

Two New Species of the Genus *Burmoniscus* Collinge, 1914 (Crustacea, Isopoda, Oniscidea) from Palawan Island, the Philippines

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Key Words:

Isopoda
Oniscidea
Philosciidae
Burmoniscus
New species
Philippines

Two species of the genus *Burmoniscus* Collinge, 1914 (Philosciidae), *B. philippinensis* and *B. palawanensis* from Palawan Island, the Philippines are described as new. In the family Philosciidae, only a single species, *Pseudotyphloscia alba* (Dollfus, 1898), has been recorded from the Philippines. Two species of the genus *Burmoniscus* Collinge, 1914 (Philosciidae), *B. philippinensis* and *B. palawanensis* from Palawan Island, the Philippines are described as new. *B. philippinensis* is distinguished from its congeners by the shape of telson with straight sides and slightly protruding distal part with acute apex, while *B. palawanensis* by its peculiar shape of male pleopod 1 endopod.

The genus *Burmoniscus* was established by Collinge (1914) to accommodate the new species *B. moulmeinensis* collected in Myanmar (Burma) and was redefined and discussed by Taiti and Ferrara (1986). Up to now, *Burmoniscus* includes more than fifty nominal species distributed in the Ethiopian, Oriental and Australian Regions.

The terrestrial isopods of the Philippines have received very little attention. In the family Philosciidae, only a single species, *Philoscia (Setaphora) pallida* Dollfus, 1898, was recorded by Arcangeli (1927). Kwon and Taiti (1993), however, confirmed that it was a mis-identification of *Pseudotyphloscia alba* (Dollfus, 1898). This contribution deals with descriptions of two new species of *Burmoniscus* collected from Palawan Island, the Philippines in 1997.

The specimens examined are deposited in the Museo Zoologico "La Specola" dell'Università, Florence (MZUF) and the Department of Biology, Inje University, Kimhae (IJB).

Descriptions

Genus *Burmoniscus* Collinge, 1914

Burmoniscus Collinge, 1914: 466. Type species: *Burmoniscus moulmeinensis* Collinge, 1914 (= *Philoscia coeca* Budde-Lund, 1895), by original monotypy.

Fomososcia Verhoeff, 1928: 218. Type species: *Formososcia ocellata* Verhoeff, 1928, by monotypy.

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Rennelloscia Vandel, 1970: 143. Type species: *Rennelloscia wolfii* Vandel, 1970, by subsequent designation (Vandel, 1973).

Vavoscia Schultz, 1985: 216. Type species: *Vavoscia javanensis* sensu Schultz, 1985 (nec Recharadson Searle, 1922) (= *Burmoniscus schultzi* Taiti, Ferrara and Kwon, 1992), by original designation and monotypy.

Burmoniscus philippinensis, new species (Figs. 1, 2)

Type material: 1 ♂ (holotype), Palawan I., Puerto Princesa, San Rafael, Benduyan, valley, 26.iv.1997, leg. D. H. Kwon & D. S. Jeon (MZUF); 2 ♂♂, 4 ♀♀ (paratypes), same data as holotype (MZUF); 3 ♂♂, 4 ♀♀ (paratypes), same data (IJB).

Non-type material examined: 1 ♂, 1 ♀, Palawan I., Puerto Princesa, Sabang, near seacoast, litter, 24.iv.1997, leg. D. H. Kwon & D. S. Jeon (IJB); 5 ♂♂, 19 ♀♀, Palawan I., Puerto Princesa, Sabang, St. Paul National Park, forest, 24.iv.1997, leg. D. H. Kwon & D. S. Jeon (IJB); 1 ♂, 2 ♀♀, Palawan I., Puerto Princesa, Iwahig, Balsahan, 20.iv.1997, leg. D. H. Kwon & D. S. Jeon (IJB); 2 ♂♂, 1 ♀, Palawan I., Quezon, Tabon Beach, 27.iv.1997, leg. D. H. Kwon & D. S. Jeon (IJB); 6 ♂♂, 4 ♀♀, Palawan I., Quezon, Tumarbon Waterfall, 28.iv.1997, leg. D. H. Kwon & D. S. Jeon (IJB).

Description: Maximum length of male 5.5 mm, of female 7.0 mm. Color in alcohol dark brown with usually pigmentless muscle spots. Dorsum smooth, highly convex. Pereonites with several gland pores (5 to 15 per side) along the whole lateral margins. Noduli laterales with

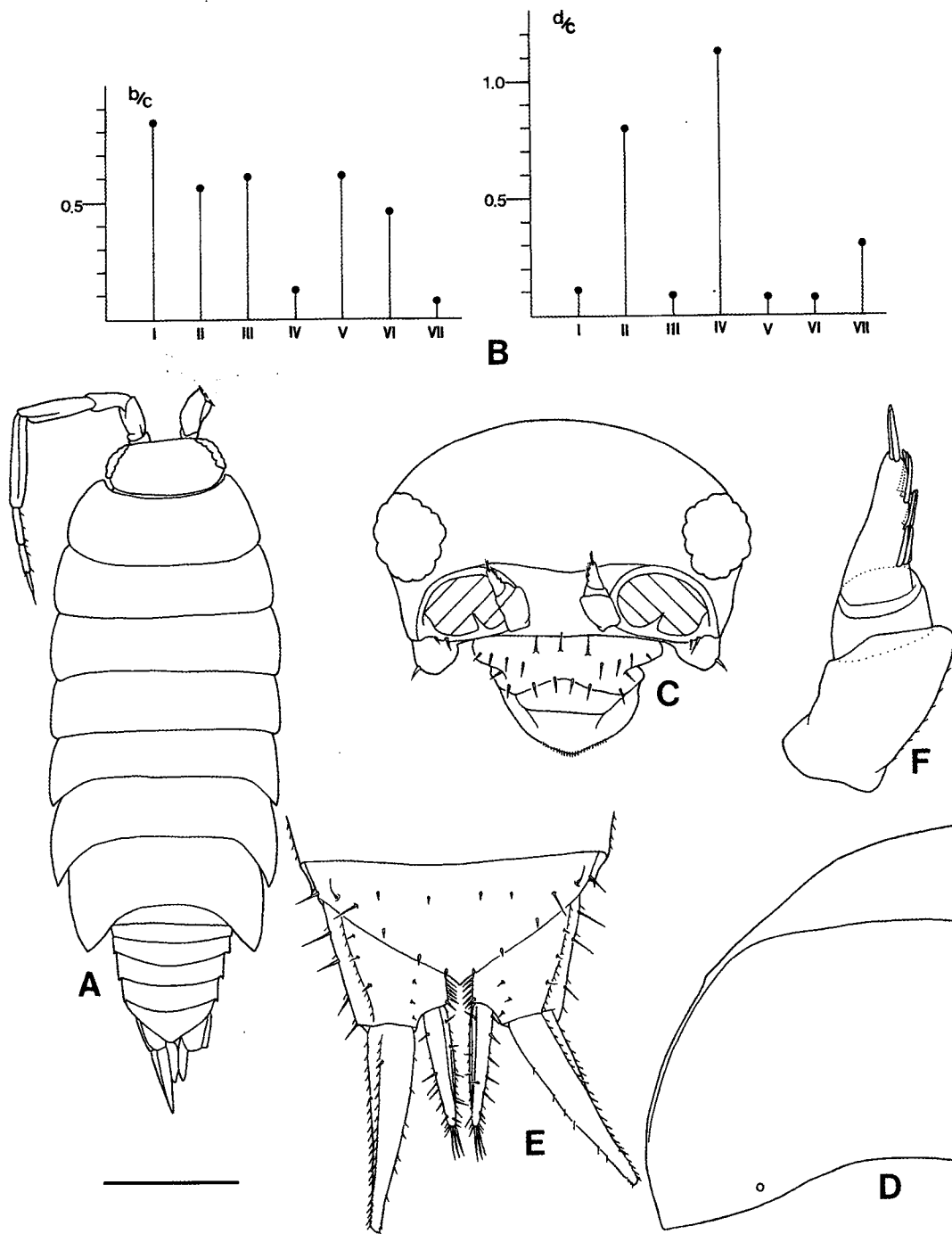


Fig. 1. *Burmoniscus philippinensis*, n. sp: A, Habitus in dorsal view, male. B, Coordinates of noduli laterales. C, Cephalon in frontal view. D, Left epimeron of pereonite 7. E, Pleonite 5, telson and uropods. F, Antennule. b; distance of the nodulus lateralis from the posterior margin of the pereonite, c; length of the pereonite, d; distance of the nodulus lateralis from the lateral margin of the pereonite. Scale bar = 1 mm.

b/c and d/c coordinates as in Fig. 1B. Eye with 20 ommatidia. Cephalon 1.7 times as wide as long, with supra-antennal line slightly bent downwards in the middle. Pereonites 1-4 with postero-lateral corners rounded, 5 and 6 acute, 7 subright-angled. Pleonal epimera reduced, adpressed, with short posterior

points on pleonites 3-5 not visible in dorsal view. Telson with straight sides and slightly protruding distal part with acute apex. Antennule with 2 apical aesthetascs and 3 rows of a few superimposed ones on mesial margin of third article. Antenna with fifth article of peduncle slightly longer than flagellum; ratio of

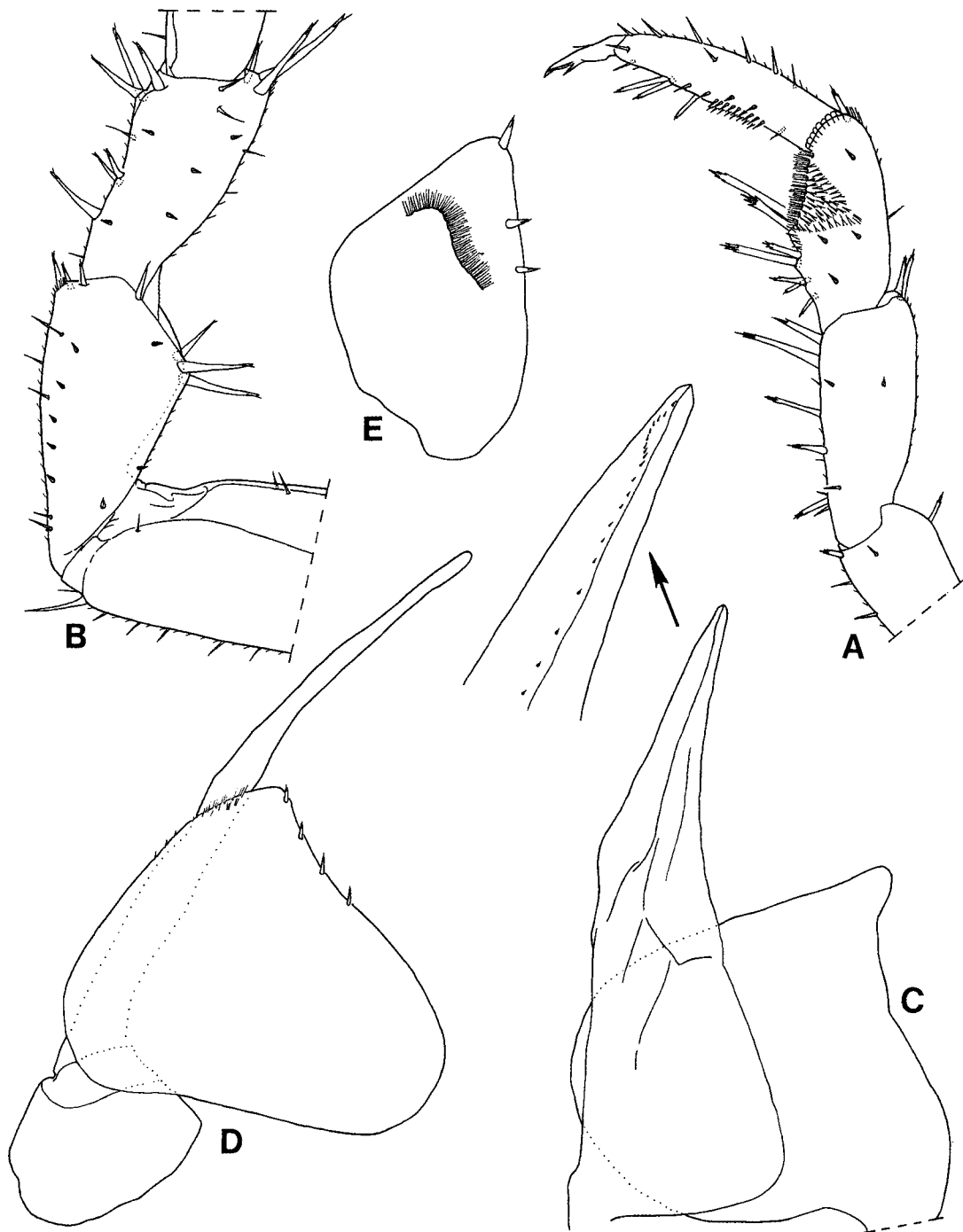


Fig. 2. *Burmoniscus philippinensis*, n. sp., male. A, Pereopod 1. B, Pereopod 7, merus and ischium. C, Pleopod 1. D, Pleopod 2. E, Pleopod 5 exopod.

flagellar articles 6:4:3; flagellar articles 2 and 3 with 2 and 2 aesthetascs, respectively. Buccal pieces characteristic of the genus *Burmoniscus*; viz., mandible with a molar penicil consisting of a single plumose seta, maxillule with exopod bearing 4+6 (5 cleft) teeth on distal margin, endopod bearing 2 unequal penicils and

a small posterior point, and endite of maxilliped with a penicil. Uropod with exopod 1.7 times as long as endopod.

Male: Pereopod 1 as in Fig. 2A. Pereopod 7 without particular modifications. Pleopod 1 exopod with slightly

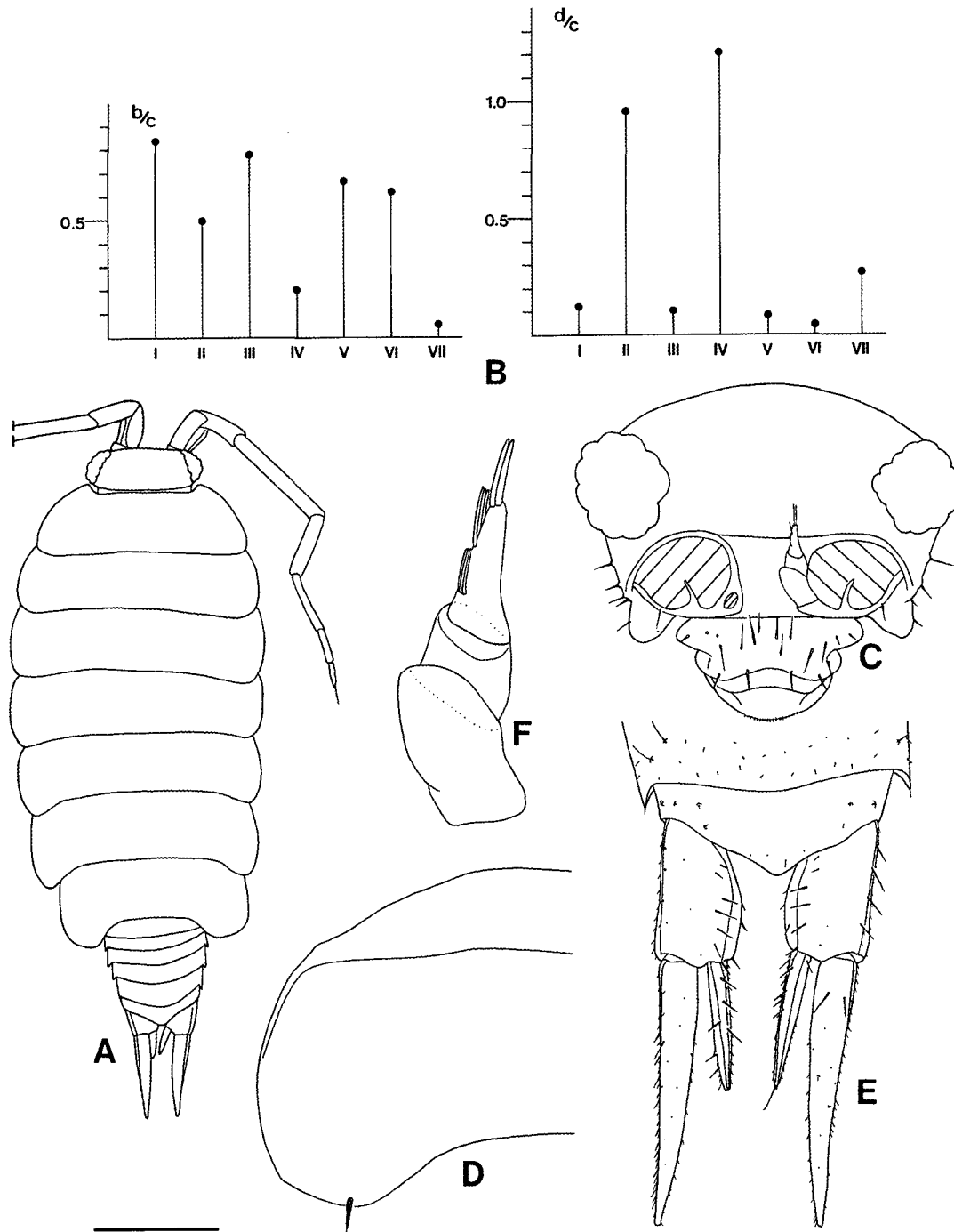


Fig. 3. *Burmoniscus palawanensis*, n. sp. A, Habitus in dorsal view, female. B, Coordinates of noduli laterales. C, Cephalon in frontal view. D, Left epimeron of pereonite 7. E, Pleonite 5, telson and uropods. F, Antennule. b; distance of the nodulus lateralis from the posterior margin of the pereonite, c; length of the pereonite tergite, d; distance of the nodulus lateralis from the lateral margin of the pereonite. Scale bar = 1 mm.

protruding posterior part with rounded apex; endopod without special modifications. Pleopod 2 exopod wider than long with slightly concave outer margin; endopod more than twice as long as exopod. Pleopod 5 exopod as in Fig. 2E.

Etymology: The specific name refers to the Philippines.

Remarks: The proposed new species is distinguished from all the congeners by its peculiar shape of telson. *B. micropunctatus* Taiti and Manicastroi, 1988 from Sri

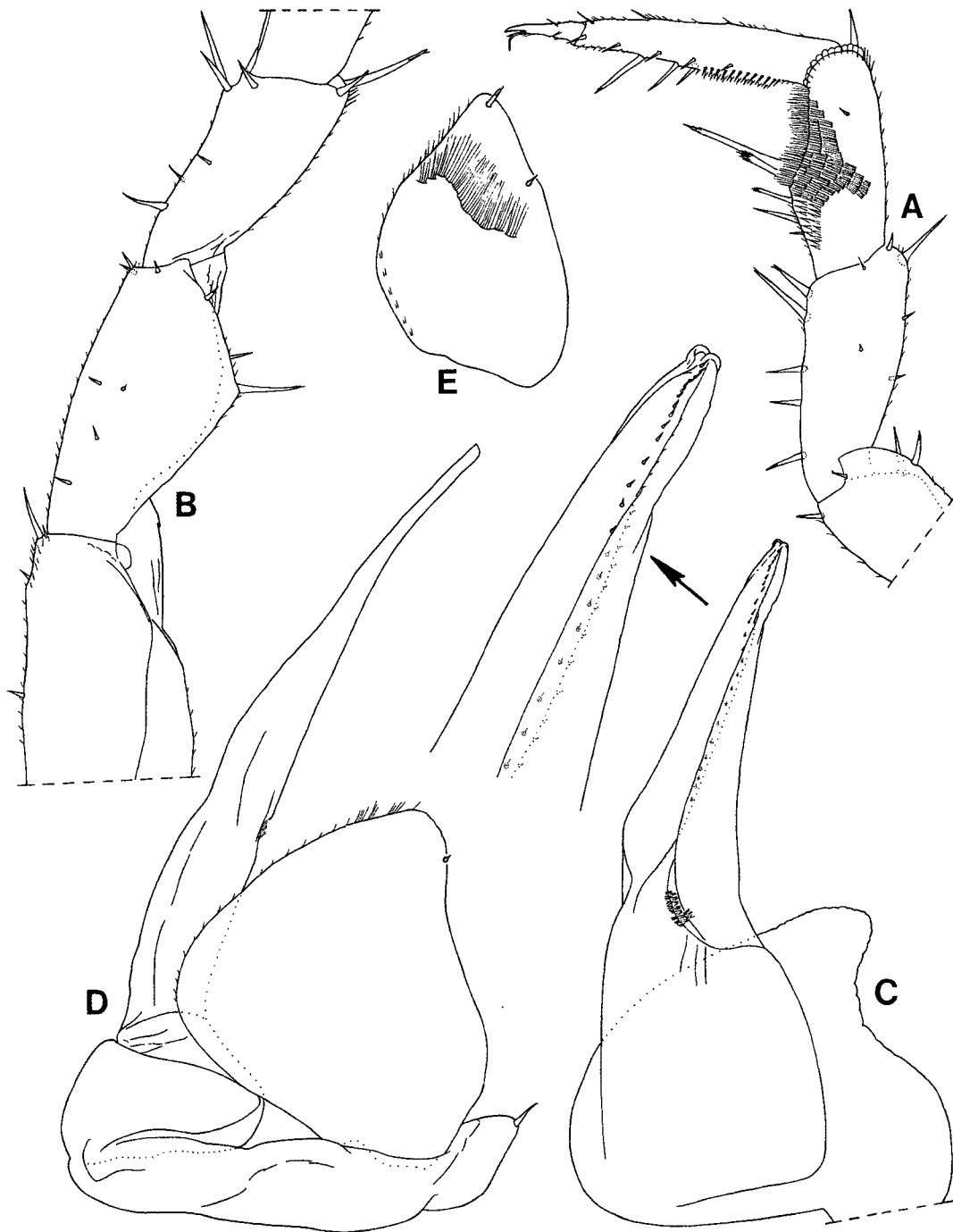


Fig. 4. *Burmoniscus palawanensis*, n. sp., male. A, Pereopod 1. B, Pereopod 7, merus and ischium. C, Pleopod 1. D, Pleopod 2. E, Pleopod 5 exopod.

Lanka, *B. mucronatus* (Vandel, 1973) and *B. comptus* (Budde-Lund, 1885) both from Myanmar are very similar in the shape of the apical part of telson to the new species, but differ in having convex sides.

Burmoniscus palawanensis, new species
(Figs. 3, 4)

Type material: 1 ♂ (holotype), Palawan I., Puerto Princesa, San Rafael, Benduyan, valley, 26.iv.1997, leg. D. H. Kwon & D. S. Jeon (MZUF); 1 ♀ (paratype), same data as holotype (MZUF); 1 ♂, 2 ♀♀ (paratypes), same data (IJB).

Non-type material examined: 2 ♂♂, 2 ♀♀, Palawan I.,

Narra, Estrella Waterfall, 22.iv.1997, leg. D. H. Kwon & D. S. Jeon (IJB); 1 ♀, Palawan I., Quezon, Tumarbon Waterfall, 28.iv.1997, leg. D. H. Kwon & D. S. Jeon (IJB).

Description: Maximum length of male 4.2 mm, of female 5.2 mm. Color in alcohol brown with usual pigmentless muscle spots and several smaller ones near posterior margin; lateral margin of each pereonite pigmentless; an oblique, large spot on each epimeron of pereonites 2-6. Dorsum smooth. Pereonites 1 and 7 without gland pores; pereonites 2-6 with a few gland pores at lateral margins. Noduli laterales with b/c and d/c coordinates as in Fig. 3B. Eye with 16-19 ommatidia. Cephalon 1.9 times as wide as long with straight supra-antennal line. Pereonites 1-6 with postero-lateral corners rounded, 7 obtusely rounded. Pleonal epimera reduced, adpressed, with short posterior points on pleonites 3-5 not visible in dorsal view. Telson with straight sides, narrowly rounded apex. Antennule with 2 apical aesthetascs and 2 rows of a few superimposed ones on mesial margin of third article. Antenna with fifth article of peduncle slightly longer than flagellum; ratio of flagellar articles 10:6:5; flagellar articles 2 and 3 with 3 and 2 aesthetascs, respectively. Buccal pieces as in *B. philippinensis*. Uropod with exopod twice as long as endopod.

Male: Pereopod 1 as in Fig. 4A. Pereopod 7 without particular modifications. Pleopod 1 exopod with triangular posterior part, apex rounded; endopod with

swollen apical part, apex rounded. Pleopod 2 exopod as long as wide, with slightly concave outer margin; endopod more than twice as long as exopod. Pleopod 5 exopod as in Fig. 4E.

Etymology: The specific name refers to the Palawan Island where the material was collected.

Remarks: The proposed new species is easily distinguished from all the congeners by its peculiar shape of male pleopod 1 endopod.

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[Received January 10, 2002; accepted February 15, 2002]