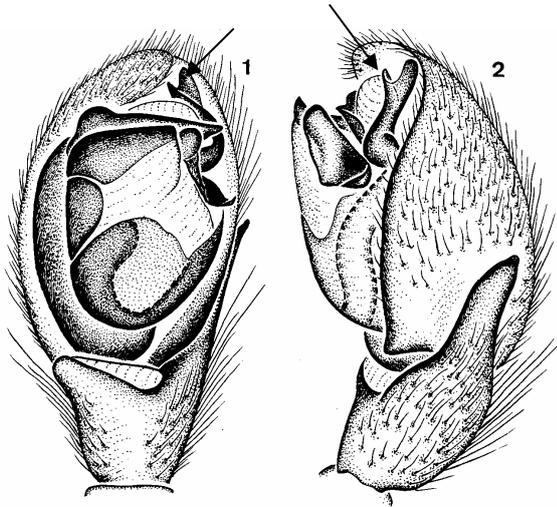
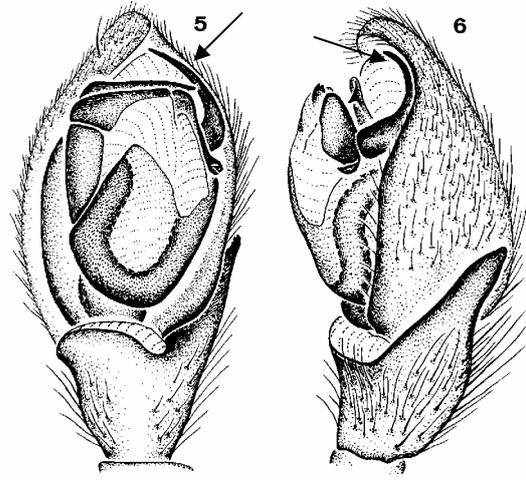


Identification of *Zelotes apricorum* and *Z. subterraneus*

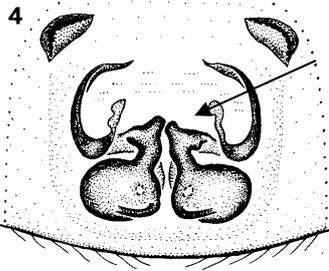
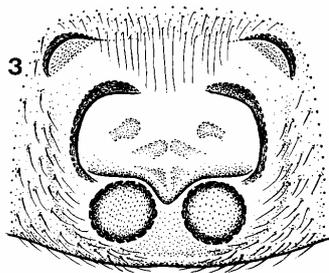
These are the only two *Zelotes* species in the British fauna that are likely to be confused. Males can be distinguished with little difficulty by reference to the tip of the embolus. Although this can be seen in both ventral and ecto-lateral view, in practice it is best seen if the palp is rotated approximately 45° away from the horizontal and viewed from slightly anteriorly. Although this is easier if the palp is dissected from the cephalothorax it is not normally essential to do so. In *Z. apricorum*, the tip of the embolus has a prominent flange ventrally near the tip which is clearly rounded. This gives the end of the embolus a Y-shaped appearance (Figs. 1 & 2). By contrast, in *Z. subterraneus* has no flange and is smoothly curved and tapered towards the tip, giving it a characteristic sickle-shaped appearance (Figs. 5 & 6).



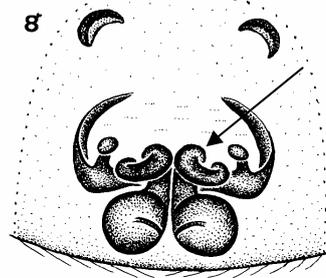
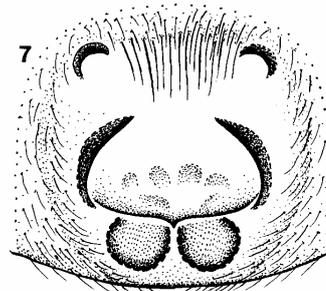
Zelotes apricorum
Male palp ventral and ecto-lateral



Zelotes subterraneus
Male palp ventral and ecto-lateral



Zelotes apricorum. 3. Epigyne ventral,
4. Epigyne dorsal.



Zelotes subterraneus. 7. Epigyne ventral,
8. Epigyne dorsal.

Females of the two species, by contrast, are very much more difficult to distinguish and the only reliable characters are the internal ducts of the dissected epigyne. In the dorsal aspect of the epigyne of *Z. apricorum*, the median epigynal ducts are simple and unlooped (Fig. 4). In *Z. subterraneus*, there is a clear additional loop in these ducts (Fig. 8). It should be noted that the appearance of the external epigyne varies in both species and cannot be used to reliably distinguish them.

An additional complication with these species is that, in some coastal populations, there is evidence for hybridisation between the two species, with some specimens showing characters intermediate between those illustrated here (Murphy & Platnick, 1986). However, out of a series of 93 specimens examined by these authors, only 25% showed clear signs of introgression between the species.

Habitats. *Zelotes apricorum* has a very wide range of habitats in Britain, but prefers warm, relatively dry situations. It is found in both calcareous and acid grasslands, coastal shingle (where it is often abundant), heathland and even open woodland. It is virtually absent from the mountains of Scotland and in northern England is almost confined to the western side of the central pennines (Harvey *et al.*, 2002).

Z. subterraneus has so far been found in two types of habitat in the UK, under stones on mountains in northern England and central and eastern Scotland and in coastal habitats (most often shingle) in the south-east (see map on p. 328, Harvey *et al.*, *op.cit.*). However, because of the strong possibility that *Z. subterraneus* has been confused with *Z. apricorum* in the past, it is possible that it will eventually be found to occur in a wider range of habitats.

Figures are from Murphy & Platnick (1986).

References

- Harvey, P.R., Nellist, D.R. & Telfer, M.G. (eds) 2002. *Provisional atlas of British spiders (Arachnida, Araneae)*, Volumes 1 & 2. Huntingdon: Biological Records Centre.
- Murphy, J.A. & Platnick, N.I. 1986. On *Zelotes subterraneus* in Britain (Araneae, Gnaphosidae). *Bull. Br. arachnol. Soc.* **7**: 97-100.

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