

Two rare spiders from the Spanish Pyrenees (prov. Huesca)

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Introduction

The spider fauna of the Pyrenees is still poorly known and much of our present knowledge is derived from the collecting expeditions of the late Jacques Denis, who often spent his summer holidays in the Pyrénées-Orientales with occasional visits to other areas. His numerous publications span thirty years from 1932-62 and nearly all appeared in *Bull.Soc.Hist.nat.Toulouse*, *Bull.Soc.ent.Fr.*, *Annls Spéléol.* and *Vie Milieu*.

In June 1972 Dr E. Balcells, Director of the Centro Pirenaico de Biología Experimental at Jaca (Huesca), invited E. D. to make a study of the spider fauna of the region. Since that year several further visits have been made to the same area and work is in progress on the collections made. This paper reports on two species, *Leptoneta paroculus* Simon and *Oonops procerus* Simon, identified by P. M. B. and for which there are few known records.

Family Leptonetidae

Leptoneta paroculus Simon, 1907 (Figs. 3-5)

This species was first described (Simon, 1907) from a specimen taken in a cave near Fanlo (Huesca). Further specimens were taken in other caves in the province and also from Lerida. It can be readily identified from the description of Fage (1913) who predicted that this species would also be found at the entrance to caves or under wet stones. The vulva of *L. paroculus* is illustrated in Fig. 3, the male

palp in Fig. 4 and the male palpal tibia in Fig. 5. In Fig. 6 the male palpal tibia of *L. infuscata* is shown for comparison.

Berland (1932) writes that all *Leptoneta* species live in caves and most are found in the Mediterranean region and the Pyrenees. Roewer (1942) lists 19 species of which all but three were described from this area; the three exceptions comprise one species in Japan and two in N. America. Although it has been known for some time that *Leptoneta* species occasionally occur outside caves as well as in the interior, little information is available. Berland (1932) quotes *Leptoneta infuscata* as an example of a spider which lives both inside caves and in moss at the entrance. He also comments that such species live under stones in forests. P. M. B. has found a ♂ and ♀ *L. infuscata* in the collection of the Museum

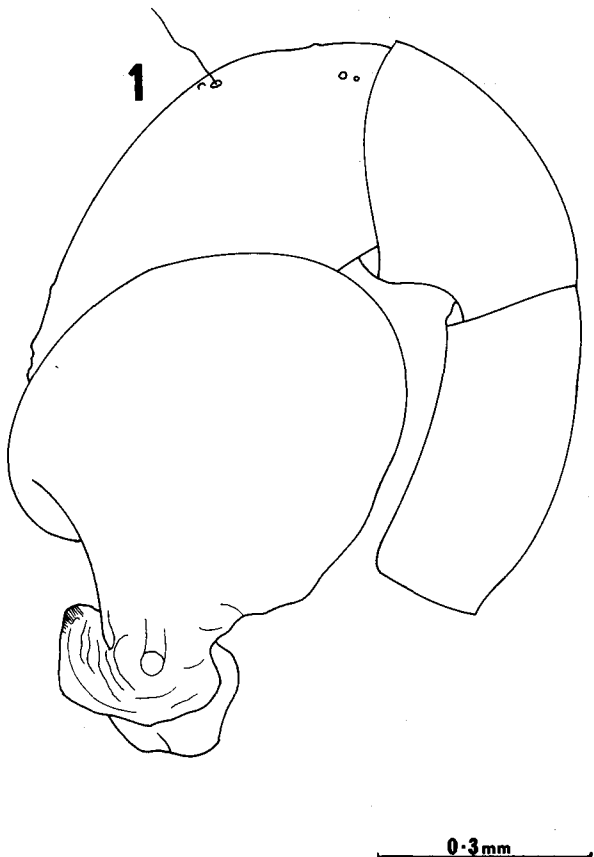


Fig. 1: *Oonops procerus* Simon, 1882. Male palp.

of Verona which were taken in Catalogne, Sierra de Montseny, Santa Fe at 1500 m on 2 May 1967 by G. Osella. Deeleman-Reinhold (1978) described this phenomenon in some detail for the cave-dwelling genus *Troglohyphantes*, which is well represented in the cave system of southern and eastern Europe. She described subterranean habitats outside caves (hollows under stones, burrows, deep crevices, etc.) as "microcaverns" and commented that most *Troglohyphantes* species are either found in such places or are confined to caves – few are found in both.

Leptoneta paroculus appears to be a species which occurs both in caves and in subterranean habitats elsewhere. All the specimens of *L. paroculus* taken by E. D. (who did not collect in caves) were taken in the Anso Valley west of Jaca, in beech forest at about 1500 m. Males, females and immatures were obtained on 10 June 1973 and females and immatures on 21 September 1974. The locality was a beech forest on the steep slope of the river valley about 50 m above the public road and north of the town of Anso. The ground was moist on each occasion and a fairly thick layer of dead leaves and humus covered the forest floor. Beneath this layer were large stones and the specimens of *Leptoneta paroculus* were found in the cavities beneath them. Although not abundant, adults and immatures were taken in all places where searches were made.

Family Oonopidae

Oonops procerus Simon, 1882 (Figs. 1-2)

This species has been recorded on very few occasions and only from France (Pyrénées-Orientales). It can be identified from the description in de Dalmas (1916). The bulbus of the male palp (Fig. 1) is peculiar and very different in structure from that of the type-species *O. pulcher* Templeton, which has a long thread-like embolus (absent in *O. procerus*) surrounded at the base by some small laminae. The best recent illustrations of *O. pulcher* (Bristowe, 1948; Locket & Millidge, 1951; Wiehle, 1953; Kekenbosch, 1955) all show apparently the same species, but many poorly known European species such as *tubulatus*, *rusticulus* and *placidus*

(all described by de Dalmas, 1916) have a bulbus more or less of the same kind. P. M. B. believes that the correctness of many European records of *pulcher* is open to doubt.

The vulva of *O. procerus* (Fig. 2) also shows considerable differences compared with the type-species. There are two "anchoring grooves" on the surface of the epigyne, structures which could have the same function as similar grooves found in other families, e.g. Scytodidae (gen. *Scytodes*), Tetrablemmidae (gen. *Tetrablemma*), Pholcidae (gen. *Smeringopus*, *Crossopriza*). The vulva of *O. pulcher* (Machado, 1941) is much simpler than that of *O. procerus*, the former having globular spermathecae

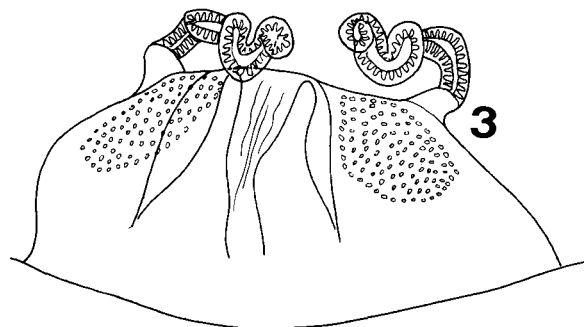
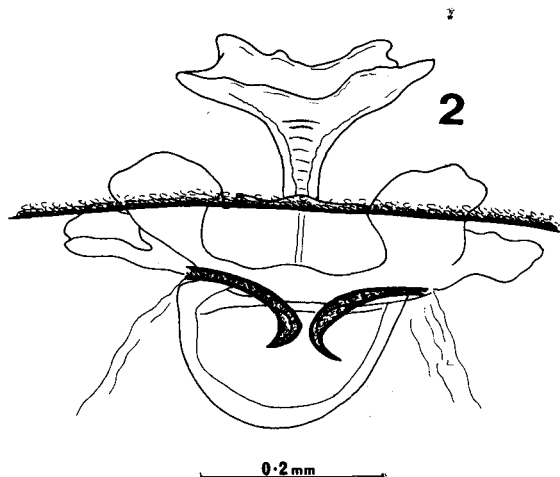


Fig. 2: *Oonops procerus* Simon, 1882. Vulva from outside, showing the two superficial "anchoring grooves".

Fig. 3: *Leptoneta paroculus* Simon, 1907. Vulva from outside.

while in the latter they are "T"-shaped and similar to many Dysderidae (e.g. *Harpactea*).

The genus *Oonops* must now be regarded as very heterogeneous and it seems likely that few non-European species are closely related to the type-species *O. pulcher*.

Although *O. procerus* was previously regarded as a very rare species it was taken (by E. D.) in considerable numbers at two localities in the Jaca

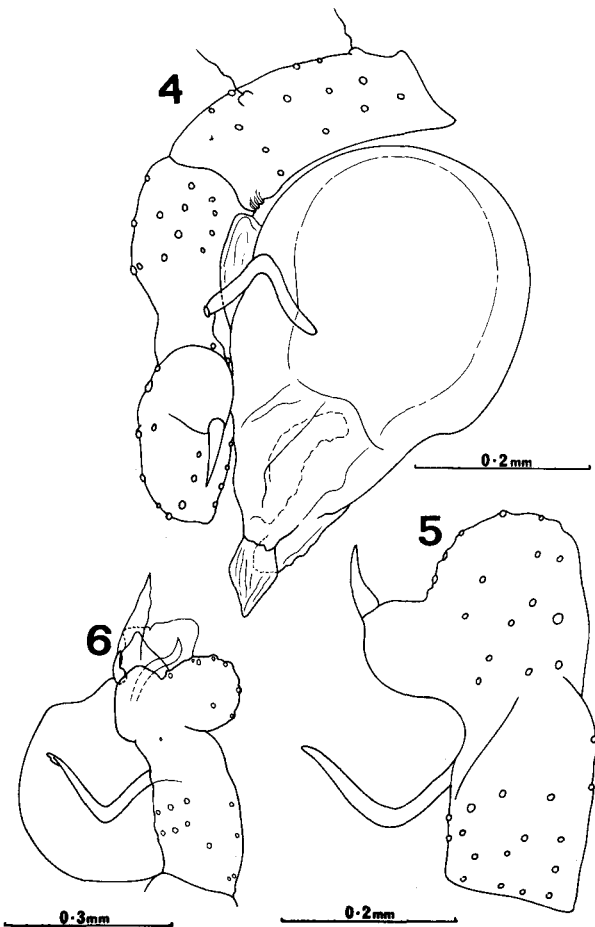
(Huesca) region of Spain and may be present in collections not yet determined. In both cases it occurred in dry scrubby woodland with *Buxus* and small pine. The spiders were shaken from moss, lichen and leaf litter which had been hand-sorted over a sheet. Numerous males, females and immatures were taken. The first locality was at Rodellar in the Sierra de Guara, foothills of the Pyrenees north of the town of Huesca. While walking up the gorge of the Rio Mascòm on 8 June 1973 collections were made under *Buxus* bushes where patches of moss grew on the stony ground beneath the canopy, and in other shady places. The second locality was at Loarre not far from Jaca where, on 19 September 1974, *O. procerus* was shaken from moss and lichens under *Buxus* and small *Pinus* in a fairly extensive open woodland. The vegetation type, in both cases, is extensive in the Jaca region and elsewhere in the low hills on the south side of the Pyrenees, and this suggests that *O. procerus* is probably widespread.

Acknowledgements

Dr E. Balcells provided laboratory accommodation and help in many other ways to E. D. during fieldwork in the Jaca region and we are most grateful to him.

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Figs. 4-5: *Leptoneta paroculus* Simon, 1907. 4 Tibia, tarsus and palp of male, prolateral view; 5 Tarsus of male palp seen from above, showing the lateral apophysis and the "lanière" (sensu Fage, 1913).

Fig. 6: *Leptoneta infuscata* Simon, 1872. Male palp seen from above.

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