

Spiders from Lebanon, III. Some notes on the Pisauridae, Agelenidae and Oxyopidae of the Near East*

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Summary

This paper begins with a review of the Pisauridae, Agelenidae and Oxyopidae known from the Near East (Syria, Lebanon, Iraq, Israel and Jordan). Six species are recorded from Lebanon (illustrated are *Pisaura mirabilis* (Clerck), *Maimuna bovierlapierrei* (Kulczynski), *Coelotes caudatus* de Blauwe, *Tegenaria maronita* Simon and *T. concolor* Simon). *Tegenaria michae* n.sp. female is described (σ unknown).

Introduction

The material described here was collected by myself during an expedition in Lebanon partially supported by the Istituto Nazionale di Entomologia (Rome) in which my friends T. Racheli, M. Rampini and V. Sbordoni also took part.

This paper is a part of a series on the Mediterranean species of the same families, which can be considered, in its entirety, as a tentative revision (or at least a review) of all the South-western Palearctic forms of these groups.

A review of the Near Eastern species

What I call here "Near East" corresponds to Syria, Iraq, Kuwait, Lebanon, Israel, Jordan and the Sinai Peninsula; these states form only in part a natural region: the steppe areas of south-eastern Turkey have much in common with this "Near East" whereas the desert parts of Syria, Jordan and Iraq may possibly be more similar to Arabia. Unfortunately we know so little of this large peninsula that it is impossible to trace a border. This "Near East" is largely very recent geologically; not considering the desert parts, it has a temperate climate, not nearly so arid as might be believed. Man has extensively altered the environment, especially by the destruction of most woods

and by overgrazing. As a whole, ecologically this region has much in common with other parts of the Mediterranean, such as southern Spain, Italy, Greece or Turkey.

Our knowledge of the spiders of the Near East is very limited: we know more about many tropical countries. Practically nothing is known on the spiders of Iraq, Kuwait, Syria and (Trans-)Jordan; most of the spider collections have been made around the better known tourist towns, such as Jerusalem, Jericho, Bethlehem, Nazareth, etc. All papers, with the exception of those by O. Pickard-Cambridge (1872) and Kulczynski (1911) are of moderate or little importance.

The general similarity of the climate with that of the rest of the Mediterranean region readily explains the presence in the Near East of many common species, e.g. *Pisaura mirabilis* (Clerck, 1757), *Oxyopes lineatus* Latreille, 1806 and *O. heterophthalmus* (Latreille, 1804). *P. mirabilis* has been recorded from Lebanon and Israel by Kulczynski (1911), Strand (1914) and Kerville (1926); I note incidentally that with the change of names and borders, it is often difficult to decide to which country a record now belongs (most old authors speak simply of "Syria and Palestine"). *O. lineatus* and *O. heterophthalmus* should live in Lebanon, Israel and Jordan (*lineatus* was named by O. Pickard-Cambridge, 1872, Pavesi, 1895, Strand, 1913 and Kerville, 1926; *heterophthalmus* only by the last three authors). For general distribution, illustrations and comments on these species, see Brignoli, 1977a.

Three common Agelenidae are also known from the region: *Tegenaria parietina* (Fourcroy, 1785) recorded from Beirut by Simon (1884; only synanthropic?); *Agelena orientalis* C. L. Koch, 1841 recorded from Israel and Lebanon (sub *syriaca* – from Syria, no exact locality, see C. L. Koch, 1843: 111 – or *labyrinthica orientalis*) by O. Pickard-Cambridge, 1872, Simon, 1884, Pavesi, 1895, Strand, 1914 (see, for comments, Brignoli, 1976, 1978); *Lycosoides coarctata* (Dufour, 1831) recorded from "Syria" and Israel by O. Pickard-Cambridge, 1872 (sub *puta*) and Kulczynski, 1911.

The remaining species are more or less localized and problematic. *Pisaura consocia* (O. Pickard-Cambridge, 1872), described from the region (as *Dolomedes*) should be quite common (records by

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more or less to a "form" which is also present in Italy (I know it, for instance, from Sardinia, Arbatax); they appear to be somewhat intermediate between the two other forms known to me (see Brignoli, 1977a).

Oxyopes lineatus Latreille, 1806

Chouf – Beit ed Din, 900 m, 29.V.72, P. Brignoli leg., 1♂

– Kfarhim, 200 m, 27.V.72, P. Brignoli leg., 1♀

Bcharré – Bcharré, 1000-1100 m, 4.VI.72, P. Brignoli leg., 1♀.

– Hassroun, 1500 m, 2.VI.72, P. Brignoli leg., 3♂♂.

Comments: all these individuals are "true" *lineatus*, identical with those which I know from Italy.

Maimuna bovierlapierrei (Kulczynski, 1911)

Chouf – Beit ed Din, 900 m, 29/30.V.72, P. Brignoli leg., 4♀♀

Jazzine – Jazzine, 950 m, 29.V.72, P. Brignoli leg., 1♀

Comments: so far limited to Lebanon; epigyne/vulva, see Figs. 3-4.

Coelotes caudatus de Blauwe, 1973

Bcharré – Col des Cèdres, 2300-2600 m, 31.V./3.VI.72, P. Brignoli leg., 2♀♀.

– Cèdres de Bcharré, 1950 m, 3/5.VI.72, P. Brignoli leg., 3♀♀.

Metn – Baskinta, 1400 m, 22.V.72, P. Brignoli leg., 1♀.

Comments: the only *Coelotes* known from the Near East so far; it is related to Turkish species (see Brignoli, 1978); epigyne/vulva, see Fig. 5.

Tegenaria maronita Simon, 1873

Bcharré – Cèdres de Bcharré, 1950 m, 3/5.VI.72, P. Brignoli leg., 1♀.

Baalbeck – Ainata, 1500 m, 31.V./5.VI.72, P. Brignoli leg., 1♂, 2♀♀.

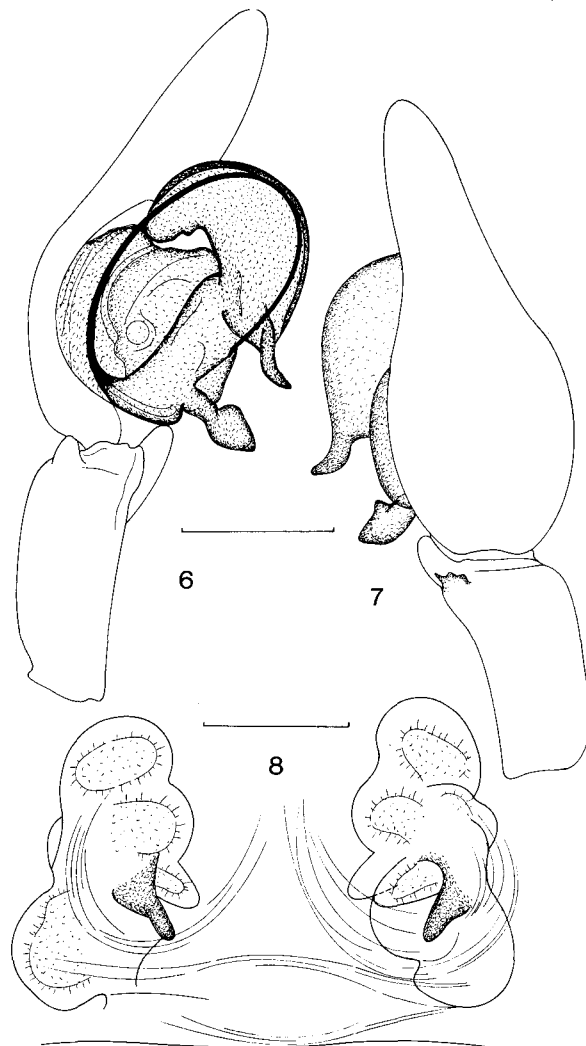
"Liban/Syria", Ch. de la Brulerie leg., 1♂, 1♀ (types; Coll. Simon, Mus. Paris 469; with label *annulipes* = *maronita*).

Comments: this species is probably the commonest Lebanese *Tegenaria*; I found it under stones in the famous cedar grove of Bcharré and in crevices of rocks in open ground at Ainata. Genitalia, see Figs. 6-8.

Tegenaria pagana C. L. Koch, 1841

"Syria", Ch. de la Brulerie leg., 1♂, 1♀ (Coll. Simon 478, part of the type series of *T. concolor*; labelled *pagana* by Mrs R. de Blauwe).

Comments: I agree with Mrs de Blauwe that these specimens belong to this common Mediterranean species (described from Greece, Nauplia) which has often been misidentified.



Figs. 6-8: *Tegenaria maronita* Simon, 1873. 6 Male palpus, from the inside; 7 Male palpus, from the outside; 8 Epigyne (and vulva, transparent). Scale lines: 6, 7 = 0.5 mm, 8 = 0.2 mm.

Tegenaria concolor Simon, 1873

"Syria", Ch. de la Brulerie leg., 1♀ (Coll. Simon 478 bis, part of the type series; lectotype; labelled *T. domestica* (Clerck) by Mrs R. de Blauwe).

Comments: this specimen is not related to *T. domestica* (see, for instance, the illustration of the vulva of this species in Brignoli, 1976); it has a characteristic vulva (Fig. 10), somewhat similar to that of *T. michae* n.sp. The affinities of both of these species are highly uncertain.

Tegenaria michae n.sp.

Bcharré — Cèdres de Bcharré, 1950 m, 3/5.VI.72, P. Brignoli leg., 3♀♀ (1♀, dissected, holotype, the other two paratypes; in my collection).

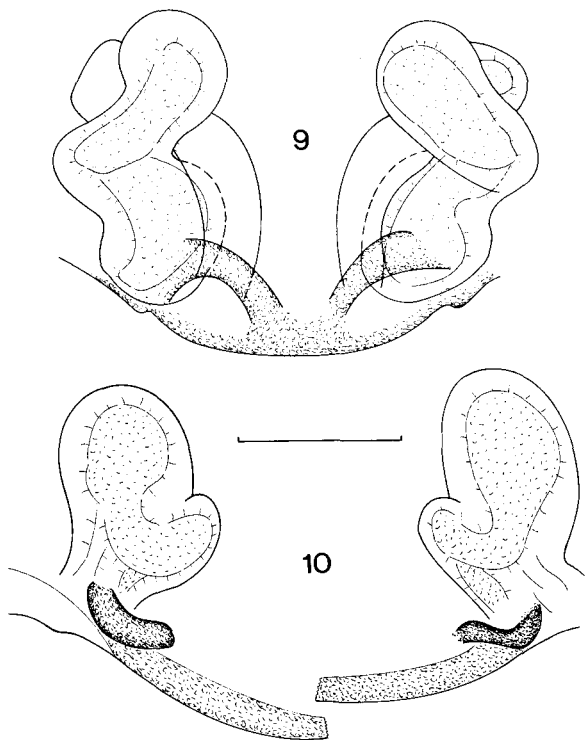


Fig. 9: *Tegenaria michae* n.sp. Epigyne (and vulva, transparent).

Fig. 10: *Tegenaria concolor* Simon, 1873. Epigyne (partly broken in two) and vulva.

Scale line 0.2 mm.

Description of female (male unknown)

Prosoma yellow-brown, with dark stripes radiating from the fovea; subequal eyes in two nearly straight lines (AME smaller — ½ — than the rest); anterior eyes very close together; posterior eyes separated by 2/3 of their diameter; labium as wide as long; sternum with typical pattern; chelicerae with 3-3 teeth. Legs with incomplete dark rings on all segments. Opisthosoma dorsally slate coloured, with traces of a typical pattern; ventrally lighter. Superior spinnerets with apical segment whitish and pointed, as long as the (darkish) basal segment. Epigyne/vulva, see Fig. 9.

Measurements (in mm): prosoma 2.56 long, 1.86 wide; opisthosoma 5.00 long. Total length: 7.56.

Legs	Femur	Patella	Tibia	Meta-tarsus	Tarsus	Total
I	2.50	0.86	2.30	2.22	1.45	9.33
II	2.22	0.82	1.80	1.95	1.15	7.94
III	1.66	0.80	1.57	1.62	0.90	6.55
IV	2.35	1.20	2.45	2.70	1.20	9.90

Derivatio nominis

This species is named after my Lebanese wife, Micha, as an acknowledgement for her constant help in my work.

Discussion

This species, which is not related to the sympatric *T. maronita*, but could be related to *T. concolor*, is of uncertain affinities; the very simple epigyne and vulva are of little help. I do not even see affinities with the many species now known from southern Turkey.

There is a superficial similarity in the structure of the vulva with some European species, e.g. *T. campestris* (C. L. Koch, 1834), *T. zinzulusensis* Dresco, 1959 or *T. drescoi* Brignoli, 1971 but this seems to me more due to convergence.

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Costa, 1875, Simon, 1892, Pavesi, 1895, Kulczynski, 1911, Strand, 1913, 1914 and Kerville, 1926). I did not find this species, which could be recognized only from the paper by Kulczynski (op. cit.). Elsewhere (Brignoli, 1977a) I have briefly discussed the apparent variability of *P. mirabilis* in Italy; the epigyne of *consocia* would fall within this variability, but from Kulczynski it appears that the palpi of the males should be different from those of *mirabilis* (which are not variable).

Kulczynski (op. cit.) considers *Pisaura* Simon, 1885 a synonym of *Ocyale* Savigny & Audouin, 1825: this affirmation has passed virtually unnoticed (de Lessert, 1925: 336 in note, mentions the observations by Kulczynski and Strand without taking any position; the combination *Ocyale mirabilis* has been used by a few authors – Franganillo Balboa etc. – until fairly recent times, probably more through ignorance of Simon's 1885 paper than by acceptance of the theses of Kulczynski). Its implications are considerable, as *Pisaura* is the type genus of the family Pisauridae whereas *Ocyale* is currently included in the Lycosidae. Strand (1913) even supposed a synonymy between *P. consocia* and the type species of *Ocyale*, *O. atalanta* Savigny & Audouin, 1825 (described from Jaffa). The arguments given by Simon (1885: 358; repeated in 1937: 1052 as an alleged answer to Kulczynski without any change or new facts – “je n'ai rien à ajouter...”) for considering *Ocyale atalanta* different at generic level (at that time the families Pisauridae and Lycosidae were still united) from *Pisaura mirabilis* are in effect, as Kulczynski noted, not at all exhaustive: Simon had no types before him (Roewer, 1959: 803 is wrong) and, so far as I know, the descriptions by Audouin were based on the illustrations by Savigny (the plates therefore are the types) and not on material. Simon had only an old specimen, named *O. atalanta*, which did not correspond (with the exception of the position of the eyes) to the illustration by Savigny. What Simon called *O. atalanta* is quite evidently a lycosid (see figs. 448a-c, by Roewer, 1959: 804 apparently based on material compared with that of Simon); what is puzzling is that the older authors (Walckenaer, Lucas) clearly considered *O. atalanta* to be close to *Pisaura mirabilis* and *Dolomedes* (and *Zora*) by the position of the eyes, one of the few characters (not considering the genitalia) which allow

one to distinguish between the Pisauridae and the Lycosidae. It is sufficient for instance to note that Lucas (1840: 362-364) divided the genus *Dolomedes* into three groups: “Campestres” with *Dolomedes fimbriatus* and a *Zora*, “Crypticolles” with “*Dolomedes*” *atalanta*, and “Sylvains” with “*Dolomedes*” *mirabilis*.

From all this it seems to me that quite probably the “true” *Ocyale atalanta* is a pisaurid, possibly, as supposed by Strand, identical with *Pisaura consocia*. A comparison of the material of Pickard-Cambridge with the plates of Savigny would be interesting.

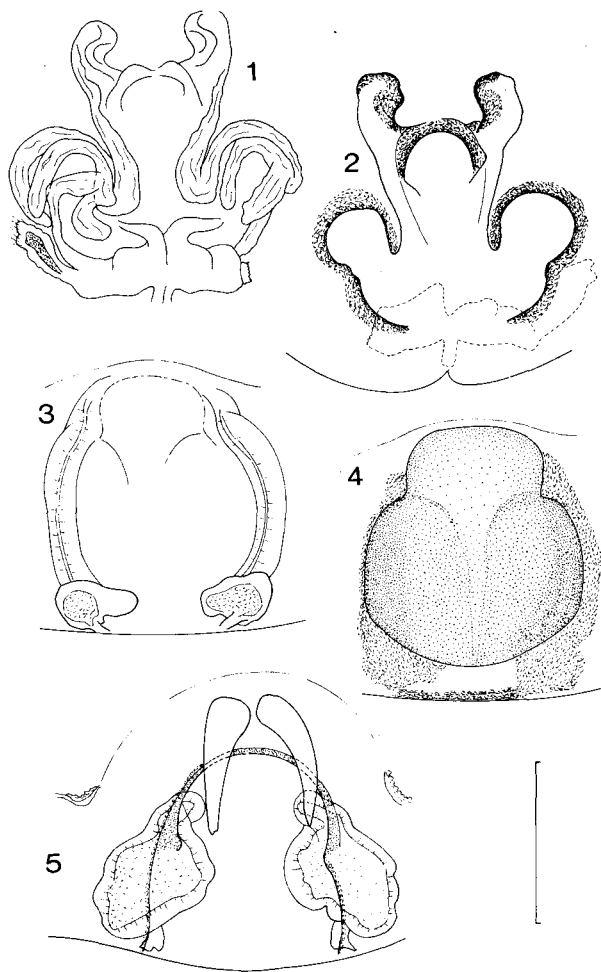
Evidently, a synonymy *Ocyale* = *Pisaura* would be very annoying from the point of view of the stability of the nomenclature; as *Ocyale* is not a forgotten name, the only solution could be to find another name for the *atalanta* sensu Simon and to consider this the type species of *Ocyale* (Lycosidae). The true *atalanta*, if identified, could be attributed to *Pisaura* which could thus be saved.

This problem is not considered in a recent paper by Blandin (1976), who publishes illustrations (from material of the Simon collection) of *P. mirabilis* and *P. consocia*; as I have stated elsewhere (Brignoli, 1977a) there are strong reasons for supposing the existence of considerable problems with the Mediterranean forms of the *mirabilis*-group. My Italian material seems as variable as that (of the same group) observed in Korea by Paik (1969). I have found three forms, apparently distinguishable by the epigyne, but which seem connected by intermediate forms. The rareness of males (all those I observed were identical) makes it impossible to come to any conclusion at present.

Concerning the Oxyopidae, Pickard-Cambridge (1872) has described species from the Jordan plains, *Oxyopes sobrinus* and *O. optabilis* (of which only the second has subsequently been recorded from Israel by Simon, 1892). As I have pointed out elsewhere (Brignoli, 1977a, 1978) there are considerable problems with the Mediterranean *Oxyopes* (too many “forgotten” or dubious species and uncertain synonymies: *algerianus*, *atticus*, *bilineatus*, *variegatus*, *alexandrinus*, *transalpinus*, *italicus*, *gentilis* etc.); unfortunately the existing material of this group is relatively scarce. Kulczynski (1911) recorded from the Dead Sea region the “forgotten” *O. alexandrinus* Savigny & Audouin, 1825.

Also a (poorly known) *Peuceitia* has been named from the region, *P. virescens* (O. Pickard-Cambridge, 1872) described from Israel and recorded from Lebanon by Simon (1884) and from Jericho and Jerash by Pavesi (1895).

An *Oxyopes* is among the very few spiders known



Figs. 1-2: *Pisaura mirabilis* (Clerck, 1757). 1 Vulva, from the inside (the right spermatheca has broken off); 2 Epigyne.

Figs. 3-4: *Maimuna bovierlapierrei* (Kulczynski, 1911). 3 Vulva, from the inside; 4 Epigyne.

Fig. 5: *Coelotes caudatus* de Blauwe, 1973. Epigyne (and vulva, transparent).

Scale line 0.5 mm.

from Iraq; Reimoser (1913) recorded *lineatus* from Baghdad.

The Agelenidae should be well represented in the region, but few species are known. The problematic *Agelena livida* Simon, 1875 (see Brignoli, 1977b, 1978) has been recorded from Palestine by Kulczynski (1911) and Strand (1913) whereas *A. affinis* Kulczynski, 1911 has been described from Beirut.

As I have pointed out elsewhere, I have some doubts about the presence of *A. livida* in the Near East and there is no proof that the species illustrated by Kulczynski is identical with the *livida* of Simon.

In Palestine (Israel + Jordan) *Maimuna inornata* (O. Pickard-Cambridge, 1872) should be common; it has been recorded also by Simon (1892) and Kulczynski (1911), and I have illustrated it recently (1976) on material from Rhodes. Kulczynski (1911) has described *M. bovierlapierrei* from Beirut (see later).

The genus *Tegenaria* was formerly represented only by *T. concolor* Simon, 1873 described from Damascus (see later) and by *T. maronita* Simon, 1873 described from Lebanon; this name must be used instead of *T. annulipes* O. Pickard-Cambridge, 1872 (described from Mount Lebanon; the synonymy *annulipes* = *maronita* was published by Simon, 1884) because *annulipes* is pre-occupied by Lucas (1844; this species is now a *Miturga*).

Denis (1955) recorded some juvenile *Tegenaria* from some caves in Lebanon.

The only other species of the region are *Cedicus flavipes* Simon, 1875 (described from Syria; see de Blauwe, 1973) and *Coelotes caudatus* de Blauwe, 1973 from Lebanon (see later).

Most of the species considered here are listed in the works of Bodenheimer (1935, 1937) which, so far as spiders are concerned, seem to be little more than simple compilations.

Material examined

Pisaura mirabilis (Clerck, 1757)

Aley – El Mderej, 1300-1500 m, 23.V.72, P. Brignoli leg., 1♀.

Bcharré – Hassroun, 1500 m, 2.VI.72, P. Brignoli leg., 1♀

Comments: these individuals (Figs. 1-2) correspond