

Notes on some species of Thalassinidea from French Polynesia

(Crustacea: Decapoda).

With 2 Text-Figures.

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Abstract.

[SAKAI, K. (1992): Notes on Thalassinidea from French Polynesia (Crustacea: Decapoda). — Senckenbergiana marit., 22 (3/6): 211–216, 2 figs.; Frankfurt a. M.]

Three species of Thalassinidea from French Polynesia are recorded; *Corallianassa collaroy*, *Parascytoleptus tridens* and *Eutrichocheles brocki*. The male of *Parascytoleptus tridens* is described for the first time.

Kurzfassung.

[SAKAI, K. (1991): Bemerkungen zu einigen Thalassinidea von Französisch Polynesien. — Senckenbergiana marit., 22 (3/6): 211–216, 2 Abb.; Frankfurt a. M.]

Drei Arten Thalassinidea werden von Französisch Polynesien gemeldet: *Corallianassa collaroy*, *Parascytoleptus tridens* und *Eutrichocheles brocki*. Das Männchen von *Parascytoleptus tridens* wird erstmalig beschrieben.

Introduction.

A small collection of Thalassinidea from Tahiti and Bora Bora (French Polynesia) brought together by HANS-GEORG MÜLLER (Institut für Allgemeine und Spezielle Zoologie der Justus-Liebig-Universität, Giessen, Germany) was examined. It contains the first known males of *Scytoleptus tridens*, also some new records. The species are treated hereafter in some detail.

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Many thanks are due to Dr. MICHAEL TÜRKAY (Curator of Crustacea Section, Forschungsinstitut Senckenberg, Frankfurt am Main), who allowed me to examine this interesting collection and assisted me in reading my manuscript and in many other ways.

The following abbreviations are used: CL = carapace length including rostrum; SMF = Senckenberg Museum, Frankfurt am Main; TL = total length measured from the tip of the rostrum to the posterior end of the telson by using a thread attached to the alcohol-wet specimens.

Callianassidae DANA 1852.

Corallianassa MANNING 1987.

1987 *Corallianassa*, — MANNING, Proc. biol. Soc. Washington., 100 (2): 392.

Corallianassa collaroy (POORE & GRIFFIN 1979).

Fig. 1

1979 *Callianassa collaroy*, — POORE & GRIFFIN, Rec. austral. Mus., 32 (6): 260, Figs 24–25.

Material: 1 ♀ (SMF 20357 TL/CL including rostrum 23.0/5.5 mm), Moorea, by Maharepa, Tahiti, III 1988, H.G. MÜLLER leg.

Remarks: This species is clearly a member of *Corallianassa*. POORE & GRIFFIN gave good figures of the male chelipeds. The female ones are, however, different; the dactyl and the fixed finger are narrower than in males (Fig. 1d, e). The rostrum, the maxilliped 3, and the tail-fan (Fig. 1a, b, c) agree well with those described by POORE & GRIFFIN.

Distribution: Long Reef, Collaroy, New South Wales, Australia [type locality]; Tahiti.

Axiidae HUXLEY 1879.

Parascytoleptus SAKAI & DE SAINT LAURENT 1989.

1989 *Parascytoleptus*, — SAKAI & DE SAINT LAURENT, Naturalists, 3: 39.

Parascytoleptus tridens (RATHBUN 1906).

Fig. 2

1906 *Paraxius tridens*, — RATHBUN, Bull. U.S. Fish Comm., 23 (3): 896, Fig. 53.

1925 *Axius (Paraxius) tridens*, — DE MAN, Siboga Exped., 39a (5): 127.

1989 *Parascytoleptus tridens*, — SAKAI & DE SAINT LAURENT, Naturalists, 3: 40, Fig. 10.

Material: 2 ♂ (SMF 20358 TL/CL 11.0/4.2mm; 7.0/3.0); 1 ♂ 1 ♀ (SMF 20359 TL/CL 11.0/3.8; 12.0/4.9), Moorea, by Maharepa ca. 2.6 km W of airport, dead coral, ca.

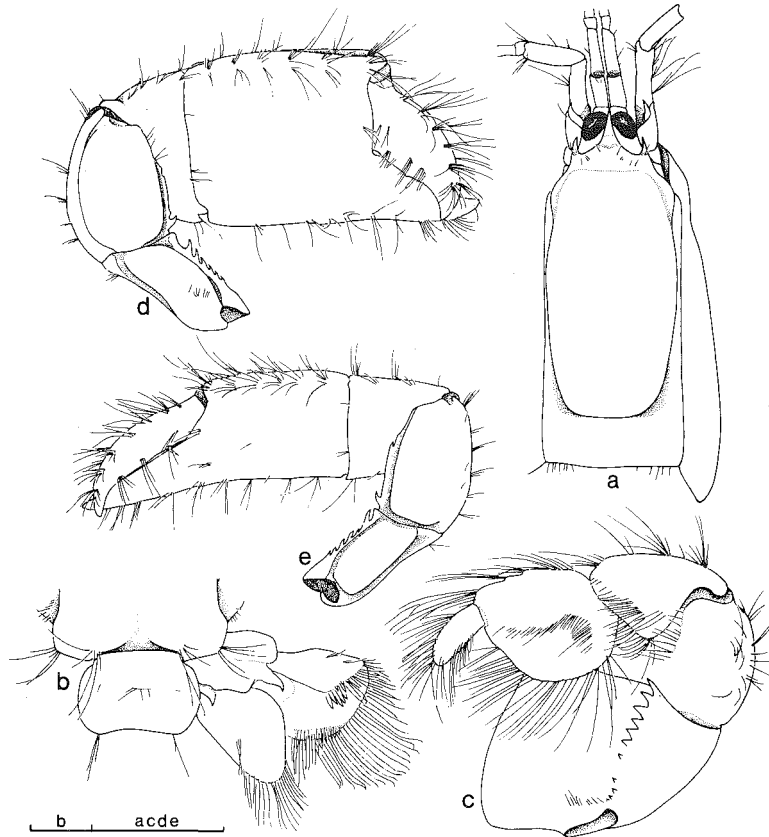


Fig. 1. *Corallianassa collaroy*, female SMF 20357 . — a. Carapace, dorsal aspect. b. tail-fan, dorsal aspect. c. maxilliped 3, inner aspect. d. larger cheliped, inner aspect. e. smaller cheliped, inner aspect.

Abb.1. *Corallianassa collaroy*, Weibchen SMF 20357 . — a. Carapax, b. Schwanzfächer, dorsal; c. 3. Maxilliped, Innenseite; d. größerer Scherenfuß, Innenseite; e. kleinerer Scherenfuß, Innenseite.

0.5 m deep, H.G. MÜLLER, III. 1988; 1 ♀ (SMF 20360 TL/CL 21.0/7.0); 1 ♂ (SMF 20360 6.5/2.5) Moorea, near Afareaitu, coral 1–2 m, 26.III.1988, H. G. MÜLLER; 2 ♂ (SMF 20361 TL/CL 14.0/4.2, 6.2/3.8) Bora Bora, near Vaitapu.

Description: Rostrum (Fig. 2a, b) short, triangular, and with distinct proximal tooth, weakly carinate backwards for a short distance. Gastric region distinctly elevated from rostrum, median carina raised from level of proximal tooth to small anterior spine at anterior end of gastric region. Cervical groove distinct medially, anteriorly fading away and not reaching anterolateral margin.

Telson longer than broad, converging posteriorly; lateral margin with a sharp proximal spine and posteriorly with three sharp spines at posterolateral angle, posterior margin narrowly rounded without a median spine.

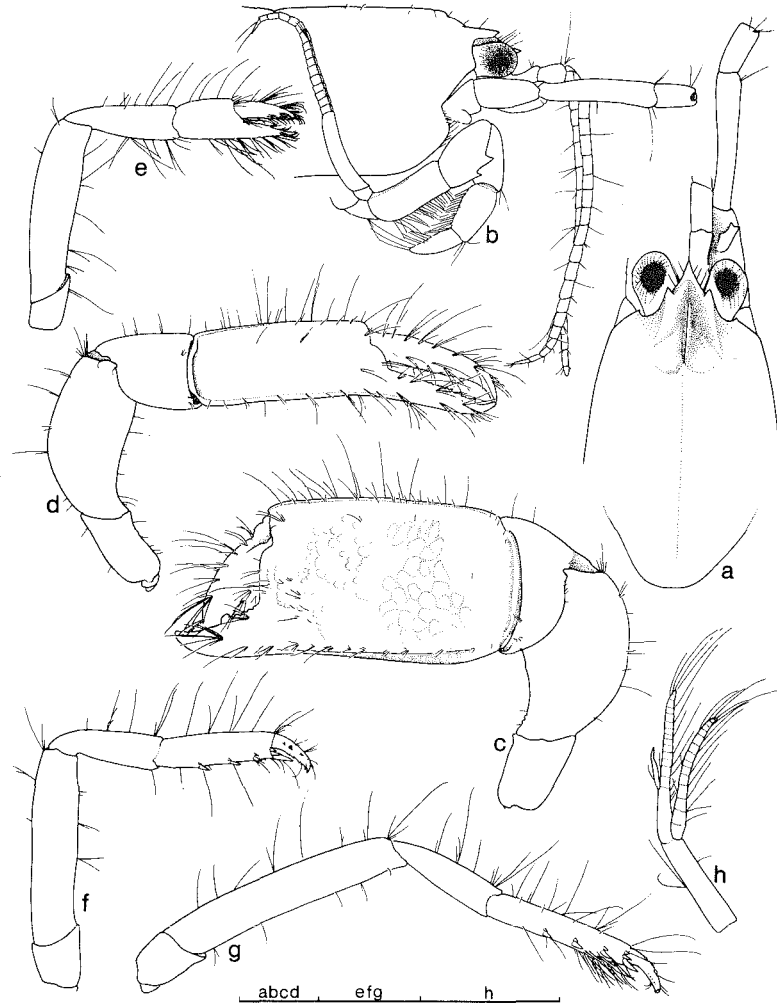


Fig. 2. *Parascytoleptus tridens*. — a. Anterior part of carapace, dorsal aspect; b. same, lateral aspect; c. larger cheliped, lateral aspect; d. smaller cheliped, lateral aspect; e. pereiopod 2, lateral aspect; f. pereiopod 3, lateral aspect; g. pereiopod 4, lateral aspect; h. female Pleopod 2. — a-g. Male; h. female, SMF 20359.

Abb.2. *Parascytoleptus tridens*. — a. Vorderteil des Carapax, dorsal; b. id., lateral; c. größerer Scherenfuß, lateral; d. kleinerer Scherenfuß, lateral; e. 2. Pereiopod, lateral; f. 3. Pereiopod, lateral; g. 4. Pereiopod, lateral; h. 2. Pleopod des Weibchens. — a-g. Männchen; h. Weibchen, SMF 20359.

Maxilliped 3 with coxa bearing sharp posterodistal spine; merus unarmed; carpus (Fig. 2b) with two stout teeth on posterior margin.

Pereiopod 1 with coxa and basis unarmed. Larger cheliped: Ischium unarmed. Merus (Fig. 2c) 1.7 times as long as broad, posterior margin proximally serrated. Carpus 1.8 times broader than long at anterior margin. Chela about 3.8 times carpal length. Palm 1.8 times as long as broad. Dactylus about two-thirds length of palm, cutting edge with proximal tooth. Cutting edge of fixed finger with five teeth in proximal half, distal one larger than all others in size. Smaller cheliped: Ischium narrower than in larger cheliped. Merus (Fig. 2d) about twice as long as broad. Carpus 1.3 times as long as broad. Chela narrow, 3 times carpal length. Dactylus narrow, slightly shorter than palm, cutting edge smooth; cutting edge of fixed finger with five sharp teeth at some distance from tip.

Pereiopod 2 (Fig. 2e) chelate.

Pereiopod 3 with propodus (Fig. 2f) bearing four rows of spines on posterolateral surface, distal row composed of three transparent spines at posterodistal angle.

Pereiopod 4 longer than pereiopod 3. Propodus (Fig. 2g) with four rows of spines on posterolateral surface, distal row with three transparent spines; posterodistal margin setose. Dactylus less than half length of palm, cutting edge serrated.

Pereiopod 5 with propodus bearing setae on posteromesial surface.

Pleopod 1 in males and females absent. Pleopods 2–5 in males and females (Fig. 2h) biramous, endopod with free appendix interna. No appendix masculina of pleopod 2 in males.

Uropod: exopod oval, bearing one sharp and one movable spine at posterolateral angle. Endopod also oval, more longer than telson and endopod, with sharp spine each at posterior angle and at the middle of the posterior margin.

Remarks: This is the first record of *P. tridens* — males. The pleopod 1 is absent in males, and pleopod 2 is biramous, bearing an appendix interna, but no appendix masculina. In an earlier publication (SAKAI & DE SAINT LAURENT 1989) it was stated, that a long median carina was present on the gastric region. However, this median carina is not an elevated structure on the whole surface, but only in the rostral part, the remainder being a simple line below the transparent surface of the carapace.

Distribution: French Frigate Shoal, Hawaii, 36–59 m deep (type locality); Tahiti; Madagascar.

Eutrichocheles WOOD MASON 1876.

1876 *Eutrichocheles* WOOD MASON, Ann. Mag. nat. Hist. London, (4) 17: 264.

1989 *Eutrichocheles*, — SAKAI & DE SAINT LAURENT, Naturalists, 3: 51.

Eutrichocheles brocki (DE MAN 1888).

1888 *Axius Brocki* DE MAN, Arch. Naturgesch., 53 (1): 475, pl.20 fig.3

1925 *Axiopsis (Paraxiopsis) Brocki*, — DE MAN, Siboga Exped., 39a (5): 71, 101, pl. 8 figs 19–19f.

- 1979 *Axiopsis (Paraxiopsis) brocki*, — POORE & GRIFFIN, Rec. austral. Mus., 32 (6): 228, text-fig 3.
 1987 *Axiopsis (Paraxiopsis) brocki*, — SAKAI, Bull. mar. Sci., 41 (2): 304.
 1989 *Eutrichocheles brocki*, — SAKAI & DE SAINT LAURENT, Naturalists, 3: 52.

Material: 1 ovig. ♀, 2 ♀ (SMF 20362 TL/CL 21.0/7.0, TL/CL 12.5/4.0, 13.0/4.0), Bora Bora, by Vaitape, 0.5–1 m, coral, 27.II–6.III. 1988; 1 ♂ (SMF 20363), id.

Remarks: The pleopod 1 in the larger ovigerous female is a segmented flagellum, however in the other small females the pleopod 1 is not present.

Distribution: Bora Bora; Ambon, Indonesia (type locality); Borneo; Okinawa, Japan. - Reef to 83 m deep.

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