

Identification of *Neon robustus* and *Neon reticulatus*

Neon robustus Lohmander, 1945 was first discovered in Britain in Edinburgh in 1997 (Snazell *et al.*, 1999). Subsequently it has been found to be quite widespread in Britain, from the Isle of Skye in the north to Portland on the south coast but with a majority of records from the western half of Britain. *Neon robustus* is very closely related to *N. reticulatus* and particular care is needed in distinguishing the two species.

Identification

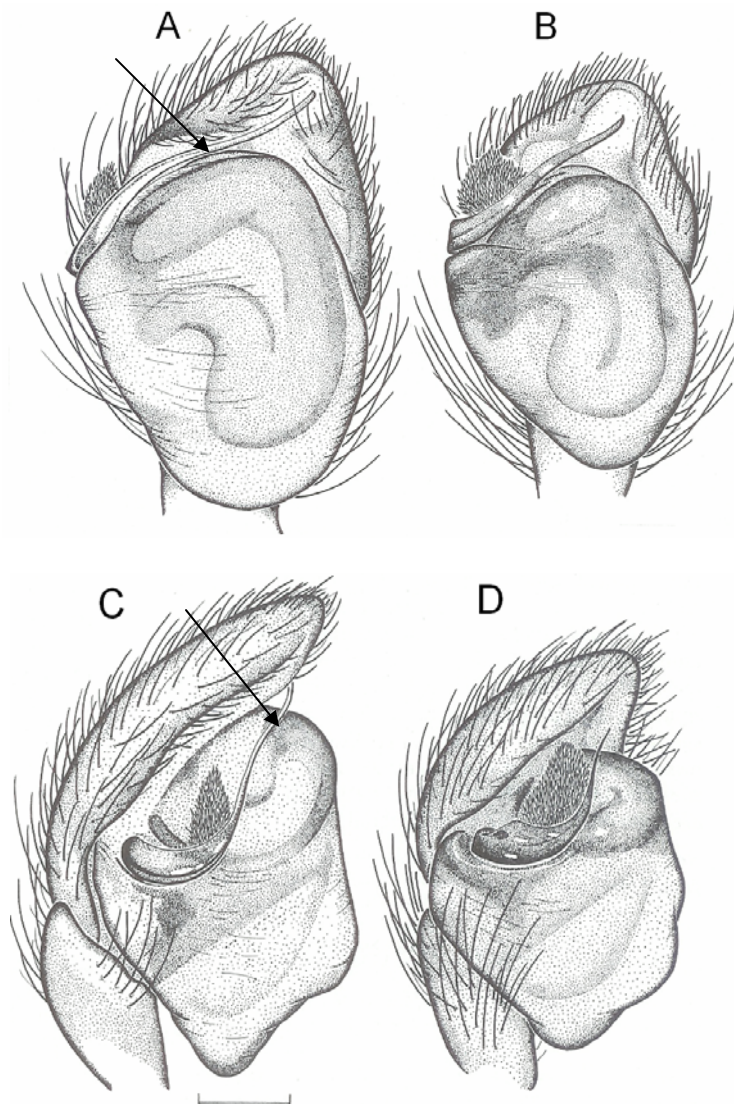


Figure 1. Male palp of A) *Neon robustus* in ventral view and C) in mesal view. Male palp of B) *N. reticulatus* in ventral view and D) in mesal view. Arrows indicate longer embolus in *Neon robustus*.

Both sexes of *Neon robustus* are larger than those of *N. reticulatus*. Snazell *et al.* provide a table of carapace lengths for the two species which suggests that both males and females of *N. robustus* are on average 13% longer than those of *N. reticulatus*. In coloration, *N. robustus* tends to be significantly darker than *N. reticulatus* and the abdomen of males is less hairy in the former species.

Males of *Neon robustus* have a longer embolus than that of *N. reticulatus* when the palp is viewed either ventrally or mesally (Figs. 1A, 1B, 1C, 1D). The spiculate lobe, which lies between the embolus and the margin of the cymbium, is also significantly smaller in *N. robustus* than in *N. reticulatus*.

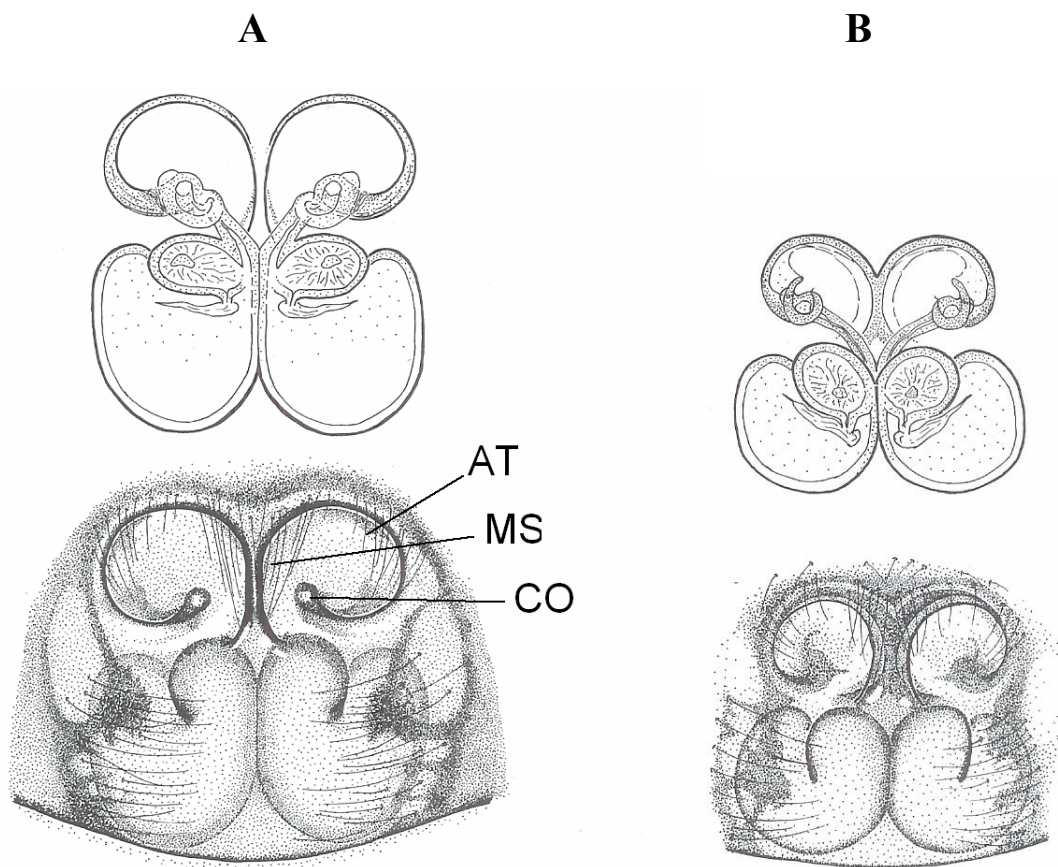


Figure 2. Epigynes of A) *Neon robustus* and B) *N. reticulatus* viewed dorsally (above) and ventrally (below). Key: AT = atrium, MS = median septum, CO = copulatory opening.

Females of *Neon robustus* differ from those *N. reticulatus* in that the median septum between the two atria is much narrower, the atria are larger and more circular and the copulatory openings are broader and more apparent (Fig. 2A). In *Neon reticulatus* there are hook-shaped projections of the vulva visible in the centre of the atria and the band of

sclerotisation around the anterior margin of the atria is much broader than in *N. robustus* (Fig. 2B).

Habitats

Neon robustus is described as a thermophilous species, occurring in open rocky situations, often south facing. In Britain it has been found on rocky scree inland and on rocky cliffs and shingle on the coast. In Sweden it is quite common on stone walls. By contrast, the much more widespread *N. reticulatus* occurs both in leaf litter in woodland and in moss in open, damp boggy ground. It has also been recorded from beneath bracken, in grassland and on a beach (Harvey *et al.*, 2002). Although *N. robustus* currently appear to be very much less common and with a more restricted distribution than *N. reticulatus*, the possibility of the two species being confused in the past may mean that it has been under-recorded.

Acknowledgements

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References

Snazell, R., Jonsson, L.J. & Stewart, J.A. 1999. *Neon robustus* Lohmander (Araneae: Salticidae), a fennoscandian spider found in Scotland and Ireland. *Bull. Br. arachnol. Soc.* 11: 251-254.

Harvey, P.R., Nellist, D.R. & Telfer, M.G. (2002) *The Provisional atlas of British spiders*. Biological Records Centre, on behalf of British Arachnological Society and JNCC.

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