

EUTRICHOCHELES PINDATYBA, A NEW AXIID
SHRIMP (CRUSTACEA: DECAPODA: THALASSINIDEA)
FROM BRAZIL

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Abstract.—A new species of axiid, *Eutrichocheles pindatyba*, is described from Santa Cruz, south-central Brazil. The species is characterized by possessing a laterally dentate rostrum, unarmed median and submedian carinae of the carapace, spinose ischia and meri and tuberculate propodi of the first pereopods.

The genus *Eutrichocheles* was erected by Wood Mason (1876), to accommodate *Cancer modestus* Herbst, 1796, and was thought to be a member of the Astacidae (= Nephropsidae) (see Holthuis 1986). Later, Chopra (1933) and Balss (1933) concluded that Herbst's species was in fact an axiid, probably an *Axiopsis* of the subgenus *Paraxiopsis*. Recent authors (e.g., Sakai & de Saint Laurent 1989) have abandoned de Man's (1925) axiid subgenera; *Paraxiopsis* is now regarded as a junior synonym of *Eutrichocheles* Wood Mason.

Five species of *Eutrichocheles* have been described, of which only *E. defensus* (Rathbun, 1901) is known from the western Atlantic. A new species is now described from the coast of Brazil, based on a single specimen collected at Santa Cruz, Estado do Espírito Santo. This specimen is deposited in the Museu de Zoologia da Universidade de São Paulo, Brazil.

Family Axiidae

Eutrichocheles pindatyba, new species

Figs. 1-16, Table 1

Material.—Holotype, MZUSP 10580, ♂ cl 10.0 mm, Santa Cruz, Espírito Santo, Brazil, 19°57'S, 40°08'W, intertidal, under stones, coll. M. L. Christoffersen, Mar 1979.

Description.—Carapace (Figs. 1, 2): integument smooth, naked; small marginal antennal tooth present; rostrum at lower

level than gastric region, with 6 teeth on right side, 5 on left; median carina unarmed, sharply keeled near rostral base; submedian carina unarmed, moderately keeled, with single long seta posteriorly; lateral carina continuing from rostral margin, unarmed except for single strong anterior tooth, bearing few short setae posterior to anterior tooth. Abdominal pleura (Fig. 1): integument bearing few long setae; pleuron 1 ventrally narrowed; pleuron 2 broadly rounded, caridean-like; pleura 3-6 irregularly rounded, each with small denticle on anterolateral margin.

Antennal acicle small, bifurcate (Fig. 3). Mouthparts (Figs. 4-8) as figured. Maxilliped 3 (Figs. 9, 10), ischium with 5 teeth on posterior margin, dentate crest strong; merus with 9 teeth on posterior margin, increasing in size distally; carpus with single distal tooth on posterior margin; propodus and dactylus unarmed. Pereopod 1: larger chela (Fig. 11), ischium with 2 strong teeth and serrations on posterior margin; merus with single tooth on anterior margin distal to midlength, 5 strong teeth and serrations on posterior margin; carpus with serrate posterior margin; propodus with anterior and posterior margins serrate, former ending distally in low tooth, mesial and external surfaces tuberculate, palm 1.5 times longer than fingers, fixed finger with several low teeth on cutting edge; dactylus with cutting edge raised near midlength, bearing several

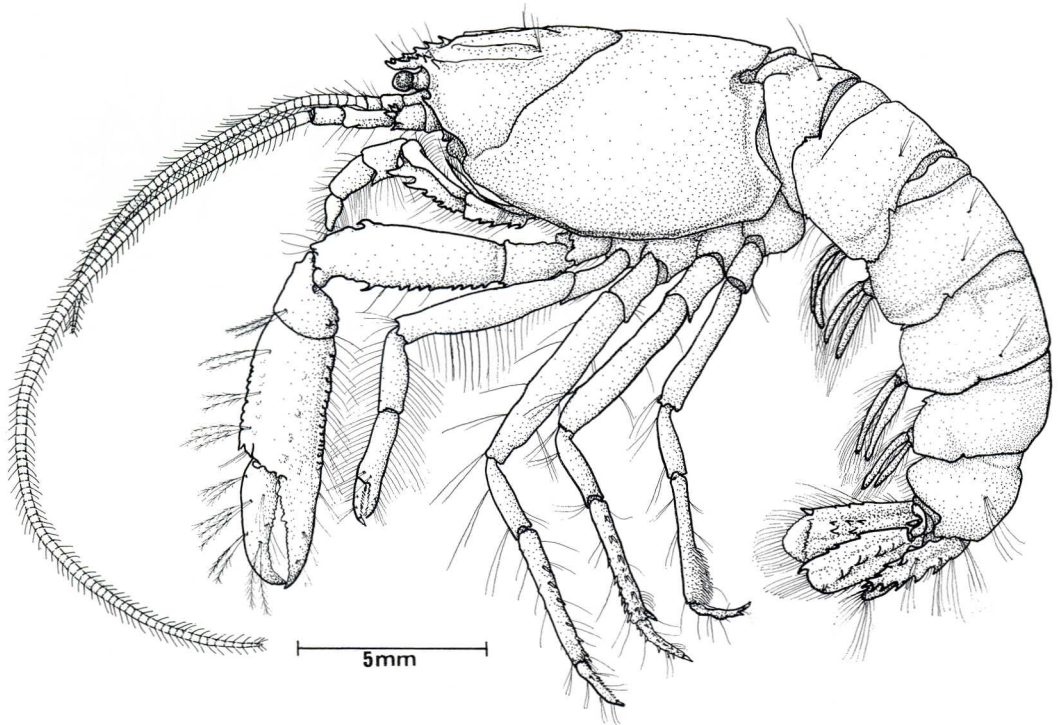


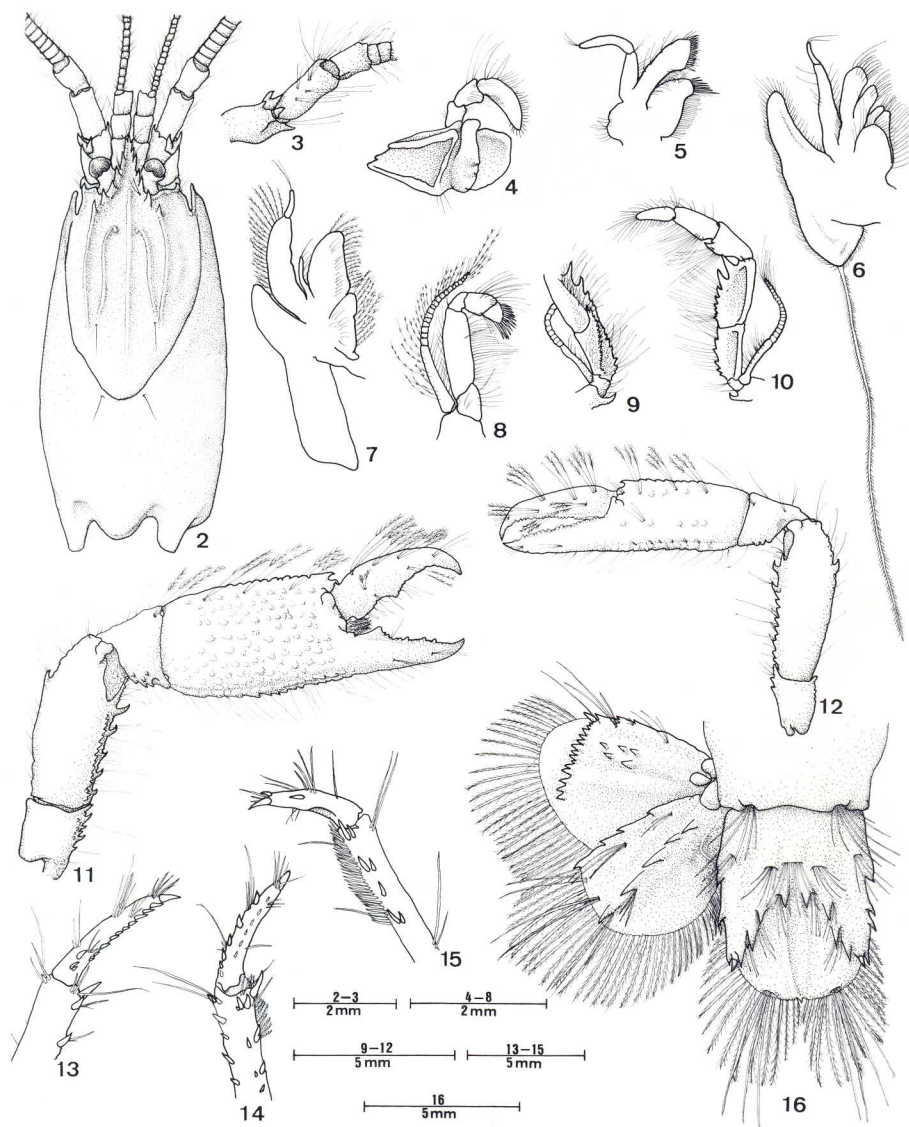
Fig. 1. *Eutrichocheles pindatyba*, new species, holotype in lateral view.

low teeth. Smaller chela (Fig. 12), ischium, merus, and carpus as in larger chela, fingers almost as long as propodal palm, latter with margins as in larger chela but surfaces less tuberculate, fingers with cutting edges nearly straight, denticulate. Pereopod 2, merus of right leg with tooth on posterior margin distal to midlength; pereopods 3–5 (Figs. 13–15) each with several strong spines on propodus and dactylus. Pleopods lacking appendix interna. Uropod (Fig. 16), outer ramus with 3 distal teeth on lateral margin, mobile spine at articulation of suture, 14 teeth along suture, 5 dorsal teeth on lateral ridge; inner ramus with 4 teeth on lateral margin, 5 teeth along dorsal ridge. Telson (Fig. 16), lateral margins with 3 teeth on left side, 4 on right, anterior to moderately long mobile spine; posterior margin convex with median tooth, 4 pairs of strong teeth on dorsal surface.

Etymology.—The specific epithet is de-

rived from the Tupi Amerindian language: 'pinda' for hook or spine, and 'tyba' for 'many,' and refers to the numerous spines on the rostrum and appendages.

Remarks.—*Eutrichocheles pindatyba* is at once distinguished from the other species attributed to the genus by the more numerous teeth of the rostrum. It also differs from *E. modestus* (Herbst, 1796), and *E. defensus* (Rathbun, 1901) by the absence of teeth or tubercles along the carinae of the gastric region. In *E. bisquamosus* (de Man, 1905) the gastric region is unusual in lacking submedian and lateral carinae. The features of the gastric region of *E. johnstoni* (Edmondson, 1925) were not described, but other differences, such as the absence of teeth on the ischium of pereopod 1 and the lower number of teeth on the dorsal carina of the inner uropodal ramus, can be noted from Edmondson's figure 4. De Man (1925) in his key to the species of the subgenus *Parax-*



Figs. 2-16. *Eutrichocheles pindatyba*, new species, holotype: 2, carapace in dorsal view; 3, antennal peduncle; 4, mandible; 5, maxilla 1; 6, maxilla 2; 7, maxilliped 1; 8, maxilliped 2; 9, maxilliped 3, inner surface of merus and ischium; 10, maxilliped 3, outer surface; 11, pereopod 1, larger cheliped; 12, pereopod 1, smaller cheliped; 13, pereopod 3, distal propodus and dactylus; 14, pereopod 4, distal propodus and dactylus; 15, pereopod 5, distal propodus and dactylus; 16, telson and left uropod in dorsal view.

iopsis includes *A. (P.) aethiopica* Nobili, 1904, which Sakai & de Saint Laurent (1989) include in their new genus *Allaxius*. The more numerous teeth on the gastric region of the carapace and the smaller teeth of the ischium and merus of pereopod 1 in the Red

Sea species separate it from the new Brazilian species.

The few other records of axiids from Brazil include *Axiopsis serratifrons* (A. Milne Edwards, 1873), known from Bahia and Paraiba, (S. Rodrigues, personal records),

Table 1.—Distribution of gills, epipods, and exopods in *Eutrichocheles pindatyba*.

	Maxillipeds			Pereopods				
	1	2	3	1	2	3	4	5
Pleurobranchs	—	—	—	—	—	—	—	—
Arthrobranchs	—	—	2	2	2	2	2	—
Podobranchs	—	—	—	—	—	—	—	—
Epipods	1	1	1	1	1	1	1	—
Exopods	1	1	1	—	—	—	—	—

the probably erroneous identification of the Californian species *Axiopsis spinulicauda* (Rathbun, 1902) from Amapá, (see Coelho et al. 1980:58, 59, 125), and *Axiopsis* sp. from tropical Brazil (see Coelho 1969:231). *Calastacus angulatus* and *Calastacus spinosus*, both described by Coelho (1973) from northern Brazil, if true *Calastacus*, are members of the Calocarididae, not the Axiidae.

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