

Pseudomaro aenigmaticus Denis, a spider new to Britain (Araneae: Linyphiidae)

R. Snazell

Institute of Terrestrial Ecology,
Furzebrook Research Station,
Wareham, Dorset

Introduction

During the course of a comparative survey conducted on some areas of chalk grassland in Dorset, a female of the little known linyphiid spider *Pseudomaro aenigmaticus* Denis was taken during the period 10 November to 1 December 1976. Subsequent sampling has yielded one further female. The only previous specimen had been taken in the cellar of a château near Barbençon in Belgium on 25 February 1961.

Genus *Pseudomaro* J. Denis 1966

Characters of Genus

Legs: Tm IV absent. Tm I 0.36. Tibiae I-III with two spines, tibia IV with one spine. *Epigyne*: Characterised by a linguiform scape.

Pseudomaro aenigmaticus Denis

Pseudomaro aenigmaticus J. Denis, 1966, p. 1; M. L. Saaristo, 1971, p. 463; K. Thaler, 1976, p. 230.

Male: Unknown.

Description of female

Total length: 1.5-1.6 mm. *Carapace*: Length 0.7 mm, width 0.5 mm. Very pale yellow with base of chelicerae easily seen through the rather translucent integument (Fig. 1). *Eyes*: Anterior medians small and darkly pigmented. All other eyes reduced and indistinct with little or no pigmentation. *Chelicerae*: Pale orange-yellow. Three fairly large anterior teeth, the central being the largest, the distal being slightly closer to it than the proximal. Slightly anterior to the teeth there are also 2 or 3 warts, each bearing a strong hair (Fig. 1). Posteriorly there is a row of 3-5 very small equally spaced teeth. *Abdomen*: Very pale grey clothed with long pale hairs. *Sternum*: Pale yellow. *Legs*: Pale yellow. Tm I 0.36. Tm IV absent. Tibial spines 2.2.2.1. A well

defined protuberance is present retrolaterally on all patellae (Fig. 6). Mt I:tI 1.29-1.33. Tib I:Mt I 1.15-1.19. Position of tibia I spines Tib I': 0.15, Tib I'': 0.77. *Epigyne*: With a characteristic linguiform scape (Figs. 2, 3, 4). *Vulva*: Fig. 5.

Occurrence

Both specimens were taken at Lyscombe Hill, Dorset, on a steep south-facing slope of chalk grassland (Grid Ref: ST 7302) which is grazed by cattle for some time each winter. There are many large mounds of the ant *Lasius flavus* (Fabr.) suggesting a long period without cultivation, probably owing to the extreme slope. Some damage is done by the passage of cattle in wet periods.

The flora is very rich especially in the more heavily grazed areas. The grasses were predominantly *Brachypodium pinnatum* (L.) Beauv., *Dactylis glomerata* L., *Anthoxanthum odoratum* L., *Holcus lanatus* L. and *Poa annua* L. with some *Briza media* L. and *Arrhenatherum elatius* (L.) J. & C. Presl. Occurring commonly over the site were the Common Rockrose (*Helianthemum chamaecistus* Mill.), Marjoram (*Origanum vulgare* L.) and Thyme (*Thymus drucei* Ronn.).

The specimens, both female, were taken in pitfall traps, one during the period 10 November to 1 December 1976, the other during the period 19 October to 10 November 1977.

Many characters of the spider suggest a subterranean habitat and the type specimen was taken in a cellar. However, considering the Dorset site and the fact that it has not been found in continental caves, it seems unlikely that *P. aenigmaticus* is a cavernicolous species, and because of its comparatively large size it probably could not inhabit the spaces between soil particles in the same way as *Tapinocyboides pygmaea* (Menge) or *Jacksonella falconeri* (Jackson). It is possible that the spider may be myrmecophilous or, more likely, that it inhabits the network of small fissures and solution channels found in the chalk subsoil on the site.

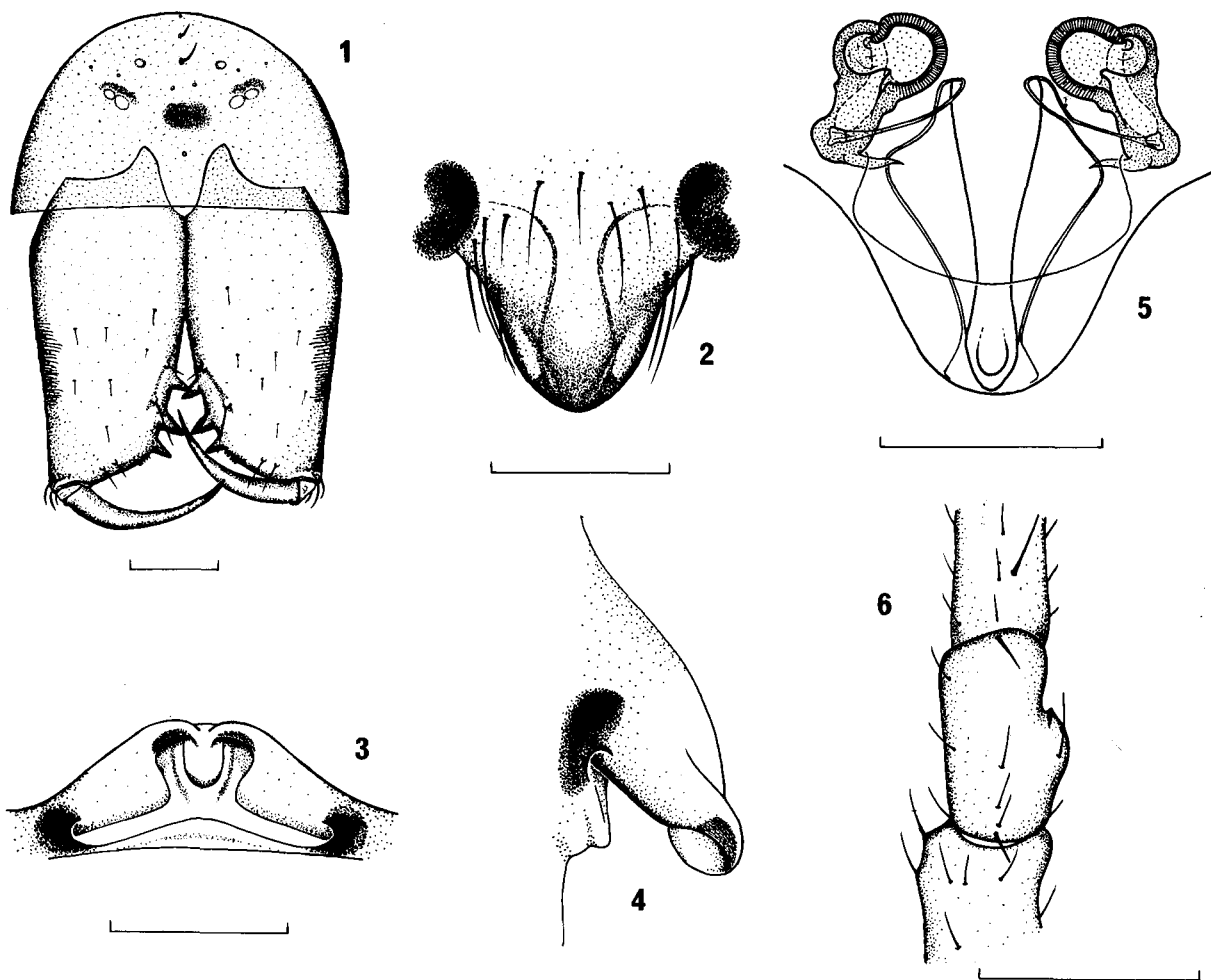
Taxonomic position

The taxonomic position of *P. aenigmaticus* is unclear at present and will probably remain so until an assignable male is found. Denis (1966) places it in

the linyphiine section of the Linyphiidae, close to *Maro*, and states that the resemblance of the epigyne to that of *Asthenargus* spp. is "purement fortuite". Saaristo (1971), because of epigyne structure, eyes and cheliceral dentition placed it in the erigonine section. Examination of the vulva of *P. aenigmaticus* suggests that it may be close to *Asthenargus braccianus* Miller (Miller, 1938) and the rather confused *Asthenargus/Gongylidiellum* group (Thaler, 1976).

Acknowledgements

I wish to thank Dr M. Grasshoff, Natur-Museum Senckenberg, Frankfurt and Dr J. Kekenbosch, Institut Royal des Sciences Naturelles de Belgique, Brussels, for the loan of type material. I would also like to thank the Hon. Mrs A. B. Russell and the Dorset Naturalists Trust for allowing me to work on Lyscombe Hill.



Figs. 1-6: *Pseudomaro aenigmaticus* Denis, female. 1 Facies and chelicerae (frontal view); 2 Epigyne; 3 Epigyne (rear view); 4 Epigyne (lateral view); 5 Vulva; 6 Right patella I (dorsal view). Scale lines 0.1 mm.

References

- DENIS, J. 1966: *Pseudomaro aenigmaticus* n. gen. n.sp., araignée nouvelle pour la faune de Belgique, et un congénère probable de Sibérie. *Bull.Inst.r.Sci.nat.Belg.* **42** (9): 1-7.
- MILLER, F. 1938: Zwei neue Höhlenspinnen aus den Grotten Jugoslawiens. *Festschr.Strand* **4**: 629-633.
- SAARISTO, M. L. 1971: Revision of the genus *Maro* O.P.-Cambridge (Araneae: Linyphiidae). *Ann.Zool.Fenn.* **8**: 463-482.
- THALER, K. 1976: Über wenig bekannte Zwergspinnen aus den Alpen, IV (Arachnida, Aranei, Erigonidae). *Archs Sci., Genève* **29**(3): 227-246.
-