

**Notes on Mitobatinae V: Revalidation of *Ruschia* Mello-Leitão, with redescription of the type species (Opiliones: Laniatores: Gonyleptidae)**

**Adriano B. Kury**

Depto. Zoologia,  
Universidade Federal do Rio de Janeiro,  
CCS, bloco A, Ilha da Cid. Univ.,  
Rio de Janeiro, RJ, 21.941, Brazil

**Summary**

*Ruschia* Mello-Leitão, 1940 is removed from the synonymy of *Discocyrtoides* Mello-Leitão, 1923, and is here revalidated to include *R. vellutina* Mello-Leitão, 1940. An emended diagnosis is given for *Ruschia*. The male of the type species (hitherto known only from the female and never figured) is herein described and figured.

**Introduction**

The monotypic genus *Ruschia* was established in the Pachylinae by Mello-Leitão (1940:106) for *R. vellutina*, from the Brazilian state of Espírito Santo. B. Soares (1944b:167) transferred *Ruschia* to the Bourguyiinae, considering it to be a synonym of *Discocyrtoides* Mello-Leitão, 1923. Mello-Leitão (1949:22) did not accept the synonymy, although it was maintained in the monograph by Soares & Soares (1948:563). *Discocyrtoides* has recently been moved to the Mitobatinae (Kury, 1990). This genus contains a miscellany of species of doubtful affinity. A phylogenetic analysis of the Mitobatinae (Kury, in prep.) failed to offer any evidence that *Ruschia vellutina* and the remaining species of *Discocyrtoides* constitute a monophyletic group, but instead, *vellutina* is thought to be probably more closely related to *Mitobates* Sundevall, 1833 and *Metamitobates* Roewer, 1913. *Ruschia* is an available name, and is therefore revalidated here to include this single species. A redescription is given of *R. vellutina* (known hitherto only from a female and never figured).

The exaggerated trend of raising species to monotypic genera has been much criticized. I join the critics, but, on the other hand, I can see no use in lumping several dozen species together in huge wastebasket genera (see e.g. Goodnight & Goodnight, 1953) not linked to any kinship hypothesis, and defined only by symplesiomorphies. When the phylogeny of the Mitobatinae has been cleared up, perhaps *Ruschia* could be included in some other genus. Currently, its status as a monotypic genus reflects the lack of evidence to relate it to any other genus.

Abbreviations of the institutions in which the specimens are deposited are: Museu de Zoologia da Universidade de São Paulo (MZUSP); Museu Nacional

do Rio de Janeiro (MNRJ); Departamento de Zoologia da Universidade Federal do Rio de Janeiro (DZUFRJ). The Brazilian states of Espírito Santo and São Paulo are here abbreviated as ES and SP. All measurements are in mm.

**Genus *Ruschia* Mello-Leitão**

*Ruschia* Mello-Leitão, 1940:106; 1949:22.

*Discocyrtoides* Mello-Leitão (part): B. Soares, 1944b:168; Soares & Soares, 1948:559.

*Type species: Ruschia vellutina* Mello-Leitão, 1940 by original designation.

*Included species:* Only the type species.

*Etymology:* The genus was named after the Brazilian naturalist Augusto Ruschi, and should be treated as feminine.

*Distribution:* States of Espírito Santo and São Paulo, southeastern Brazil.

*Diagnosis:* Mitobatines with paired sculpture on area III and on eye mound. Tarsi I with 6 segments in both sexes, tarsi II-IV with more than six segments. By the rectangular scute outline, unarmed coxa and trochanter IV in male, and cleft and flange in ventral plate of penis, it can be tentatively related to *Mitobates*. It can be readily distinguished by the low tarsal segmentation and low pedipalpal tibia spination. As autapomorphies for *Ruschia* can be cited: (1) unique structure of glans penis ventral branch; (2) velvet-like mesotergal tegument; (3) white spots on dorsal scute (very different from those of *Discocyrtoides maculatus* H. Soares, 1974); (4) eye mound very low, with armature much reduced in male; (5) tiny body (it is the smallest mitobatine I have seen); (6) simple dorso-basal anterior apophysis of coxa II (considered as a reversal to ancestral condition; also unique in Mitobatinae).

***Ruschia vellutina* Mello-Leitão (Figs. 1-10)**

*Ruschia vellutina* Mello-Leitão, 1940:106; B. Soares, 1944a:144; Mello-Leitão, 1949:22.

*Discocyrtoides vellutinus*: B. Soares, 1944b:167; 1945:348; Soares & Soares, 1948:563; H. Soares, 1974:481.

*Despirus marginatus* Mello-Leitão (specimen label only).

*Material examined:* Female holotype (MNRJ 201), Santa Teresa, ES (A. Ruschi); 1♀ (MZUSP 1.841), Santa Leopoldina, ES, January 1945 (Vervloet); 1♂ (DZUFRJ 0284), Fazenda Tabajara, Santa Teresa, ES, 4 September 1988 (R. L. C. Baptista/A. P. Chaves/A. B. Kury); 3♂, 1♀ syntypes of "*D. marginatus*" (MNRJ), Iguape, SP (Lange).

*Etymology:* From latin = velvet-like, referring to the appearance of the mesotergum.

*Distribution:* Brazil, Espírito Santo state, Santa Teresa and Santa Leopoldina; São Paulo state, Iguape.

	Tr	Fe	Pa	Ti	Mt	Ta	Total
<b>Pedipalpus</b>	0.59	1.22	0.66	0.94	—	1.16	4.57
<b>Leg I</b>	0.56	5.49	0.46	3.49	6.40	2.71	19.11
<b>Leg II</b>	0.68	14.06	1.53	11.43	16.34	7.23	51.27
<b>Leg III</b>	0.77	10.97	1.56	5.49	11.60	4.58	34.97
<b>Leg IV</b>	0.90	23.31	1.57	13.26	27.66	6.74	73.44

Table 1: *Ruschia vellutina* male (DZUFRJ 0284), appendage measurements.

	Tr	Fe	Pa	Ti	Mt	Ta	Total
<b>Pedipalpus</b>	0.63	1.25	0.53	0.94	—	0.91	4.26
<b>Leg I</b>	0.53	4.64	0.84	3.03	5.36	1.87	16.27
<b>Leg II</b>	0.69	10.29	1.19	8.34	11.76	5.42	37.69
<b>Leg III</b>	0.75	7.60	1.28	4.52	7.54	3.48	25.17
<b>Leg IV</b>	0.78	10.86	1.34	7.42	11.77	4.84	37.01

Table 2: *Ruschia vellutina* female holotype, appendage measurements.

*Male* (DZUFRJ 0284)

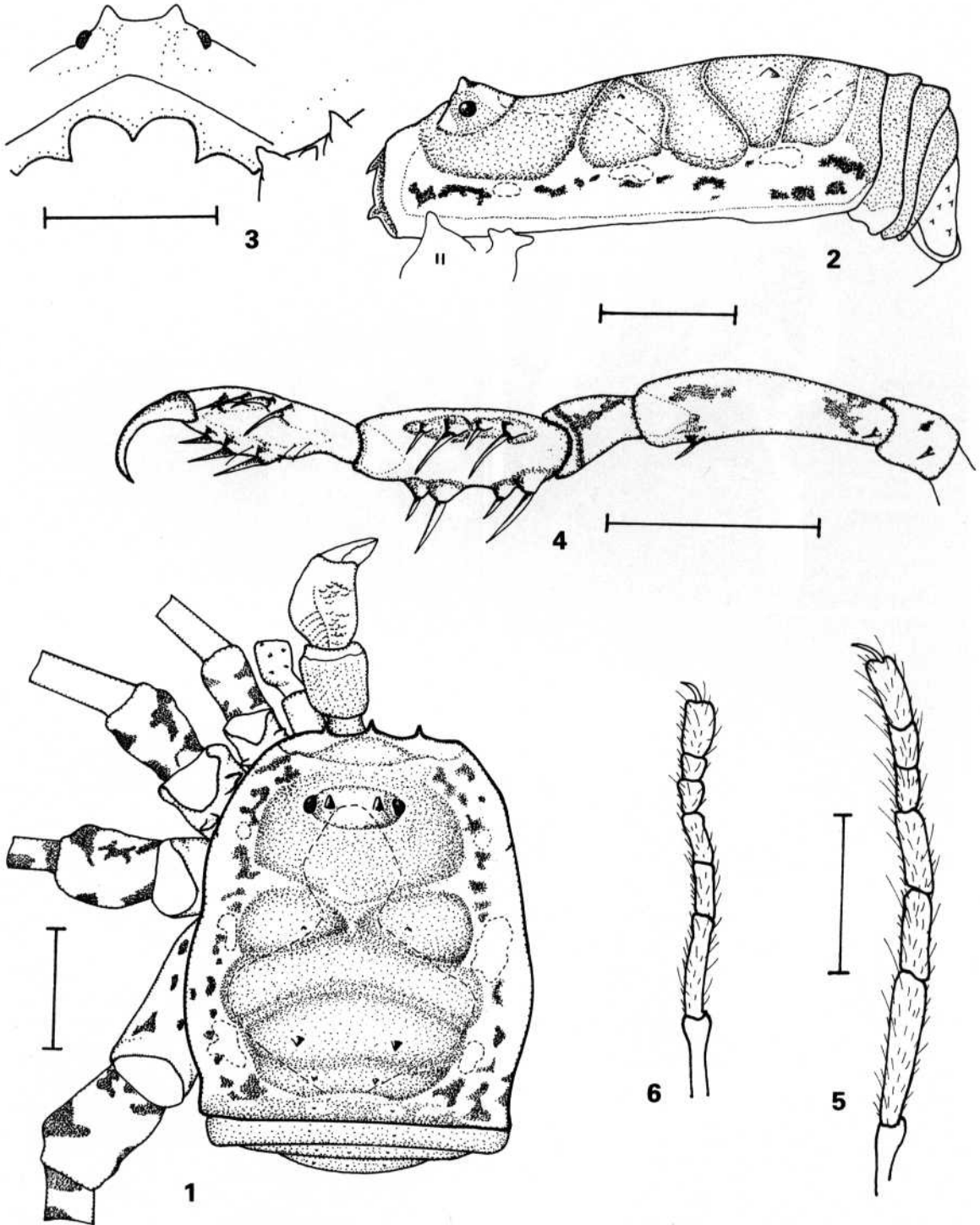
Dorsal scute 3.22 long; cephalothorax 1.53 long, 2.37 wide; abdominal scute 1.69 long, 2.87 wide.

*Dorsum* (Figs. 1-2): Body rectangular with convex sides, wider at area II, slightly constricted at cephalothorax/abdomen groove, posterior margin of scute straight, anterior margin with rounded corners, unarmed and smooth (except for cheliceral sockets). Eye mound (Fig. 3) low, situated at mid-length of carapace, armed with a pair of pointed tubercles. Abdominal scute divided from cephalothorax and into five areas by five well-marked transverse grooves;

groove I deep, linked to groove II by a longitudinal median groove, groove II medially projected into area I, groove III recurved, grooves IV-V almost straight. Scutal area III armed with a pair of pointed tubercles, other areas, free tergites and dorsal anal opercle unarmed. Area IV, posterior margin of scute and free tergites with a row of minute granules. Mesotergum and posterior part of carapace with velvet-like tegument.

*Venter*: Coxae and stigmatic area each with a transverse row of minute granules.

*Pedipalpus* (Fig. 4): Robust, overall surface smooth.



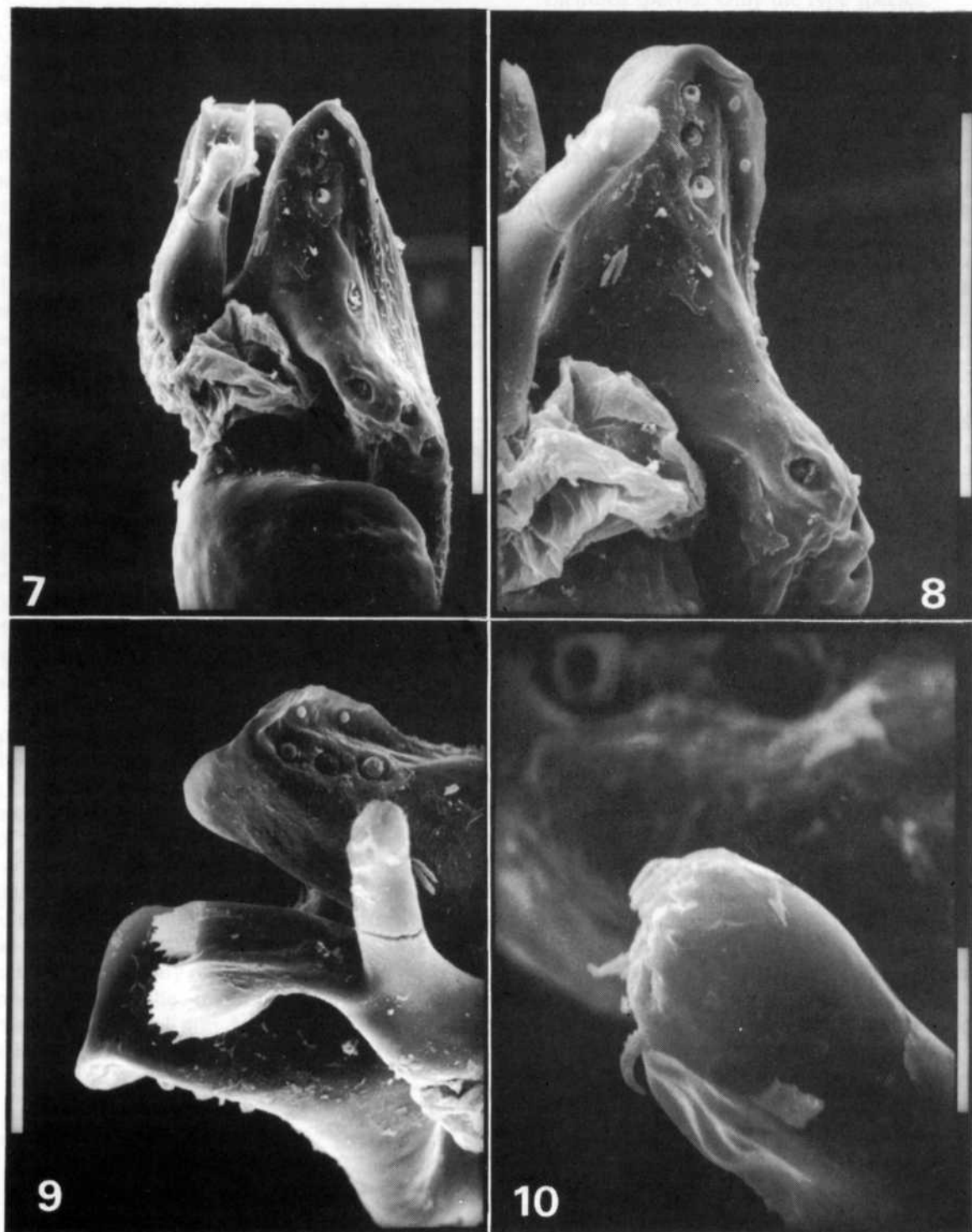
Figs. 1-6: *Ruschia vellutina*. 1-5 Male DZUFRJ 0284. 1 Habitus, dorsal view; 2 Habitus, lateral view; 3 Dorsal scute, frontal view; 4 Left pedipalpus, ventral view; 5 Tarsus I. 6 Female holotype, tarsus I. Scale lines = 1 mm.

Trochanter armed with a basal setiferous tubercle, femur with a ventro-basal setiferous tubercle and a medio-distal spine. Patella slightly widened, unarmed; tibia armed with four ectal (IiIi) and four mesal (IiIi) spines; tarsus armed with three mesal (Iii) and four ectal spines (IiIi). Tarsal claw robust, smooth, curved. Segments cylindrical, tarsus and tibia ventrally flattened. Measurements of segments in Table 1.

*Legs:* Very elongate; all segments unarmed; coxae IV extending well beyond lateral margins of dorsal scute, femora I-IV straight. Approximate proportion of femora I-IV lengths: 1:3:2:4. Ratio calcaneus/

astragalus of metatarsi I-IV: 0.5:0.3:0.5:0.3. Tarsal segmentation 6:13:9-10:10 (variation in the other three males examined: 6:13-14:9-11:10). Double tarsal claws of legs III-IV untoothed, bearing no scopula, with a tarsal process. Distitarsi I and II with 3 segments each. Measurements in Table 1.

*Coloration:* Pedipalps, lateral margins of scute, trochanters I-IV and base of femora III-IV light yellow with minute, sharply delimited black spots; cephalothorax, mesotergum and free tergites black; chelicerae dark yellow, with dense, dark olive-green reticle; free sternites and ventral anal opercle black.



Figs. 7-11: *Ruschia vellutina*, male DZUFRJ 0284. **7** Distal part of penis, lateral view; **8** Ventral plate of penis, dorsal view; **9** Glans penis, lateral view; **10** Apex of stylus, lateral view. Scale lines = 0.1 mm (7-9), 0.01 mm (10).

Lateral margins of scute with three pairs of white spots, one on carapace, one at area I and one at groove IV. Tubercles of area III black, those of eye mound yellow; all legs olive-green.

**Genitalia** (Figs. 7-10): Penis 2.04 long. Truncus slender. Ventral plate pyriform, widened at base, divided distally into two branches by a deep V-shaped cleft; armed with three distal and three basal setae and a much smaller one in the middle; each branch with a distal well-developed flange, bearing two very short setae. Glans (Fig. 9) bifid; ventral branch ("fan") roughly rectangular, with two latero-distal projecting flakes with grooved surface and serrate margins; dorsal branch cylindrical, entirely smooth, with rounded apex, slightly swollen (Fig. 10) and with blunt tubercles and ridges.

#### Female

Paired sculpture of area III and of eye mound as spines (only tubercles in male). Basitarsus I not thickened as in male (see Figs. 5-6). All segments of leg IV much shorter than in male, especially femur and metatarsus IV (see Tables 1-2). Approximate proportion of femora I-IV lengths: 1:2:1.5:2. Ratio calcaneus/astragalus of metatarsi I-IV: 0.5:0.3:0.4:0.3. Range of tarsal segmentation ( $n = 3$ ): 6:12:9:9-11.

**Habitat:** Previous information about the natural history of *Ruschia vellutina* is not available. The only data result from just one specimen: DZUFRJ 0284 was collected on the under-surface of a rock in a waterfall, as some larger species of Mitobatinae.

#### Acknowledgements

I am grateful to H. E. M. Soares for the loan of material under her care and to A. Timotheo da Costa for steady laboratory support. Many thanks to R. L. C. Baptista and A. P. Chaves for their efforts to collect Mitobatinae. I am deeply indebted to Dr M. Benchimol (Inst. Biofísica C. Chagas Filho, UFRJ) for providing SEM facilities and to Dr M. Attias for spending hours taking the micrographs.

#### References

- KURY, A. B. 1990: Um novo conceito para Bourguyiinae (Opiliones: Laniatores: Gonyleptidae). In XVII Congresso Brasileiro de Zoologia, Londrina, *Resumos*, p. 22.
- GOODNIGHT, C. J. & GOODNIGHT, M. L. 1953: The opilionid fauna of Chiapas, Mexico, and adjacent areas. *Am. Mus. Novit.* **1610**: 1-81.
- MELLO-LEITÃO, C. F. DE 1923: Opiliões Laniatores do Brasil. *Archos Mus. nac. Rio de J.* **24**: 107-197.
- MELLO-LEITÃO, C. F. DE 1940: Mais alguns novos opiliões sul-americanos. *Anais Acad. bras. Cienc.* **12**(2): 93-107.
- MELLO-LEITÃO, C. F. DE 1949: Famílias, subfamília, espécies e gêneros novos de opiliões e notas de sinonímia. *Bolm Mus. nac. Rio de J. (N. S., Zool.)* **94**: 1-33.
- SOARES, B. A. M. 1944a: Contribuição ao estudo dos opiliões do Espírito Santo. *Papéis Dep. Zool. S. Paulo* **6**(13): 143-156.
- SOARES, B. A. M. 1944b: Notas sobre opiliões da coleção do Museu Nacional do Rio de Janeiro. *Papéis Dep. Zool. S. Paulo* **6**(15): 163-180.
- SOARES, B. A. M. 1945: Opiliões da coleção do Museu Nacional do Rio de Janeiro. *Archos Zool. Est. S. Paulo* **4**(9): 341-394.
- SOARES, B. A. M. & SOARES, H. E. M. 1948: Monografia dos gêneros de opiliões neotrópicos I. *Archos Zool. Est. S. Paulo* **5**(9): 553-636.
- SOARES, H. E. M. 1974: Opera Opiliologica Varia III (Opiliones: Gonyleptidae). *Revta bras. Biol.* **34**(4): 477-486.

---

Bull.Br.arachnol.Soc. (1991) **8** (9), 287

*Uloborus kerevatensis*, new name for *Uloborus albolineatus* Opell, 1982 (Arachnida, Araneae, Uloboridae)

#### Brent D. Opell

Department of Biology,  
Virginia Polytechnic Institute and State University,  
Blacksburg, Virginia 24061, U.S.A.

The species name *Uloborus albolineatus* was first used by Mello-Leitão (1941), making its subsequent used by Opell (in Lubin *et al.*, 1982) a junior homonym and requiring that a replacement name be proposed.

Therefore, I propose the species name *Uloborus kerevatensis* to replace the name *Uloborus albolineatus* Opell, 1982. This new name is an adjective derived from the type locality of the species.

#### References

- MELLO-LEITÃO, C. F. 1941: Las arañas de Córdoba, La Rioja, Catamarca, Tucuman, Salta y Jujuy. *Revta Mus. La Plata (N.S., Zool.)* **2**: 99-198.
- LUBIN, Y. D., OPELL, B. D., EBERHARD, W. G. & LEVI, H. W. 1982: Orb plus cone-webs in Uloboridae (Araneae), with a description of a new genus and four new species. *Psyché, Camb.* **89**: 29-64.