Macaroeris nidicolens (Walckenaer, 1802) in Britain (Araneae: Salticidae)

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Summary

Both sexes of *Macaroeris nidicolens* (Walckenaer, 1802) are described from British material, and its habitat and distribution are discussed.

Introduction

The occurrence of *Macaroeris nidicolens* (Walckenaer, 1802) in Britain was first described by Milner (2002) from Mile End Park, London, in May 2002. Further adults and juveniles were found at the same site in June 2002 and in August 2003, so the species seems to be well established. The epigyne is known to be very variable, and as that of the British specimens differs markedly from that shown by Roberts (1995), drawings are provided here of the epigyne and male palp of British specimens. A brief description and notes on variation and distribution are also given. All measurements are in mm.

Macaroeris nidicolens (Walckenaer, 1802) (Figs. 1-5)

Aranea nidicolens Walckenaer, 1802: 246 (descr. δ\$).

Dendryphantes nidicolens: Simon, 1876: 41; 1937: 1214, 1263, figs. 1941–1942 (δ\$); Miller, 1971: 147, pl. 22, figs. 24–25 (δ\$).

Eris nidicolens: Prószyński, 1976: 150, 184, figs. 74, 75, 336–341 (δ\$); Heimer & Nentwig, 1991: 498, fig. 1328.1–4 (δ\$); Roberts, 1995: 191, figs., pl. 12, fig. 7 (δ\$).

Macaroeris nidicolens: Wunderlich, 1992: 519, figs. 848–852 ($\ensuremath{\mathfrak{G}}\xspace$); Metzner, 1999: 43, figs. 9d–e, 10a–l ($\ensuremath{\mathfrak{G}}\xspace$).

For complete list of taxonomic references see Platnick (2003).

Description: Female: Total length 7.5. Carapace length 3.0, width 2.5. Carapace orange-brown, darker around eyes, with scattered black hairs, longer on sides below eyes, and with band of squamose white hairs laterally and in central patch between PLE and longitudinal stripe between AME; pair of smaller patches between PME and PLE. Clypeus covered with long white hairs. Chelicerae dark brown. Sternum dark yellow-brown. Abdomen dorsally pale brown with pattern of white bars and chevrons, and with white band around anterior end, extending laterally. Venter whitish grey with pale broad median longitudinal stripe. Legs brown, with darker annulations on tibiae and metatarsi III-IV. Leg I darker, stout, especially femur and tibia. Tibia I with 3 pairs of short stout ventral spines, tibia II and metatarsi I-II with 2 pairs (Fig. 5). Femora I-II with 2–3 short stout spines distomesally, all femora also with 2-3 longer curved dorsal spines in distal half. All legs covered with numerous fine black hairs and white squamose hairs. Palps yellow-brown. Epigyne (Figs. 3–4): A smooth, longitudinally elongated plate, with a pair of small openings at about mid-point, and an

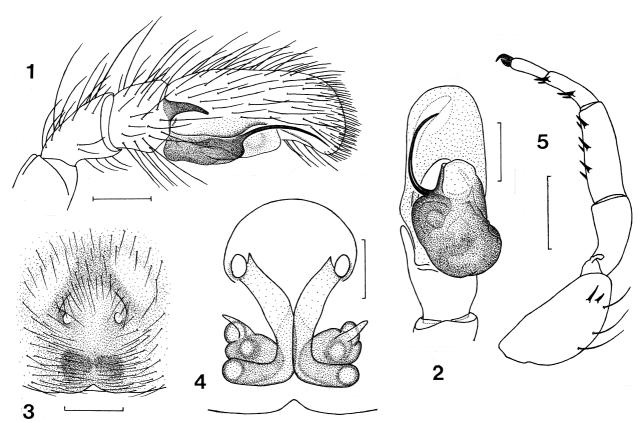


Fig. 1–5: *Macroeris nidicolens*. **1** Right male palp, retrolateral view; **2** Ditto, ventral view, hairs omitted; **3** Epigyne, ventral view; **4** Vulva, dorsal view; **5** Right female leg I, prolateral view, showing spines, fine hairs omitted. Scale lines=0.1 mm (4), 0.2 mm (1–3), 1.0 mm (5).

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obscure semi-circular line anterior to them. Vulva shows wide copulatory ducts converging from lateral openings and convoluted posteriorly. The epigyne is described by Wunderlich (1992: 520, figs. 849–852) as extremely variable. That of the British specimens resembles the "common form" of Wunderlich, whereas that shown by Roberts (1995), with a pronounced transverse furrow joining the openings, is closer to that described by Wunderlich (1992: fig. 852) as a "rare form".

Male: Total length 6.0. Carapace length 2.3, width 2.0. Carapace similar to female, but darker red-brown, with diffuse black patch in centre of cephalic area. Clypeus with fewer white hairs. Abdomen as female, but also with pair of diffuse black blotches near mid-point. Sternum brown. Legs darker than in female, especially I–II. Leg I enlarged, but not as markedly so as in female. Spination as female, but with fewer white squamose hairs. Palp (Figs. 1-2): Dark brown, except distal end of cymbium paler and thickly clothed with short curved pale hairs. Tegulum bulbous, proximally protruding prolaterally, embolus long and smoothly curved. Strong retrolateral tibial apophysis, pointing slightly downwards. Wunderlich (1992) and Metzner (1999) describe some variation in the form of the base of the embolus and of the tegulum, but this is less marked than in the epigyne.

Habitat: The species was found in Britain in 2002 and 2003 in a London park, on Corsican pine (Pinus nigra var. maritima) trees which apparently had been planted in 1998 (Milner, 2002). The habitat is cited by Heimer & Nentwig (1991) as the crowns of coniferous trees, and Roberts (1995) states that it occurs on the branches and trunks of trees. However, Duffey (2003) describes it as occurring in west-central France in a variety of habitats, from hay meadows and roadside vegetation to hedges, garden shrubs and trees. Metzner (1999) also describes the habitat in Greece as variable, from sea level to 1300 m, in dry stands of Pinus, Quercus, Genista and other shrubs. It is possible that the species may become restricted to trees, especially pines, in the more northern parts of its range, where the greater protection provided by this habitat might be important in a more hostile climate.

Distribution: The species is widespread in continental Europe as far north as Belgium and Germany, and as far east as the southern part of European Russia, the Caucasus, SW Turkmenistan and Iran, but it is especially common in the Mediterranean region. It has also been recorded from N. Africa, the Canaries and Madeira. There seems no reason why it should not be able to become established in southern England.

In view of its widespread distribution and considerable variability, there may be some doubt about whether all of its forms are conspecific. Wunderlich (1992) synonymised a number of names with *nidicolens*, but treated the related species *M. cata* (Blackwall, 1867), *M. desertensis* Wunderlich, 1992, *M. diligens* (Blackwall, 1867), *M. litoralis* Wunderlich, 1992 and *M. moebi* (Bösenberg, 1895), all from Madeira and the Canaries, as valid species. It seems likely that other species may exist elsewhere in its range.

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