

The female of *Altella lucida* Simon

P. Merrett

Furzebrook Research Station,
Wareham, Dorset

A single male of *Altella lucida* Simon was taken in a pitfall trap at Mordon Bog National Nature Reserve, Dorset, in April 1971, and the palp of this specimen was figured in Merrett (1971).

A thorough search of the area in April 1972 led to the discovery of two more males and seven females. The first of these males was found on 19 April about 50 m from where the original specimen was taken in 1971, under a small stone in a bare sandy area near the top of a slope, and the first female was found in a similar habitat only a few feet away on 24 April. Despite further searching no more specimens were found there, the other male and six females all being found within an area of about 2 m² lower down the slope near where the traps were placed in 1971. This area consisted of a dry mat of the alga *Zygonium ericetorum* Kutz. in which were embedded large numbers of small stones (2-6 cm across), with scattered small tussocks of *Molinia caerulea* (L.) and plants of *Calluna vulgaris* (L.), and smaller amounts of *Erica tetralix* L. and *E. cinerea* L. The alga and stones comprised about 70-80% of the total area. The coarse sandy soil surface was damp under the mat of alga, and

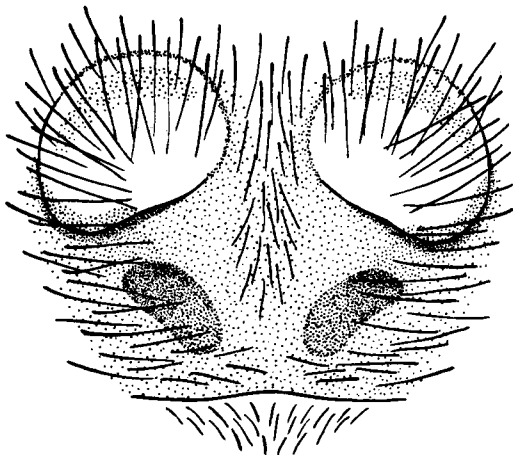


Fig 1: *Altella lucida* Simon. Epigyne.

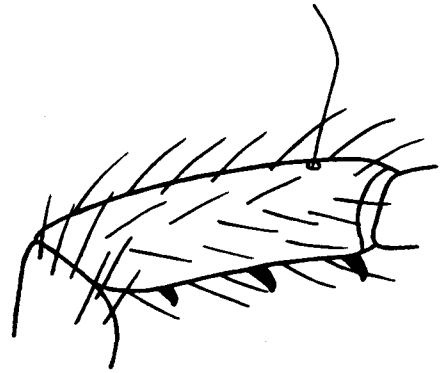


Fig 2: Male metatarsus I, from side.

the *Altella* were found mainly in small cavities in the soil surface under the stones. No webs were seen, and the spiders were observed to run fast when disturbed. Several juveniles, almost certainly of this species, were also observed in this area on 24 April. Further searching in the same type of habitat elsewhere at Mordon Bog N.N.R. failed to provide any evidence of another colony, but on a short return visit to the original colony on 19 May another male and several juveniles were seen.

The female has not previously been described in the British literature. The epigyne is illustrated in Fig. 1. The posterior part consists of a lightly chitinised plate through which the spermathecae and part of the ducts can be seen, while anteriorly there are two large depressions, similar to those of *Argenna*. These depressions are less obvious in young females and were not shown by Wiehle (1953, fig 241) although referred to by Simon (1914). They were figured by Lehtinen (1967). The leg spines differ from those of the male. There is a ventral spine on tibia III, but it is not as strongly developed as in the male. There is also a pair of ventro-lateral spines at about the mid-point of tibia I, these being absent in the male. The males taken at Morden had three single short stout slightly hooked ventral spines on metatarsus I, the basal one being shorter than the other two (Fig 2). The specimen examined by Locket & Millidge (1951) apparently lacked the basal spine. The female lacks these ventral spines, but a single short fine ventro-lateral spine is present in some specimens.

The colouration of the fresh specimens of both sexes is also slightly different from the description given by Locket & Millidge. In the female, the carapace is yellow-brown with darker streaks radiating from the fovea, while the sternum is the same colour as the carapace but with darker margins. The carapace and sternum of the male, and the chelicerae of both sexes, are a darker shade of brown. The abdomen of the female is grey with a slightly darker dorsal median stripe anteriorly, while that of the male is dark grey without a stripe. There may be several fine pale chevrons posteriorly, these being most evident in the male. The whole dorsal surface of the abdomen is covered with short dark hairs and appears iridescent, especially in the male.

The specimens taken in 1972 were measured, their size range being as follows:—♀: carapace length

0.65-0.7 mm; total length 1.55-1.75 mm. ♂: carapace length 0.6 mm; total length 1.35 mm.

References

LEHTINEN, P. T. 1967: Classification of the Cribellate spiders and some allied families, with notes on the evolution of the suborder Araneomorpha. *Ann. Zool. Fenn.* 4, 199-468

LOCKET, G. H. & MILLIDGE, A. F. 1951: *British Spiders* 1, 1-310. Ray Society, London

MERRETT, P. 1971: The rediscovery of *Altella lucida* Simon in Britain. *Bull. Brit. Arach. Soc.* 2, 39

SIMON, E. 1914: *Les Arachnides de France* 6, (1), 1-308. Paris

WIEHLE, H. 1953: Spinnentiere oder Arachnoidea (Araneae). IX: Orthognatha-Cribellatae-Haplogynae Entelegynae. *Tierwelt Dtl.* 42, 1-50

Nomenclature for Orb Web Thread Connections

Robert R. Jackson

Division of Research,
North Carolina Department of Mental Health,
Raleigh, North Carolina 27602 USA¹

Introduction

The orb web of a spider such as *Araneus diadematus* Clerck consists of an array of silken threads, in which there are over a thousand distinct points where these threads are fastened together. In the course of a study of thread connection fine structure (Jackson, 1971), a convenient nomenclature was devised with which it is possible to exactly identify each thread connection within the web. This nomenclature is potentially useful for any study in which precise identification of locations within the web is desired.

Fig. 1 is a schematic diagram of the orb web of *A. diadematus*, showing the various types of thread connections. (See Savory, 1952, for further details on

web structure.) Captive spiders built their webs, from which the diagram was devised, within 51 x 51 x 9 cm aluminium frames with removable glass doors. (See Witt, Reed and Peakall, 1968, for further information on methods for rearing and photography.)

Nomenclature

The following abbreviations are used:

- F Frame thread
- FY Frame Y-structure
- NS Loop of non-sticky spiral (in strengthening zone)
- NS-R Non-sticky spiral to radius connection
- R Radius thread
- R-F Radius to frame connection
- RY Radial Y-structure
- SS-R Sticky spiral to radius connection
- N North (i.e., up)
- S South (i.e., down)
- W West (i.e., the side nearer the aluminium frame)
- E East (i.e., the side farther from the aluminium frame)

Identification of radii - To identify a radius, pick the radius which is most nearly north (or south, east

¹Present address: Department of Zoology, University of California, Berkeley, California 94720 USA.