

Cleantioides vonprahli, a new species of idoteid isopod
(Crustacea: Isopoda: Idoteidae) from Bahía Málaga, Pacific Coast of Colombia

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Abstract. *Cleantioides vonprahli* n. sp. is described from Bahía Málaga, Colombia. It was captured in bottom trawlings, with amphipods and another idoteid isopod: *Cleantioides occidentalis* (Richardson 1899). This new species is closest to *C. planicauda* (Richardson 1899) and *C. occidentalis*, but can be distinguished from the first species by the number of articles on the maxillipedal palp, and the second species by the shape of pleotelson. The present paper is the first record of idoteid isopods from the Colombian Pacific waters.

The genus *Cleantioides* Kens and Kaufman (1978) was previously known from only two species: *C. occidentalis* (Richardson 1899) endemic to the tropical eastern Pacific (Northern Gulf of California to the Galapagos Island), and *C. planicauda* (Richardson 1899), an amphi-American species, known from throughout the Caribbean region and north to Georgia, and in the eastern Pacific only from Oaxaca, Mexico (Brusca and Wallerstein 1979, Brusca 1984, Brusca and Iverson 1985).

The new species described below was collected on December 14 and 15, 1985, in bottom trawlings from Bahía Málaga, Colombia, from a small artisanal fishing boat ("Mulatos"), in depths ranging from 4 to 20 m. Amphipods (unidentified) and the congener *C. occidentalis* were also collected. This is the first record of *C. occidentalis* from Colombian waters.

A diagnosis, description, illustration, and notes on habitat and color are provided for *C. vonprahli*.

Measurements given for the holotype and paratypes are total body length. The following abbreviations are used: CRBMUV, Colección de Referencia de la Sección de Biología Marina de la Universidad del Valle; SDNHM, San Diego Natural History Museum.

Cleantioides vonprahli new species

(Fig. 1-3)

Holotype. CRBMUV 85203; female 19.5 mm.

Type locality. Northeast side of Bahía Málaga, Pacific coast of Colombia (3° 58' N, 77° 20' W).

Paratypes. 3 females, 14.9 mm, 12.7 mm, 11.6 mm (CRBMUV 85204), same sample as holotype; 2 specimens (SDNHM), Estero Corozal, Bahía Málaga (4° 04' N, 77° 17' W).

Diagnosis. Body about 5.0-5.4 times longer than wide. Supra-antennal line with shallow median emargination; frontal process small, not reaching anterior margin of frontal lamina 1; frontal lamina 1 produced medially; frontal lamina 2 truncate. Maxillipedal palp of 4 articles; endite with 2-3 coupling hooks. Lateral margins of pereon and pleon without setae. Coxal plates visible in dorsal aspect on pereonites II-VII. Pleon composed of 4 free segments (including the pleotelson), plus one pair of partial sutures. Pleotelson with distal third of dorsal surface deeply excavate.

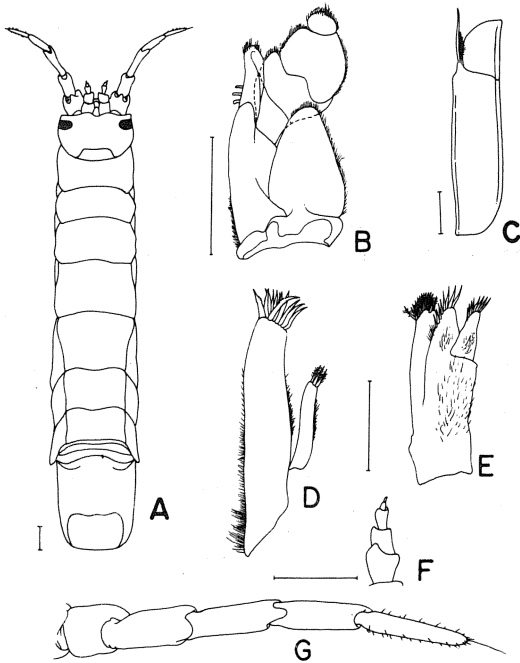


Fig. 1. *Cleantoides vonprahli* new species, Holotype, female. A. Body in dorsal view; B, Maxilliped; C. Uropod; D. Maxilla 1; E. Maxilla 2; F, Antenna 1; G, Antenna 2. Scale in all figures is 1 mm.

Description. Body densely granulated, with subparallel sides 5-5.4 times longer than wide. Head wider than long, partially immersed medially in pereonite I; supra-antennal line with a shallow median emargination or notch; frontal process small, not extended to anterior margin of frontal lamina 1; frontal lamina 1 produced medially, not reaching anterior margin of frontal lamina 2; frontal lamina 2 wider than frontal lamina 1 and with anterior margin truncate, visible in dorsal view. Eyes transversely elongate, situated near anterolateral angle of head (Fig. 1A). Antenna 1 composed of 4 articles, the fourth being the single flagellar article, bearing terminal stout seta (Fig. 1F). Antenna 2 of 6 articles, basal article totally or almost totally covered by supra-antennal line, articles 2-5 with scalloped distal margins, the sixth being the single flagellar article with many short simple setae and a long distal seta (Fig. 1G). Maxillipedal palp of 4 articles, margins of all, basis and epipod, setose, endite divided by a suture from the basis, with 2-3 coupling hooks and setae only on distal margin (Fig. 1B). Endopod of maxilla 1 with 3 distal circumplumose setae;

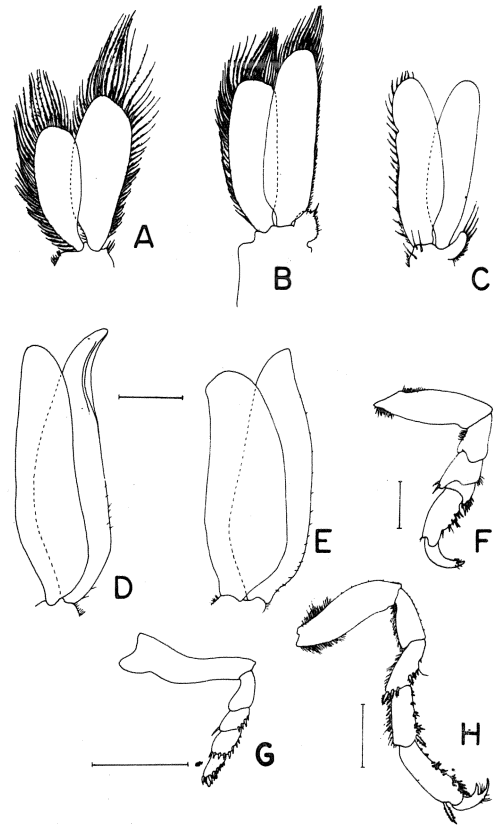


Fig. 2. *Cleantoides vonprahli* new species. Holotype, female. A, First pleopod; B, Second pleopod; C, Third pleopod; D. Fourth pleopod; E. Fifth pleopod; F. First pereopod; G. Fourth pereopod; H. Seventh pereopod.

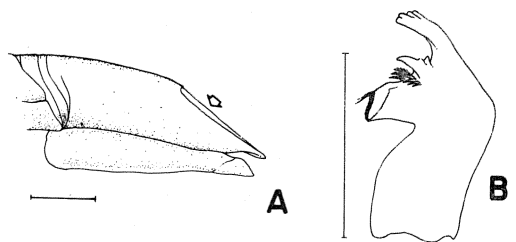


Fig. 3. *Cleantoides vonprahli* new species. Holotype, female. A. Lateral view of pleon; B. Left mandible.

exopod with 12 spines (Fig. 1D). Maxilla 2 trilobate; inner lobe with at least 8 stout setae; inner portion of outer lobe with 8 stout setae, outer portion with numerous stout and plumose setae (Fig. 1E). Left mandible with 4-cusped incisor process, lacina mobilis of 3

cusps and complex setal row, robust molar process with row of spinules in stockade-shape on inner margin (Fig. 3B); right mandible with incisor process, lacina mobilis and molar process somewhat reduced in size, the latter with a group of inferodistal long setae.

Pereon 2.4. to 2.8 times longer than pleon; lateral margins subparallel, without setae (Fig. 1A). Free dorsal coxal plates present on pereonites II to VII; those of V to VII occupying entire lateral margin, posterior angles projected and acute; IV occupying 3/4 lateral margin; II and III occupying 1/2 lateral margin. Pereopods I-III slender, directed anteriorly and increasing in size posteriorly, with spines on merus, carpus, and propodus (Fig. 2F); pereopod IV greatly reduced and non-ambulatory, row of spines along terminal margins of merus, carpus and propodus, dactylus single, strongly triangular and small (Fig. 2G); pereopods V-VII directed and increasing in size posteriorly, pectinate spines on margins of merus, carpus and propodus (Fig. 2H). All pereopods with exception of fourth biungulate. Pereonites I-V of female, bear oostegites.

Pleon composed of 4 segments (including pleotelson) plus one pair of partial lateral sutures (Fig. 1A). Pleotelson with distal third of dorsal surface deeply excavate, forming in lateral view a fall of near 45°. Without trace of dorsal humps (Fig. 3A). Uropods uniramous, glabrous; distolateral angle with single, large plumose seta along proximal portion (Fig. 1C). Pleopods 1-2 with numerous plumose setae, pleopod 3 considerably less setose, pleopods 4 and 5 essentially naked (Fig. 2A-E). Basis of pleopod 2 and 3 with distinct setose lobe (Fig. 2B-C).

Color in life. Body light brown, with four dorsal longitudinal lines of dark brown chromatophores. Antenna 1, antenna 2, uropods and all pereopods with spots of dark brown chromatophores. Eyes black. This color is retained in specimens preserved in alcohol. One female paratype has lost the coloration, perhaps due to a recent molting.

Habitat. The specimens of *Cleantioides vonprahli* were collected by bottom trawls, in depths between 4 and 20 m; the substrate was principally mud-rocky, covered by

decomposing leaves of *Rhizophora mangle*, *R. harrisonii*, *Pelliciera rhizophorae*, *Mora megistosperma*, *Avicennia germinans*, *Conocarpus erectus* and *Laguncularia racemosa*, upon which this species may feed. In Estero Corozal, *C. vonprahli* occurs sympatrically with *C. occidentalis*, in salinities of 20-26‰.

Remarks. *Cleantioides vonprahli* is morphologically very similar to *C. planicauda*. The authorship of this species is usually shown as "*C. planicauda* Benedict in Richardson (1899; 1905)", acknowledging that Richardson's original description was taken from a manuscript by James E. Benedict. However, Benedict never published the manuscript (or if he did omitted this species), hence that valid authorship belongs to Richardson (Brusca and Iverson 1985).

Neither in Richardson (1899; 1905), nor in Kensley and Kaufman (1978), was *C. planicauda* adequately figured. Hence, based on Brusca and Iverson (1985), we have found that *C. vonprahli* differs from *C. planicauda* in the following characters: *C. vonprahli* has a maxillipedal palp of 4 articles; the coxal plates are visible in dorsal view on pereonites II-VII; the articles of antenna 2 are enlongate; the lateral margins of the pleotelson and coxal plates are glabrous. In *C. planicauda* the maxillipedal palp is of 5 articles, the coxal plates are visible in the dorsal view on pereonites V-VII only, the articles of antenna 2 are stout and short, and the lateral margins of the pleotelson and coxal plates V to VII bear tufts of plumose setae.

C. vonprahli differs from its other congener *C. occidentalis*, by the shape of pleotelson. In *C. occidentalis* the apex of pleotelson is broadly rounded and moderately excavate, with a pair of elevated submedian dorsal humps. In *C. vomprahli* the distal third of the dorsal surface is deeply excavate, without trace of dorsal humps.

In both species the maxillipedal palp is of 4 articles, but in *C. vonprahli* the basal article is almost of similar size to the second article; while in *C. occidentalis* the basal article is smaller than the second article.

Brusca and Wallerstein (1979) reported that in males the appendix masculina of the second pleopods is apparently an important feature for species recognition; unfortunately in our material no male was present.

Etymology. The new species is named in honor of Dr. Henry von Prahli, of the Universidad del Valle, Cali, Colombia, who has contributed so much to the knowledge of invertebrates from Pacific and Atlantic Colombia.

RESUMEN

Se describe *Cleantioides vonprahli* n. sp. de Bahía Málaga, Colombia. Se capturó en arrastres de fondo, con anfípodos y otro isópodo idoteido: *Cleantioides occidentalis* (Richardson 1899). Esta nueva especie está estrechamente relacionada con *C. planicauda* (Richardson 1899) y *C. occidentalis*; puede distinguirse de la primera especie por el número de artejos en el palpo de maxilipedo y de la segunda por la forma del pleotelson. El presente es el primer registro de isópodos idoteidos para las aguas del Pacífico Colombiano.

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