#### SPIDERS FROM THE MADEIRA AND SALVAGE ISLANDS

### By JACQUES DENIS 1

Mr. G. E. Maul has kindly sent to me for examination a collection of spiders preserved in the Museu Municipal do Funchal. Most of these are from the main island of Madeira or from the Selvagens. Only very few come from Porto Santo and Deserta Grande. For convenience species from either archipelago will be listed separately below.

## 1. Spiders from the Madeira Islands

A revision of Madeiran spiders has just recently been the subject of a paper of mine (1962): this takes 141 species into account, and the rather doubtful status of some of them are discussed; 36 are to be found in the present collection. which also adds a further 4 or 5 to the list: Rhomphaea nasica (E. S.), Theridium pallens Bl., a new Misumena described hereafter as M. nigromaculata and young specimens probably belonging to two different species of Liocranum, a genus not yet known to occur in Atlantic islands.

Species are numbered as in my 1962 paper.

# Dysdera crocata C. L. Koch, 1839.

Madeira: Lombo João Boieiro, S. Roque, 1 juv. 1.III.1953; 1 8, 10.III.1953 (Figueira coll.).

### 6. Segestria florentina (Rossi, 1790).

Madeira: Lombo João Boieiro, S. Roque, 1  $^\circ$ , IX.1952; 1 pull., 1.III.1953; 3 juv., 3.III.1954 (Figueira coll.). Choupana, 2  $^\circ$  1  $^\circ$  subad.,

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8.IX.1956, in cracks of brick column of house (Nos. 9581-3, Maul coll.), Santo da Serra,  $1\,$ ?, 8.IX.1952 (No. 19276, Maul coll.).

12. Loxosceles rufescens (Dufour, 1820).

Madeira: Funchal, Museum building, 1 & subad., VIII.1952.

14. Drassodes lapidosus (Walckenaer, 1802).

Madeira: Pico Ruivo, 1 & 1 & subad. 2  $\mbox{$\varsigma$}$  subad. 3 juv., 12.X.1956 (Maul coll.)

24. Zelotes longipes (L. Koch, 1866).

Madeira: Pico Ruivo, 2 9, 12.X.1956 (Maul coll.).

A young female from the plateau of Ilheu do Farol in Porto Santo (11.VI.1949, No. 31121, Maul coll.,) perhaps belongs to the same species.

26. Zelotes rusticus (L. Koch, 1872).

Madeira: Funchal, Museum building, 1 &, 9.IV.1953.

30. Chiracanthium sp. (? albidulum Blackwall, 1859).

Madeira: Lombo João Boieiro, S. Roque, 1 juv., 1.III.1953 (Figueira coll.). The abdomen of this young specimen completely lacks the red dorsal stripe, so that it can certainly not be *Ch. pelasgicum* (C. L. K.) which has also been recorded from Madeira.

## 32 A. Liocranum sp. 1.

Madeira: Funchal, Quinta Reid, 1 cephal., 1.IV.1953 (Maul coll.).

No representative of this genus is known from any of the Atlantic Islands. In this specimen the median eyes of both rows are smaller than the lateral ones; legs dark brown with apex of tibiae, basis of metatarsi and whole tarsi pale yellow, the second pair being lighter (pair IV being missing).

#### 32 B. *Liocranum* sp. 2.

Madeira: Funchal, 18 subad., 14.II.1956, on wall of Avenida do Mar after strong swell (Nos. 7938-46, Maul coll.).

A spider quite distinct from the preceding one, with front median

eyes larger than lateral ones; legs of a rather even pale yellow brown colour and abdomen without any pattern.

## 34. Misumena spinifera (Blackwall, 1862).

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Madeira: Santo da Serra, 13, no date (No. 318, Maul coll.). Choupana, 19, 24.V.1953 (No. 283, Maul coll.). A young specimen from Monte (IX.1941; No. 3122) probably belongs to this species.

# 34 A. *Misumena nigromaculata* sp. n.

Madeira: Funchal, Caminho de Ferro,  $1\ ^\circ$  (type), 7.X.1940 (No. 251). Cephal. 3 mm.; total length 6 mm. This female, perhaps somewhat smaller than the previous species, wholly resembles it in aspect and colour, except for two large black spots on lung-books and the space between the spinnerets being black. The epigynes are quite different (see fig. 1 and 2) and in the present species they are much nearer the epigastric furrow. Metatarsi I and II bear 8-8 lower spines, tibiae I from 11 to 13 pairs, tibiae II 10 pairs, the tibial ones being rather unequal in size.

### 38. Xysticus nubilus Simon, 1875.

Madeira: Cova da Veranda, ca. 1200 m., 1  $^{\circ}$ , 10.VII.1951, under stone (No. 3245, Maul coll.).

A very young specimen (Lombo João Boieiro, S. Roque, IX.1952) certainly belongs to a Thomisid species not yet recorded from Madeira, but even its generic determination is impossible.

# 44. Evophrys sp. (? vafra Blackwall, 1867).

Madeira: Ribeiro Frio, 1 juv., 3.IX.1953 (No. 569, Maul coll.).

# 46. Salticus mutabilis Lucas, 1846.

Madeira: Lombo João Boieiro, S. Roque, 1 &, 8.IV.1953 (Figueira coll.).

### 48. Dendryphantes catus (Blackwall, 1867).

Madeira: Santo da Serra, 19 (? ad.), no date (No. 318, Maul coll.).

#### 50. Dendryphantes diligens (Blackwall, 1867).

Madeira: Santo da Serra,  $1\,\%$ , no date (No. 318). Monte, between Corujeira de Fora and de Dentro,  $1\,\%$ , 4.X.1940 (No. 263, Maul coll). Choupana,  $1\,\%$  1 juv., 24.V.1953 (No. 283, Maul coll.).

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# 54 A. Rhomphaea nasica (Simon, 1873).

Madeira: Funchal, 1 9 1 juv., 19.VIII.1940 (No. 418); Funchal, Barreiros, 1 8 subad., 2.VI.1954, on rose bush (No. 5697, Maul coll.).

This mediterranean species has already been recorded from the Azores.

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# 58. Achaearanea assorensis (Berland, 1932).

Madeira: Lombo João Boieiro, S. Roque, 2 ♀, 8.III.1953, among banana leaves (Figueira coll.).

According to a verbal information from Dr. H. W. Levi, A. geochares, described by him from Colorado, is a synonym of A. assorensis: so that this is, with Nesticus pallidus Emert., a second species common both to Madeira and North America, besides of course the eight really holarctic ones.

## 65 A. Theridium pallens Blackwall, 1834.

Madeira: Lombo João Boieiro, S. Roque, 1 &, 8.III.1953, among banana leaves (Figueira coll.). A widespread spider throughout Europe.

Two very young Theridiid species in the same lot cannot be determined, which is also the case with another one from the same place (15.III.1953).

#### 67. Teutana nobilis (Thorell, 1875).

Madeira: Santo da Serra, 1 juv., no date (No. 318, Maul coll.).

A young specimen collected after a strong swell on a wall of the Avenida do Mar in Funchal (14 II.1956: No. 7947) probably belongs to either the genus *Teutana* or *Lithyphantes*.

It is likewise not possible to determine two very young Enoplognatha

from Lombo João Boieiro (1.III 1952 and 5.III.1952).

# 79. Ostearius melanopygius (O. P. Cambridge, 1879).

Madeira: Lombo João Boieiro, S. Roque, 1 9, 10.III.1953, (Figueira coll).

# 83. Leptyphantes tenuis (Blackwall, 1852).

Madeira: Santo da Serra, 1º, no date (No. 318, Maul coll.). Lombo João Boeiro, S. Roque, 1 & 10.III.1953 (Figueira coll.).

# 99. Zygiella x-notata (Clerck, 1757).

Madeira: Lombo João Boieiro, S. Roque, 1 juv. 4 pulli, 8.III.1953 among banana leaves; 1 \, 14.III.1953; 1 \, 19.IV.1953 (Figueira coll.).

## 100. Mangora acalypha (Walckenaer, 1802).

Madeira: Choupana, 1 9 1 juv., 24.V.1653 (No. 283, Maul coll.).

#### 102. Araneus cucurbitinus Clerck, 1757.

Madeira: Ribeiro Frio, 1 \, 3.IX.1953 (No. 5689, Maul coll.). Lombo João Boieiro, S. Roque, 1 \, 10.IV.1961 (Figueira coll.).

## 102 a. Araneus cucurbitinus maderianus Kulczynski, 1905.

Madeira: Lombo João Boieiro, S. Roque, 1 &, 18.VI.1953 (Figueira coll.).

### 103. Araneus crucifer (Lucas, 1839).

Madeira: Neither locality nor date, 2 ♀ 2 juv. (No. 352). Funchal' 1 ♀, 27.VII.1940 (No. 421); Funchal, Levada dos Barreiros, 1 ♀, 10.VI.1957 (Maul coll.). Lombo João Boieiro, S. Roque, 1 ♀, VIII.1952; 1 ♂ juv., IX.1952; 2 juv., 8.III.1953, among banana leaves (Figueira coll.). Pico Ruivo, 1 juv., 12.X.1956 (Maul coll.).

Porto Santo: Pico do Castelo, 4 9 1 juv., 18.IX.1957, on Cupressus

macrocarpa (Maul coll.).

There is a good deal of individual variation in this species and, as said in my former paper, I do not take into consideration the forms named uselessly by Strand.

# 107. Cyrtophora citricola (Forskael, 1775).

Madeira: Lombo João Boieiro, S. Roque, 1 \( \text{1 juv. 1 pull., VIII.1952} \) (Figueira coll.). Funchal, Levada dos Barreiros, 1 juv., 10.VI.1957 (Maul coll.).

#### 108. Metargiope bruennichi (Scopoli, 1772).

Madeira: Lombo João Boieiro, S. Roque, 19, VIII.1952 (Figueira coll.). Choupana, 19, 9.VIII.1953 (Maul coll.).

## 109. Metargiope trifasciata (Forskael, 1775).

Madeira: Lombo João Boieiro, S. Roque, 1 9, VIII.1952 (Figueira coll.).

# 115. Tegenaria parietina (Fourcroy, 1785)

Madeira: Funchal, (?) 1 8, no date (No. 3119). Lombo João Boieiro, S. Roque, 1 9, 1.III.. 1953; (?) 18 subad. 2 9 subad., VIII. 1952 (Figueira coll.).

## 116. Tegenaria domestica (Clerck, 1757).

Madeira: Lombo João Boieiro, S. Roque, 19, VIII.1952 (Figueira coll.).

# 117. Tegenaria pagana C. L. Koch, 1841.

Madeira: Lombo João Boieiro, S. Roque, 18, 10. III. 1953 (Figueira coll.). This male belongs to the subspecies urbana (Simon, 1875) which is thus a new form for Madeira.

# 120 a. Pisaura mirabilis maderiana Kulczynski, 1899.

Madeira: Choupana, 2 9, 24.V.1953 (No. 283, Maul coll.).

# 121. Pardosa proxima (C. L. Koch, 1848).

Madeira: Choupana, 1 9 1 pull., 24.V.1953 (No. 283, Maul coll.).

#### 122. Geolycosa blackwalli (Johnson, 1863).

Madeira: Camacha, 1 9, VIII.1949 (M. Câmara coll.).

#### 123. Geolycosa ingens (Blackwall, 1857).

Deserta Grande, 19, 8. VIII. 1955 (No. 6288); 18 19 subad., 19.VI.1962 (W. S. Bristowe coll.).

## 124. Isohogna maderiana (Walckenaer, 1837).

Madeira: Câmara de Lobos, 1 ? 1 pull., 23.III.1953 (Maul coll.). Funchal, 1 3 subad. 1 ? 1 ? subad. 5 juv., 14.II.1956, on wall of Avenida do Mar after strong swell (Nos. 7938-46, Maul coll.). Whether all young specimens belong to the same species is not quite sure; this also goes for Hogna insularum hereafter.

## 125. Hogna heeri (Thorell, 1875).

Madeira: Ribeiro Frio, 1 %, 3.IX.1953 (Maul coll.). Pico Ruivo, 1 % subad. 2 %, 12.X.1956 (Maul coll.).

Three young specimens (1  $^{\circ}$  subad. 2 juv.) collected on the Plateau of Ilheu do Farol in Porto Santo (11.VI.1949, No. 3121, Maul coll.) belong perhaps to this species.

## 126. Hogna insularum (Kulczynski, 1899).

Madeira: Funchal,  $3\ 3\ 1\ 9\ 2$  juv., 29.XII.1962 (No. 19459);  $2\ 3\ 2\ 9\ 4$  juv., 22.I.1963; on wall along beach at Avenida do Mar after heavy swell (Maul coll.).

Porto Santo, 1 % with its egg-cocoon, 1 % subad. (?), 15.VIII.1955 (Nos. 6289-6290, Maul coll.).

#### 127. Arctosa cinerea (Fabricius, 1775).

Madeira: Fajā da Nogueira, 1 & subad. (?), 24.VI.1940 (No. 3150, Maul coll.).

## 137. Oecobius annulipes (Lucas, 1846).

Madeira: Lombo João Boieiro, S. Roque, 1 pull., 8.III.1953, among banana leaves; 2 & subad. 1 % 7 juv., 4.IV.1953; 3 & subad. 2 % 5 juv. 1 pull., 3.III.1954, (Figueira coll.).

# 11. Spiders from the Salvage Islands

Önly three short lists [by Blackwall (1864), Kulczynski (1899) and Simon (1912) respectively] concerning the spider fauna of the Salvage

Islands were published; they record 5, 6 and 6 species, each of these including young specimens which could not be identified with certainty; as a result this small fauna appeared to consist of a dozen species:

Dysdera wollastoni Blackwall;

Ariadna portisancti Kulczynski;

Drassodes lutescens speculator Kulczynski;

(Drassus) paivani Blackwall (according to Simon 1912 it could be Haplodrassus dalmatensis L. K.);

(Drassus) bewicki (a young Agelenid sp. in Simon's opinion);

Herpyllus blackwalli (Thorell) (inadult specimens);

Zelotes longipes (L. Koch);

Philodromus sp.;

Pholcus phalangioides (Fuessli);

Teutana grossa (C.L. Koch) (probably Theridion sp., Blackwall 1864); Ero sp.;

Tegeneria dubia Blackwall (supposed to be T. domestica Cl. by Simon).

In view of this scanty knowledge to work out the collection sent by the Museum of Funchal was of considerable interest. In fact a considerable advance is achieved from the 17 species it is composed of. Moreover it was an opportunity to revise two poorly known species of Blackwall's, which was made possible through the kindness of the Authorities of the Hope Department, Oxford University Museum, where the types are preserved; thus I have been able to try to determine their true's tratus.

The consequence is that, with two species formerly included under the same name and ten others recorded here for the first time, the total

number of spiders from the Salvage Islands is brought up to 23.

Unfortunately of three species only young specimens were collected and they cannot be determined; one belongs to a Mediterranean genus (Zodarium). both the others to widespread genera; Zodarium and Philodromus have representatives in the Canary Islands as well as in Madeira, Ero in Madeira only.

There seem to be two endemic species; Scotognapha paivai belongs to a South Mediterranean genus which is known from the Canary Islands; Oxyptila atlantica to a widespread genus, young examples of which have already been found in Madeira.

Seven species have not yet been recorded outside the Atlantic Islands; 5 are known from the Canary Islands only (Dysdera nesiotes, Scotognapha bewickei, Camillina canariensis, Aelurillus annulipes, Oecobius immaculatus), 1 only from Madeira (Ariadna portisancti) and the last from both archipelagoes (Dendryphantes diligens).

The 11 more or less widespread remaining species, belong to the Mediterranean fauna and, with the exception of *Drassodes lutescens*, all occur in the Atlantic Islands: 4 in Madeira and 6 both in Madeira and the Canaries.

On the whole the spider fauna of the Salvage Islands has thus clear Mediterranean affinities (half the species and all genera) and is an intermediate one between the two neighbouring archipelagoes, 7 species being common to both, 6 and 5 either to the Canary Islands or Madeira only.

IIntroduction by man of a few species, Loxosceles rufescens and Pholcus phaangioides for instance, and perhaps also Tegenaria pagana urbana is a valid hypothesis. But most of them live under stones and it is worth noticing that as a rule they are not «ballooning» spiders; such is also the case with Zodarium sp. So it seems that, contrary to the opinion usually accepted, a part of the spider fauna of the Salvage Islands consists of species which have been established there for a long time; I think this can only be explained by land connexions with either the Canary Islands and Madeira, the presence of at least one endemic species (Scotognapha paivai) showing that the separation occurred long ago.

The absence of wandering Lycosids, which have so many representatives in both the Canary Islands and Madeira, is a rather striking fact.

#### 1. Dysdera crocata C. L. Koch, 1839.

Selvagem Grande (D. wollastoni, Blackwall 1864).

Selvagem Grande: 2 juv. (?), 20.VII.1958, on top under stones

(No. 14196, Figueira coll.).

After examining a male cotype of *D. wollastoni* in the Oxford University Museum, Mr. J. A. L. Cooke wrote me that it is quite certainly a synonym of *D. crocata*. This is an almost cosmopolitan spider which has been recorded from all the Atlantic Islands.

#### 2. Dysdera nesiotes Simon, 1907.

(=D. wollastoni Kulcz. 1899, not Blackwall),

In the opinion of Mr. J. A. L. Cooke, who has had quite a number of

Kulczynski's *D. wollastoni* at his disposal, this is the same as Simon's *D. nesiotes* and a subspecies is not really needed for Canarian examples. So both records of *D. wollastoni* Kulcz. (not Blackw.) by Kulczynski (1899) and Simon (1912) refer to *D. nesiotes*, a species which is peculiar to the Canaries and the Salvage Islands.

Although spines on their femora IV are usually less in number, I think the young specimens in the present collection belong to the same species

as the adult ones:

Selvagem Grande: 2 %, 20.VII.1939 (No. 283); 3 juv., 3.VI.1957 (Nos. 11707-11, Maul coll.).

Selvagem Pequena (Pitão): NW border. 1 & 2 juv. 1 pull. 4.VI.1957, under stones (Nos. 11717-22, Maul coll.).

Ilheu de Fora: 2 9 2 juv., 5.VI.1957 (Nos. 11741-2, Zino coll.).

#### 3. Ariadna portisancti Kulczynski, 1899.

Selvagem Grande (first record by Simon 1912):  $1 \circ 3$  juv., 20.VII.1939. (Nos. 283);  $1 \circ 3$ , 3.VI.1957 (Nos. 11717-22, Maul coll.);  $1 \circ 3$ , 18.VII.1958, on top under stone (No. 14209, Figueira coll.).

Porto Santo.

#### 4. Loxosceles rufescens (Dufour, 1820).

Selvagem Grande: 1  $\circ$  subad. 2 juv., 14.X.1955, on top under stones (Nos. 7564-7566); 1  $\circ$  4 juv., 3.VI.1957 (Nos. 11707-11, Maul coll.); 1  $\circ$  subad. 1 juv. 1 pull., 18.VII.1958, on top under stones (Nos. 14192 and 14213, Maul coll.).

A cosmopolitan spider in warm countries; all the Atlantic Islands. It does not seem to be uncommon in the Selvagem, the fact that it is recorded here for the first time is, therefore, rather surprising.

## 5. Scytodes velutina Heineken & Lowe, 1835.

Selva gem Grande: Furna da Baía das Cagarras, 1 $^{\circ}$ , 18.VII.1958 (No. 14138, Figueira coll.).

Mediterranean region; Madeira.

## 6. Drassodes lutescens speculator Kulczynski, 1899.

Selvagem Grande (Pitão): NW border, 1819, 4.VI.1957, under

stones (Nos. 11717-22, Maul coll.).

Both these examples do not agree exactly with the arrangement of the eyes of the typical form as described by Kulczynski; moreover, metatarsi I and II are provided with 2 basal spines (instead of one). Drassodes lutescens (C. L. Koch) is a widespread spider in the whole Mediterranean region, but it is not known from the Atlantic Islands, with the exception of its form speculator which appears to be peculiar to the Selvagem. As Simon presumes, the young female he recorded (1912) from Selvagem Grande almost certainly belongs to this species, no other representative of the genus having been recorded from the archipelago up to now.

## 7. Herpyllus blackwalli (Thorell, 1875).

Selvagem Grande; recorded by Simon (1912, Scotophaeus bl.) from subadult specimens which, according to the author, agree well with European ones. This species resembles the following in such a way that a determination based on young examples remains doubtful; however, as both species were known by Simon, it will be accepted as correct until further information is available.

## 8. Herpyllus musculus (Simon, 1878).

Selvagem Grande: 1 %, 20.VII.1939 (No. 283, Maul coll.); 1 %, 18.VII.1958, on top under stone (No. 14209); 1 % 1 %, 20.VII.1958, on top under stones (No. 14196, Figueira coll.).

Southern France, Portugal, Madeira.

Simon's figures for this species are rather bad; the male palp has been tolerably well pictured by Schenkel (1938); I, therefore, thought it advisable to give here a new drawing of the epigyne (fig. 8).

## 9. Zelotes longipes (L. Koch, 1866).

First record by Kulczynski (1899).

Selvagem Grande:  $1\,$  \$\,\ \ 18.VII.1958 (No. 14192); 1 juv. (?), 20.VII.1958 (No. 14196); on top under stones (Figueira coll.).

Middle and South Europe; the Atlantic Islands (Azores, Madeira).

#### 10. Camillina canariensis (Simon, 1883).

Selvagem Pequena (Pitão): NW border, 1 9 1 9 subad., 4.VI.1957, under stones (Nos. 11717-22, Maul coll.).

Canary Islands.

## II. Scotognapha paivai (Blackwall, 1864) (sub Drassus).

Selvagem Grande:  $1\,^{\circ}$ , 20.VII.1939 (No. 283); 1 juv., 3.VI.1957 (Nos. 11707-11, Maul coll.); 1 juv., 18.VII.1958, on top under stone (No. 14192, Figueira coll.).

Selvagem Pequena (Pitão): NW border, 19, 24.VII.1958, under

stone (No. 14322, Figueira coll.).

Ilheu de Fora: 1 & subad., 5.VI.1957 (Nos. 11741-2, Zino coll.).

These are the only records since the original description. No doubt this species is fairly common in the Salvage Islands, as Blackwall had 49 adult or immature females at his disposal; he, incidentally, wondered at the fact that no male was present in such a number of specimens collected, but no information was given as to dates of capture and in the relevant family males, as a rule, do not live for a long time after having reached the adult stage, which often occurs before the females reach it.

It is a very distinct species, quite different from Haplodrassus dalmatensis (L. Koch), and not identical as wrongly supposed by Simon (1912). In my opinion it could be referred to the genus Scotognapha Dalmas, a genus which seems to be intermediate between Echemeae and Gnaphoseae, with a strong, blunt tooth on the inner margin of the falces and well-developed spinnerets. However not all characters agree. The tarsi lack claw tufts of spatula-like hairs and the claws are provided with but one tooth in their concavity (fig. 9). The front eyes are placed in a strongly procurved line with the median ones larger than the lateral and hind median ones; the hind ocular row is nearly straight or slightly recurved, the median eyes being much more (ca. twice) widely separated from the lateral ones than from one another; the ocular trapezium is slightly wider in front and slightly longer than wide.

The epigyne (fig. 7) rather resembles that of Gnaphosa, with a similar

process in front of the dimple.

The front legs are rather thick (fig. 8); metatarsus and tibia I are spineless or the metatarsus is armed with 1 or 2 lower spines near its basis; tibia II bears 1 subapical spine on its underside, metatarsus II 3-2

spines. The hind legs are provided with numerous spines which appear to be variable both in number and disposition.

The lower spinnerets bear 5 spigots arranged in a transverse fan. I have been unable to see any swelling on the median spinnerets.

Females in the present collection are somewhat smaller (cephal. 4 mm.; total length 8-10 mm.) than specimens communicated by the Oxford University Museum (cephal. 5-6 mm.; total length 10-15 mm.).

The correct spelling for this species, named after Barão do Castello de Paiva, is obviously paivai and not paivani as used by most authors and first by Blackwall himself.

# 12. Scotognapha bewickei (Blackwall, 1864) (sub Drassus).

The only record from Selvagem Grande, by Blackwall. Canary Islands (Tenerife).

This is a very striking spider. As described by Blackwall it is in complete agreement with the preceding one as regards pattern, arrangement of eyes and chetotaxy. Its epigyne (fig. 10), too, is nearly the same and, bearing in mind the possible variations, I would not consider it convenient to separate the two species from each other. However, the unusual length of the upper spinnerets (fig. 11-12) is quite an abnormal character. On the other hand, as several specimens were collected, this character does not appear to be an individual anomaly, nor does it seem a character of subspecific value. On the contrary, as the shape of the spinnerets is of primary importance in this family, the above mentioned unusual length would be of great enough importance to consider the erection of a new genus. However, I prefer not to do this, all the more so, as Sc. bewickei is similar to Sc. paivai in every other respect.

Thus Simon (1912) was wrong in supposing that *Drassus bewicki* was an Agelenid species and it is difficult to understand why he thought it was a young Agelenid, since Blackwall's description refers to adult specimens. Furthermore, the male was described (1868) from Tenerife. To examine the latter would be of considerable interest to refer it to its right genus. Unfortunately it is not available, as is the case with many others of Blackwall's spiders, which seem to be lost.

The species was named for Mr. Bewicke, so that bewickei is the correct spelling for it.

The genus Scotognapha has two representives in the Canary Islands,

Sc. convexa (Simon) and Sc. atomaria Dalmas; both are known only from males and differ from the species here referred to by their hue. Another species, the female of which is unknown too, is to be found in Syria. It is, therefore, a South-Mediterranean genus.

## 13. Oxyptila atlantica sp. n.

Selvagem Grande: 1 % (type), 14.X.1955, on top under stone (No. 7562, Figueira coll.).

Selvagem Pequena (Pitão): NW border, 19, 4.VI.1957, under stone (Nos. 11717-22, Maul coll.).

Cephal. 1.5 mm.; total length 3 mm.

Cephalothorax yellow on each side of a wide median stripe, with irregular reddish-brown dots, these being darker along the margin of the thoracic part; provided with a few clavate hairs in the ocular area (6 on the clypeus) and behind along the lateral margin. Sternum yellowish white, paler than coxae, with a few reddish-brown dots, 5 of which are larger and darker (4 lateral and one posterior). Legs yellow with the apex of their femora and their coxae marked with reddish-brown. Abdomen greyish-yellow, dotted with a pale brownish colour; four well marked black points on its back, two on the front margin and two more separate from one another about the middle; a few darker transverse lines before the spinnerets; underside somewhate paler; back and sides with a very few clavate hairs, sides and underside with short, very thin hairs.

Ocular trapezium scarcely wider than long (ratio=1.120).

Femur I provided with 3 clavate spines arranged in an oblique row on its anterior side and 2 upper ones at its apex. Tibia I armed with 1-2 lower spines, metatarsus I with 3-3 lower spines and 1 lateral one on its anterior side. A very few clavate hairs on various joints.

Epigyne fig. 3.

The second specimen (Selvagem Pequena) is much darker in colour. Its cephalothorax is brown with a pale median stripe enlarged on the thoracic part where it is more orange-yellow, with large brown spots on the cephalic part; white spots or stripes on the cephalic part and in the ocular area. Sternum with 7 large, well-marked brown spots (3 lateral on each side and 1 posterior). The brown spots on legs are darker and more numerous, chiefly on pairs I and II. Its abdomen is strongly suffused with dark brown on the sides to the front; it is marked with numerous irre-

gular brown points or transverse spots mixed with white; there are no black conspicuous points as in the type.

Metatarsus I bears one lateral spine on both sides.

Although rather different in appearance, the structure of its epigyne (fig. 4) is about the same as in the type.

In the Atlantic Islands the genus Oxyptila was known only from young

specimens recorded from Madeira.

#### 14. Philodromus sp.

Selvagem Grande (Simon 1912).

## 15. Dendryphantes diligens (Blackwall, 1867).

Selvagem Grande: 1 juv., 20.VII.1958, on top under a stone (No. 14196, Figueira coll.); a brightly coloured specimen the determination of which is almost certainly correct.

Madeira, Canary Islands.

## 16. Aelurillus annulipes (Lucas, 1838) (?).

Selvagem Pequena (Pitão): NW border, 1 \( \text{subad.}, \quad 4.VI.1957, under a stone (Nos. 11717-22, Maul coll.).

This specimen agrees tolerably well with Lucas's and Strand's descriptions, except for the underside of its abdomen being much paler than the dorsal side. *Ae. annulipes* is the only species belonging to the genus to have been recorded from the Atlantic Islands (Canaries).

#### 17. Pholcus phalangioides (Fuessli, 1775).

Kulczynski 1899.

A cosmopolitan species.

#### 18. Spermophora senoculata (Dugès, 1836).

Selvagem Grande: Furna das Pardelas,  $1 \circlearrowleft 1 \circlearrowleft 4$  juv., 20.VII.1958, under wooden boards (No. 14207, Figueira coll.).

Mediterranean region; Madeira.

#### 19. Zodarium sp.

Selvagem Grande: 1 juv., 18.VII.1958, on top under a stone (No. 14209, Figueira coll.).

This rather damaged specimen is much paler in colour than Z. styliferum (Simon) recorded frm Madeira and its legs are entirely yellow. An undescribed species belonging to the genus occurs in the Canary Islands.

#### 20. Teutana grossa (C. L. Koch, 1838).

A nearly cosmopolitan species, occurring in all the Atlantic Islands, already recorded from the Selvagem (Kulczynski 1899, Simon 1912; probably

Theridion sp., Blackwall 1864).

#### 21. *Ero* sp.

Selvagem Grande (Simon, 1912). A genus having four representatives in Madeira.

## 22. Tegenaria pagana urbana (Simon, 1875).

Selvagem Grande: Entrance to Furna do Cabeço do Inferno, 1 9 5 juv., 21.VII.1958 (No. 14202, Figueira coll.); inside Furna do Cabeço do Inferno, 5 pulli (?), 21.VII.1958, under stones (Nos. 14185 and 14188, Figueira coll.),

T. pagana C. L. Koch is a widespread spider throughout middle and south Europe, the Mediterranean region and all the Atlantic Islands; it is often established in caves. Its subspecies urbana is rather widespread too, but it is less common; I have above recorded it from Madeira for the first time.

Blackwall's young *Tegenaria dubia* almost certainly belongs to this species which greatly resembles *T. domestica* (Clerck), a cosmopolitan spider the presence of which in the Selvagem would be plausible, however I think that Simon (1912) was wrong in considering *T. dubia* a synonym of *T. domestica*.

#### 23. Oecobius immaculatus (Schmidt, 1956).

Selvagem Grande: 1  $^{\circ}$ , 20.VII.1958, from cave (No. 14321, Figueira coll.).

This very small specimen (cephal. 0.70 mm.; total length 1.70 mm.) is remarkable for its very pale colour. Besides a fine black marginal line, its cephalothorax is marked only with a slightly darkened, faintly defined spot behind the eyes; no lateral spots being present. Sternum and legs are completely pale yellow. Its abdomen is greyish yellow reticulated with white, with a median lanceolate stripe and some brownish lateral spots.

These characters seem to agree with the male very summarily described ("Sie unterscheidet sich von der Stammart O. annulipes Luc. durch das Fehlen jeglicher Zeichnung auf Cephalothorax und Abdomen. Auch zeigt die Unterart nicht die für die Stammart charakteristische Ringelung der Extremitäten") by Schmidt as Oe. annulipes immaculatus from one specimen introduced in Germany with Canarian bananas. Nevertheless, its epigyne (fig. 5) rather differs from the typical Oe. annulipes and in spite of a good deal of individual variation usually shown by this organ I think this form really belongs to a distinct species, which is to be named Oe. immaculatus. It differs, too, from Oe. cellariorum (Dugès) by the front median eyes being smaller than the posterior ones and by the abdominal pattern.

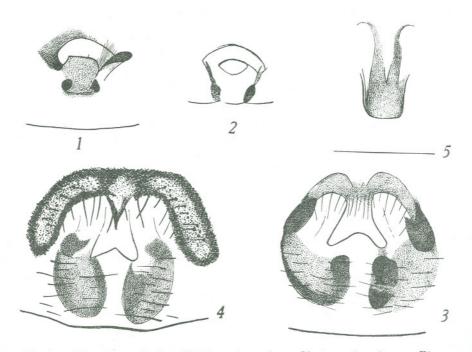


Fig. 1.—Misumena spinifera (Bl.) (specimen from Choupana), epigyne. Fig. 2.—Misumena nigromaculata sp. n., epigyne. Fig 3.—Oxyptila atlantica sp. n. (type), epigyne. Fig. 4.—Oxyptila atlantica sp. n. (specimen from Pitão), epigyne Fig. 5.—Oecobius immaculatus (Schmidt), epigyne.

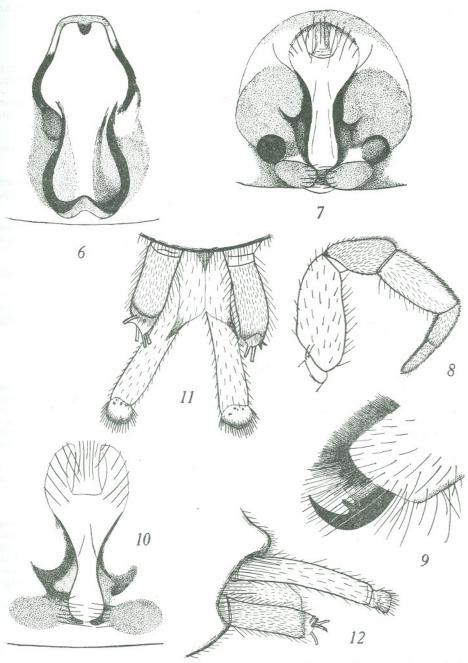


Fig. 6. — Herpyllus musculus (Simon), epigyne. Fig. 7. — Scotognapha paivai (Bl), epigyne. Fig. 8. — Id., leg of pair I. Fig. 9. — Id., tarsal claw. Fig. 10. — Scotognapha bewickei (Bl.), epigyne. Fig. 11.—Id., spinnerets from below. Fig. 12.—Id., spinnerets from side.

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#### CORRIGENDA TO MY 1962 PAPER.

I do not intend to rectify here misprints that occurred in my former paper on Madeiran Spiders; to avoid them was quite impossible as I received only one series of slip proofs and, as I was publishing in French in a foreign country, the proofs were covered with corrections which no doubt made the task of the printers a very hard one indeed. Most of these mistakes are of minor importance and consist of wrong letters or figures which can be changed without any difficulty; so I shall overlook them and will only refer to the following ones:

p. 10 line 17; «Berland. is to be placed at the end of line 18;

p. 14 line 1; read: «... période comprenant la seconde quinzaine d'avril et la première quinzaine de mai...», the words in italics being omitted.

Two far greater mistakes are my own:

p. 44 line 24; instead of «Olios impediens», read «Olios prominens».

p. 67; owing to their enlarged falces in the male sex, I put Theridium bellicosum (and Th. instabile) in the genus Enoplognatha; Mr. G. H. Locket has rightly remarked (in litt.) that both these species lack the colulus, the presence of which is one of the characters of Enoplognatha; thus they are to be kept in the genus Theridium which includes some American representatives (for instance Th. aurantiacum Emert. and Th. sexpunctatum Emert.) which also have the falces enlarged, divergent and provided with large, irregular teeth.