, in *T. pinicola* the tip of the conductor is small, blunt-ended and curves strongly towards the tip of the cymbium (Fig.1b). The tip of the embolus is much straighter than that of *T. extensa*, although often difficult to discern in the fold of the conductor.



Figure 1A. Male palp of *T. extensa,* lateral view, 1B. Male palp of *T. pinicola*, lateral view. TC = tip of conductor, TE = tip of embolus

Distinguishing females of these two species requires particular care as, in common with those of all tetragnathids, they lack a clear external epigyne. In normal specimens, the epigynal area anterior to the epigastric fold in *T. extensa* is extensively darkly pigmented and in some specimens at least, the outline of the spermathecae can be detected through the cuticle (Figure 2A). In *T. pinicola*, however, this dark pigmentation is normally absent and the epigynal area lacks any very distinctive features (Figure 2B).



Figure 2A. Female epigyne of *T. extensa*. 2B. Female epigyne of *T. pinicola*.

In some specimens, these differences may not always be clear. A very useful additional character is the ratio of femur I width to femur III length. In *T. extensa* this is always greater than 0.20 while in *T. pinicola* it is always less than 0.176.

**Habitats**. *T. extensa* occurs in a very wide range of habitats throughout Britain. Although most common in wetlands of various types, it has also been recorded from woodlands, grasslands of different types, shingle, saltmarshes, sand dunes and heathlands as well as gardens and post-industrial sites. *T. pinicola* is largely restricted to the southern half of Britain. Around a third of all records come from woodlands (often lightly wooded areas) but also from various grassland types, moorland and heathland.

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