ZOOLOGISCHE MEDEDELINGEN

UITGEGEVEN DOOR HET

RIJKSMUSEUM VAN NATUURLIJKE HISTORIE TE LEIDEN

(MINISTERIE VAN CULTUUR, RECREATIE EN MAATSCHAPPELIJK WERK)

Deel 54 no. 9 5 oktober 1979

# ON SOME AFRICAN *OECOBIUS* AND *ZIMIRIS* (ARANEAE, OECOBIIDAE AND GNAPHOSIDAE)

by

PAOLO MARCELLO BRIGNOLI

Istituto di Zoologia dell'Università, L'Aquila (Italy)

With 8 text-figures

SUMMARY

Some records are published of *Oecobius annulipes* Lucas, 1849, *O. cellariorum* (Dugès, 1836) — new for Tunisia —, *O. putus* O. Pickard-Cambridge, 1876, and *O. templi* O. Pickard-Cambridge, 1876 (♂ ♀ illustrated, new for Sudan). *Zimiris doriai* Simon, 1882, is recorded from Sudan (new for this country, ♂ ♀ illustrated); *Z. indica* Simon, 1884, is apparently a new synonym of this species.

The here published material belongs in part to the Muséum d'Histoire Naturelle, Genève (MHNG) and in part to the Rijksmuseum van Natuurlijke Historie, Leiden (RMNH); I thank respectively B. Hauser and P. J. van Helsdingen for the loan of these spiders.

## OECOBIIDAE

### **Oecobius annulipes** Lucas, 1849

Material: Egypt, Bacos, Ramleh, near Alexandria, 6.iv.09, 1 ♀ "on a wall" (MHNG).

Remark: already known from Egypt (Hassan, 1953).

### **Oecobius cellariorum** (Dugès, 1836)

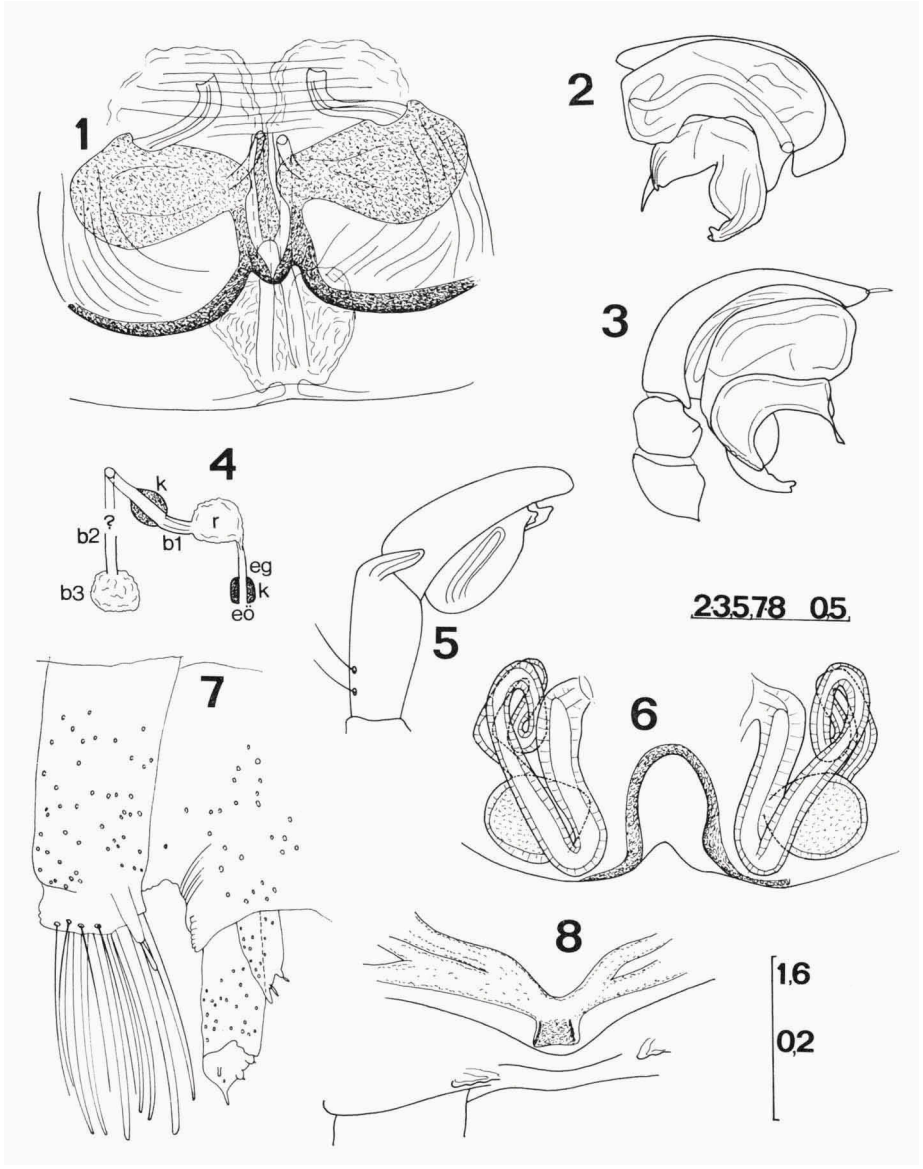
Material: Tunisia, Cherichera, 1915, F. Santschi leg., 1 ♀ (MHNG). — Kairouan, 1915, F. Santschi leg., 1 ♂, 3 ♀ (MHNG, 1 ♀ in my collection).

Remarks: widespread species; new for Tunisia.

### **Oecobius putus** O. Pickard-Cambridge, 1876

Material: Sudan, Khartoum, vi and viii.67, W. Wismeyer leg., 2 ♂, 6 ♀ (RMNH, one couple in my collection).

Remarks: widespread species; already known from Sudan (Shear & Benoit, 1974).




Figs. 1-4. *Oecobius templi* O. Pickard-Cambridge. 1, vulva, from the outside; 2-3, bulbus, internally and externally; 4, structure of the vulva (schematic, see text). Figs. 5-8. *Zimiris doriai* Simon. 5, male pedipalp; 6, epigyne/vulva, externally; 7, spinnerets; 8, tracheal stigmata. Scales in mm.

**Oecobius templi** O. Pickard-Cambridge, 1876

Material: Sudan, Khartoum, vi and viii.67, W. Wismeyer leg., 1 ♂, 5 ♀ (RMNH, one ♀ in my collection).

Remarks: described from Egypt, new for Sudan. This species can be identified with the paper by Kritscher (1966); genitalia, see figs. 1-3.

The examination of the vulva shows a structure similar, but not identical, to that of the "sp. indet. A" illustrated by Baum (1974: 120). The first part of the copulation duct (EG 1 of Baum) is short and straight, the second part (EG 2) is membraneous, relatively straight and directed forwards (cephalad); apparently there is no communication between EG 2 and the first part of the fertilization duct (B 1), which is membraneous, but easily detected. B 1 passes through a large sclerotized capsule (K); B 2 is very long and ends in a large, membraneous, "wrinkled" region (B 3).

I did not use the technique by Baum (op. cit.), but a much simpler one, consisting only of soaking the vulva in chlorallactophenol for a few seconds; the — non permanent — preparation was examined with a Leitz-Nomarski microscope with transmitted (not incident) light.

GNAPHOSIDAE

**Zimiris doriai** Simon, 1882

Material: Sudan, Khartoum, vi and viii.67, W. Wismeyer leg., 3 ♂ (all in August), 1 ♀ (RMNH, one ♂ in my collection).

Remarks: this species, the type of the genus *Zimiris* Simon, 1882, was described after a juvenile female from Aden (Southern Yemen); de Dalmas (1918) redescribed it after a female from the same locality, the epigyne of which was somewhat damaged. Following de Dalmas, the epigyne of *Z. doriai* should be very similar to that of *Z. indica* Simon, 1884; the illustration of this last species published by de Dalmas is identical to that of the same species published by Cooke (1964; on a specimen from Madras, India). It is evident that the species illustrated by these authors is the same as the one of which I have seen material (see figs. 5-6). It thus can be concluded that, either *Z. indica* lives in India and Sudan, or *Z. doriai* is identical with *Z. indica*. This last species was described from Ramnad (Southern India); for distinguishing it from *Z. doriai*, de Dalmas (op. cit.) found nothing better than slight differences in colour and relative positions of the eyes. It is well known that these characters have been found of limited value in many groups of spiders and the examination of the material here published has confirmed that also in this group it is better not to rely on them. The colour of the prosoma (which should be darker than the legs in *Z. indica*)

and the distance between the median posterior eyes (larger than the diameter of the eyes in *Z. doriai*) are both variable in the material from Khartoum; following the key of de Dalmas (op. cit.) one specimen would belong to *Z. indica* and the rest to *Z. doriai*. The second hypothesis is, therefore, more likely.

The genus *Zimiris* appears justified by the highly specialized spinnerets (fig. 7). The tracheal stigmata consist of two slits at the sides of a small, slightly sclerotized lamina (fig. 8); apparently nothing of this kind exists in *Prodidomus* (see Lamy, 1902: 185).

## References


Baum, S., 1974. Zum "Cribellaten-Problem": die Genitalstrukturen der Oecobiinae und Urocteinae. — Abh. Verh. naturwiss. Ver. Hamburg, (N.F.) 16: 101-153.

Cooke, J. A. L., 1964. A revisionary study of some spiders of the rare family Prodidomidae. — Proc. Zool. Soc. London, 142: 257-305.

Dalmas, R. de, 1918. Synopsis des araignées de la famille des Prodidomidae. — Ann. Soc. ent. France, 87: 279-340.

Hassan, A. I., 1953. The Oecobiidae of Egypt. — Bull. zool. Soc. Egypt, 11: 14-30.

Kritscher, E., 1966. Die paläarktischen Arten der Gattung Oecobius. — Ann. naturh. Mus. Wien, 69: 285-295.

Lamy, E., 1902. Recherches anatomiques sur les trachées des Araignées. — Thèses Fac. Sci. Paris, 1091: 149-280.

Shear, W. A. & P. L. G. Benoit, 1974. New species and new records in the genus Oecobius Lucas from Africa and nearby islands. — Rev. Zool. afr., 88: 706-720.