A new genus and species of leucosiid crab (Crustacea, Decapoda, Brachyura) from the Indo-Pacific Ocean

Bella S. GALIL
National Institute of Oceanography,
Israel Oceanographic & Limnological Research,
P.O.B. 8030, Haifa 31080 (Israel)
galil@math.tau.ac.il


ABSTRACT
A new leucosiid genus, Raylilia n. gen., is established for four species: Arcania gracilipes Bell, 1855, Arcania mirabilis (Zarenkov, 1969), Arcania uenoi Takeda, 1995, and Raylilia coniculifera n. sp. The new genus is distinguished from Arcania Leach, 1817 in having the basal antennular segment sealing antennular fossa, anterior margin of the efferent branchial channel medially fissured, the posterior margin of the carapace tridenticulate, the third to sixth segments of the male abdomen fused and bearing a preapical tubercle, and the first male pleopod distally expanded. A key to the species is presented.

KEY WORDS
Crustacea, Decapoda, Brachyura, Leucosiidae, Raylilia n. gen., Indo-Pacific Ocean, new genus, new species.

RÉSUMÉ
Un nouveau genre et une nouvelle espèce de crabe Leucosiidae (Crustacea, Decapoda, Brachyura) de l'océan Indo-Pacifique.
Un nouveau genre de Leucosiidae, Raylilia n. gen., est établi pour quatre espèces : Arcania gracilipes Bell, 1855, Arcania mirabilis (Zarenkov, 1969), Arcania uenoi Takeda, 1995, et Raylilia coniculifera n. sp. Le nouveau genre se distingue d’Arcania Leach, 1817, par plusieurs points : le segment basal antennulaire ferme la fosse antennulaire, l’extrémité antérieure du canal branchial efférent est fissurée, l’extrémité postérieure de la carapace possède trois denticules, les segments 3 à 6 de l’abdomen chez le mâle ont fusionné et possèdent un tubercule préapical, enfin le premier pléopode est élargi distalement. Une clé des espèces est présentée.

MOTS CLÉS
Crustacea, Decapoda, Brachyura, Leucosiidae, Raylilia n. gen., océan Indo-Pacifique, nouveau genre, nouvelle espèce.
INTRODUCTION
The French MUSORSTOM expeditions to the environs of New Caledonia have collected a rich trove of benthic macrofauna. Through the courtesy of Alain Crosnier, the important collection of leucosiid crabs have been made available for study. While preparing a revision of the genus Arcania Leach, 1817, specimens of A. mirabilis (Zarenkov, 1969) and A. uenoi Takeda, 1995, were identified, greatly extending the geographic range of these species. This in addition to a new species. Comparison of these species with their presumed congeners showed that they possess enough distinctive characters to merit establishing a new genus, Raylilia. Smaller-sized leucosiids have been relatively overlooked and are poorly known. Both A. gracilipes Bell, 1855 and A. uenoi were described from single specimens, A. mirabilis – from three specimens; only 13 specimens have been previously recorded for all three species. In this paper we describe the new genus, redescribe these three species, review earlier records and describe a new species from New Caledonia and Indonesia.

ABBREVIATIONS
MNHN Muséum national d’Histoire naturelle, Paris;
NHM Natural History Museum, London;
QM Queensland Museum, Brisbane;
USNM National Museum of Natural History, Smithsonian Institution, Washington D.C.;
WAM Western Australian Museum, Perth;
ZMA Zoölogisch Museum, Amsterdam;
ZMK Zoologisk Museum, København.
Measurements refer to carapace length.

SYSTEMATICS
Family LEUCOSIIDAE Samouelle, 1819
Genus Raylilia n. gen.

TYPE SPECIES. — Arcania gracilipes Bell, 1855, by present designation.

OTHER SPECIES. — Arcania mirabilis (Zarenkov, 1969); Arcania uenoi Takeda, 1995; Raylilia coniculifera n. gen. n. sp.

ETYMOLOGY. — The genus is named after Dr Ray Manning and his wife, Lili Manning.


DESCRIPTION
Chelipeds long, slender, fingers long, more than half as long as chela, cutting edges unevenly spinulate, tips cross. Pereiopods slender, short, dactyls granulate, setose.
Abdominal sulcus deep, nearly reaching buccal cavity. Male abdomen with third to sixth segments fused, narrowing distally, bearing preapical tubercle, telson one fourth as long as fused segments. Adult female abdomen with fourth to sixth segments fused, greatly swollen.
Male first pleopod with stout basal stalk, flanged on interior margin, bearing slender, setose appendix distally on external margin; tip lamellate, flared. Male second pleopod short, distally scoop-like.

REMARKS
Arcania Leach, 1817 has rounded, pyriform or rhomboidal carapace; its dorsal surface is granulate, spinulate, or tuberculate, and the intestinal region bears a single spine or tubercle. The posterior margin of the carapace is bispinose or bidenticulate. The front is bilobed and uptilted. The antennules are obliquely folded, and do not close off the antennular fossa. The antennular basal segment is lodged in the orbital hiatus. The outer orbital margin is trifissured, the inner orbital margin cleft; the infraorbital lobe is spiniform, prominent, and fused with the bidentate anterior margin of the efferent branchial channel. Third maxilliped endopod bears a vertical row of setae in females. The chelipeds are slender and elongate. The male abdomen has segments third to fifth fused, lacking a preapical tubercle; the adult female abdomen is greatly swollen, segments fourth to sixth fused, the telson laciniate. The
first male pleopod is slender and elongate, sinuous or straight.

*Raylilia* n. gen. is distinguished from *Arcania* Leach, 1817 in having basal antennular segment entirely sealing the antennular fossa, the anterior margin of the efferent branchial channel medially fissured and separated from orbital margin by a deep groove, the posterior margin of the carapace tridenticulate, third to sixth segments of the male abdomen fused and bearing a preapical tubercle, and the first male pleopod distally expanded, lamellate.

**KEY TO Raylilia n. gen. species**

1a. Two midlateral marginal denticles ........................................................................ 2

1b. Three midlateral marginal denticles ...................................................................... 3

2a. Dorsal tubercles obtuse, first male pleopod distally trilobate ...................... *R. mirabilis*

2b. Dorsal tubercles conical, first male pleopod distally petaloid ...................... *R. uenoi*

3a. Dorsal tubercles fungiform .................................................................. *R. gracilipes*

3b. Dorsal tubercles flat-topped ........................................................................ *R. coniculifera* n. sp.

**Raylilia coniculifera** n. gen. n. sp.

_Type material._ — Holotype, New Caledonia, Lagoon, stn B 6, 22°18.15'S, 166°29.5'E, 15 m, 11.II.1985, 1 ♀ 9.8 mm (MNHN B19169). Paratypes, East Lagoon, stn 664, 21°43.9'S, 166°29.4'E, 28-30 m, 8.VIII.1986, 1 ♀ 7.9 mm (MNHN B18206). — Stn 669, 21°40.5'S, 166°26.2'E, 30-40 m, 8.VIII.1986, 1 ♀ 8.4 mm (MNHN B18385). — Stn 723, 21°21.6'S, 165°56.7'E, 45 m, 12.VIII.1986, 1 ♀ 9.2 mm (MNHN B18383). — Stn 728, 21°20.6'S, 165°52.4'E, 43-47 m, 12.VIII.1986, 1 ♂ ovi 12.6 mm (MNHN B18201). — Stn 876, 20°35'S, 164°50.7'E, 30-70 m, 13.I.1987, 1 ♀ 7.2 mm (MNHN). — Stn 976, 20°35.0'S, 164°50.7'E, 30-70 m, 13.I.1987, 1 ♀ 8.0 mm (MNHN).

**Banc de Touho.** 20°44.20'S, 165°14'E, 51-59 m, 15.IX.1993, 1 ♀ 8.9 mm, 1 ♀ ovi 12.2 mm (MNHN).

**Sunda str.** Java Sea, Indonesia, 6°38'S, 105°21'E, 35 m, 30.VII.1922, 1 ♀ 6.1 mm (ZMK).

**Kei I.** Banda Sea, 5°36'S, 132°55'E, 85 m, 9.V.1922, 1 ♀ 10.2 mm (ZMK).

**Etymology.** — From Latin, *coniculus*, small cone, for the cones crowding the dorsal surface of the carapace.

**Distribution.** — New Caledonia, Indonesia, 15-85 m.

**DESCRIPTION**

Male first pleopod with basal stalk stout, internal flange rounded, disto-external appendix robust; anterior margin sinuous, proximal angle minutely denticulate.

**Color**
Dorsal surface of carapace pale orange, intestinal tubercle white; chelipeds pale orange, merus with two red bands.

**Remarks**
*R. coniculifera* n. gen. n. sp. is distinguished from the closely allied *R. gracilipes* in having carapace set with flat-topped granules, and distal margin of first male pleopod sinuous, proximally denticulate.

**Raylilia gracilipes** (Bell, 1855)  
(Figs 3; 4)

*Arcania* Adams & White, 1848: 53 (part).


**Zarenkovia mirabilis** — Chen 1996: 283, fig. 12.

**Type material.** — Designated here as lectotype, Indonesia, off Borneo, H.M.S. *Samarang*, 44 m, coll. A. Adams, pres. Capt. E. Belcher, 1 ♀ 7.1 mm, dry mounted (NHM 1847.21).

**Material examined.** — **Gulf of Carpentaria.** Australia, 10°27.6'S, 137°42'E, 49 m, 13.XII.1991, 1 ♀ ovi damaged (QM w17394). — Holothuria reef, *Penguin*, 97 m, 1 ♀ 10.3 mm (NHM 92.3.26.19).

**Batjulmati Reef.** Java, Indonesia, *Siboga*, stn 7, 7°55.5'S, 114°26'E, 15 m, 11.III.1899, 1 ♂ 6.8 mm (ZMA).

**Galewo Strait.** Off Salawatti Island, *Siboga*, stn 164, 1°42.5'S, 130°47.5'E, 32 m, 20.VIII.1899, 2 ♀♂ 6.7, 5.1 mm, 1 ♀ ovi 10.5 mm (ZMA).

**Nuhu Jaan.** Kei Island, *Siboga*, stn 260, 5°36.5'S, 132°55.2'E, 90 m, 1 ♂ 9.5 mm, 1 ♀ 10.9 mm (ZMA).

**Distribution.** — South China Sea, Indonesia, Australia, 15-97 m.

**Description**
Dorsal surface of carapace set with fungiform granules. Frontal lobes tumid, anterior margin shallow arch, sinuous. Margin of carapace bearing 11 subequal, granulate denticles: three close-

REMARKS
Raylilia gracilipes differs from its congeners in having the carapace covered in fungiform granules, and the distal margin of first male pleopod obliquely cut.

During the voyage of the *Samarang*, Adams collected several specimens “on the coast of Borneo in twenty-four fathoms”, identified only as Arcaniae (Adams & White 1848: 53). The label of the specimen of *Arcania gracilipes*, preserved in the Natural History Museum, London (NHM 1847.21), identifies it as collected by A. Adams, off Borneo. Bell’s descriptions of *Arcania gracilipes* (Bell 1855a: 367, 1855b: 310, pl. 34, fig. 9, 1855c: 21) are too brief and his figure inaccurate. However, examination of the type specimen shows the characteristic fungiform granules and tridenticulate posterior margin. Calman (1900: 28) referred his specimen “with some doubt to this species [*A. gracilipes*]” and listed the characters that distinguish it from “Bell’s type specimen”. Examination of Calman’s specimen showed it to be *R. mirabilis* (see below). Alcock (1896: 270) described his *A. gracilipes* with carapace “closely covered with flat discoidal granules” – a description fitting all three species of *Raylilia* n. gen. but *R. gracilipes*. Chen’s (1996: fig. 12) illustration clearly depicts the specimen
as possessing three, rather than the two midlateral marginal denticles characteristic of *R. mirabilis*. Though misidentifying the species, Chen (1996: 283) recognized it as differing from *Randallia*, named it *Zarenkovia mirabilis*, and attributed the authorship of the new genus to “Chen & Türkay, 1995”. This paper was never published (M. Türkay pers. comm.), therefore *Zarenkovia* is a *nomen nudum*.

**Raylilia gracilipes** (Zarenkov, 1969)  
(Figs 5; 6)

*Arcania gracilipes* – Calman 1900: 28.


not *Zarenkovia mirabilis* – Chen 1996: 283, fig. 12 [≡ *R. gracilipes*].

**Type Material.** — Holotype, SW Hainan Island, South China Sea, Shirshov Institute, Moscow, 1 ♂ 12.5 mm. Paratypes, 1 ♂ 7.1 mm, 1 ♀ 5.0 mm.

**Material Examined.** — **Wallis Island.** MUSORSTOM 7, 13°18’S, 176°08’W, 46 m, 15.V.1992, 1 ♂ 6.6 mm (MNHN).

**North Lagoon.** New Caledonia, stn DW 1094, 19°54.4’S, 163°41.2’E, 26 m, 24.X.1989, 1 ♂ 7.3 mm, 1 ♀ 7.3 mm, 1 ♀ ovi 10.0 mm (MNHN). — Stn DW 1097, 19°51.7’S, 163°42.5’E, 34 m, 24.X.1989, 1 juv. (MNHN). — Stn DW 1134, 19°31.3’S, 163°34.6’E, 40 m, 26.X.1989, 1 ♀ ovi 10.5 mm (MNHN). — Stn DW 1205, 19°41.6’S, 163°25.6’E, 38 m, 2.XI.1989, 1 ♂ 7.3 mm (MNHN).

**Noumea.** New Caledonia, CHALCAL 1, stn D 15, 19°23.30’S, 158°38.60’E, 65 m, 16.VII.1984, 1 ♂ 7.8 mm, 1 ♀ ovi 9.7 mm (MNHN B21254). — Stn D 52, 21°13.40’S, 158°49.20’E, 69 m, 24.VII.1984, 1 ♂ 6.8 mm, 1 ♀ ovi 10.4 mm (MNHN B21253).

**Chesterfield Island.** CHALCAL 1, stn DC 53, 21°19.50’S, 158°55.30’E, 60 m, 24.VII.1984, 4 ♂ 6.7-8.3 mm, 2 ♀ 10.0 mm, 10.2 mm, 4 ♀ ♀ ovi 8.8-11.5 mm (MNHN Na27539). — CORAIL 2, stn DW 9, 20°53’S, 161°35.32’E, 62 m, 28.VII.1988, 1 ♀ ovi 9.5 mm (MNHN). — Stn DW 19, 20°41.72’S, 161°00.17’E, 77 m, 21.VII.1988, 3 ♂ 6.7-6.9 mm, 3 ♀ ♀ 7.2-9.8 mm (MNHN). — Stn DW 21, 20°36.14’S, 161°01.75’E, 86-66 m, 22.VII.1988, 1 ♂ 7.2 mm, 2 ♀ ♀ 6.6, 8.9 mm (MNHN). — Stn DW 34, 19°21.62’S, 158°55.77’E, 47 m, 23.VII.1988, 1 ♂ 6.6 mm (MNHN). — Stn DW 39, 19°21.55’S, 158°38.83’E, 63 m, 23.VII.1988, 1 ♂ 7.8 mm (MNHN). — Stn DW 43, 19°21.49’S, 158°25.98’E,
<table>
<thead>
<tr>
<th>Station</th>
<th>Location</th>
<th>Depth</th>
<th>Date</th>
<th>Male Measurements</th>
<th>Female Measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>DW 63</td>
<td>19°15.15'S, 158°47.73'E</td>
<td>23.VII.1988</td>
<td>71 m</td>
<td>2 ♂ 6.7 mm</td>
<td>2 ♀ 6.7, 9.1 mm</td>
</tr>
<tr>
<td>DW 67</td>
<td>19°14.92'S, 158°36.94'E</td>
<td>24.VIII.1988</td>
<td>66 m</td>
<td>1 ♂ 6.2 mm</td>
<td>1 ♀ 6.7, 9.1 mm</td>
</tr>
<tr>
<td>DW 71</td>
<td>19°15.37'S, 158°24.37'E</td>
<td>25.VIII.1988</td>
<td>55 m</td>
<td>1 ♂ 6.2 mm</td>
<td>1 ♀ 6.7, 9.1 mm</td>
</tr>
<tr>
<td>DW 80</td>
<td>19°11.98'S, 158°47.1'E</td>
<td>25.VIII.1988</td>
<td>66 m</td>
<td>1 ♂ 9.7 mm</td>
<td>1 ♀ 9.0 mm</td>
</tr>
<tr>
<td>DW 93</td>
<td>19°06'S, 158°41.92'E</td>
<td>27.VIII.1988</td>
<td>41 m</td>
<td>1 ♂ 6.7 mm</td>
<td>1 ♀ 9.1 mm</td>
</tr>
<tr>
<td>DW 96</td>
<td>19°08.97'S, 158°52.50'E</td>
<td>27.VIII.1988</td>
<td>55 m</td>
<td>1 ♂ 6.4 mm</td>
<td>1 ♀ 9.3 mm</td>
</tr>
<tr>
<td>DW 108</td>
<td>19°09.8'S, 158°49.10'E</td>
<td>27.VIII.1988</td>
<td>68 m</td>
<td>1 ♂ 9.0 mm</td>
<td>1 ♀ 9.8 mm</td>
</tr>
<tr>
<td>DW 109</td>
<td>19°08.97'S, 158°52.50'E</td>
<td>27.VIII.1988</td>
<td>68 m</td>
<td>1 ♂ 6.2 mm</td>
<td>1 ♀ 9.1 mm</td>
</tr>
<tr>
<td>DW 109</td>
<td>19°08.97'S, 158°52.50'E</td>
<td>27.VIII.1988</td>
<td>68 m</td>
<td>1 ♂ 6.2 mm</td>
<td>1 ♀ 9.1 mm</td>
</tr>
<tr>
<td>DW 110</td>
<td>19°08.97'S, 158°52.50'E</td>
<td>27.VIII.1988</td>
<td>68 m</td>
<td>1 ♂ 6.2 mm</td>
<td>1 ♀ 9.1 mm</td>
</tr>
<tr>
<td>DW 120</td>
<td>19°24.97'S, 158°21.59'E</td>
<td>27.VIII.1988</td>
<td>56 m</td>
<td>1 ♂ 6.4 mm</td>
<td>1 ♀ 9.1 mm</td>
</tr>
<tr>
<td>DW 123</td>
<td>19°28.31'S, 158°19.27'E</td>
<td>27.VIII.1988</td>
<td>56 m</td>
<td>1 ♂ 6.9 mm</td>
<td>1 ♀ 9.3 mm</td>
</tr>
<tr>
<td>D 10</td>
<td>20°36.09'S, 161°05.82'E</td>
<td>12-31.VII.1984</td>
<td>87 m</td>
<td>2 ♂ 6.7, 9.1 mm</td>
<td>2 ♀ 6.7, 9.1 mm</td>
</tr>
<tr>
<td>D 15</td>
<td>21°24.90'S, 159°09.30'E</td>
<td>12-31.VII.1984</td>
<td>60 m</td>
<td>1 ♂ 9.3 mm</td>
<td>1 ♀ 9.4 mm</td>
</tr>
</tbody>
</table>

**Fig. 4.** — *Raylilia gracilipes* (Bell, 1855), 1 ♂ 6.7 mm, Galewo Strait, off Salawatti Island, Siboga, stn 164, 1°42.5'S, 130°47.5'E (ZMA), first male pleopod. Scale bar: 1 mm.

52 m, 23.VII.1988, 2 ♂ 6.5, 6.7 mm (MNHN). — Stn DW 63, 19°15.15'S, 158°47.73'E, 71 m, 24.VIII.1988, 1 ♂ 6.7 mm, 2 ♀ 6.7, 9.1 mm (MNHN). — Stn DW 67, 19°14.92'S, 158°36.94'E, 66 m, 24.VIII.1988, 1 ♂ 6.2 mm (MNHN). — Stn DW 71, 19°15.37'S, 158°24.37'E, 55 m, 25.VIII.1988, 1 ♂ 6.7 mm (MNHN). — Stn DW 80, 19°11.98'S, 158°47.1'E, 66 m, 25.VIII.1988, 1 ♂ 9.0 mm (MNHN). — Stn DW 93, 19°05.92'S, 158°53'E, 58-60 m, 27.VIII.1988, 1 ♂ 6.8 mm, 1 ♀ 6.2 mm (MNHN). — Stn DW 96, 19°06'E, 158°41.92'E, 41 m, 27.VIII.1988, 1 ♂ 9.1 mm (MNHN). — Stn DW 108, 19°09.8'S, 158°49.10'E, 68 m, 27.VIII.1988, 2 ♀ 6.7 mm, 9.0 mm (MNHN). — Stn DW 109, 19°08.97'S, 158°52.50'E, 47-64 m, 28.VIII.1988, 2 ♂ 6.6 mm, 6.9 mm, 1 ♀ 6.4 mm (MNHN). — Stn DW 120, 19°24.97'S, 158°21.59'E, 56 m, 29.VIII.1988, 1 ♂ 6.4 mm, 1 ♀ 9.3 mm (MNHN). — Stn DW 123, 19°28.31'S, 158°19.27'E, 56 m, 29.VIII.1988, 1 ♂ 6.4 mm, 1 ♀ 9.5 mm (MNHN). — Stn DW 125, 19°28.05'S, 158°24.39'E, 54 m, 29.VIII.1988, 2 ♂ 6.7 mm, 7.0 mm (MNHN). — Stn DW 164, 19°41.48'S, 150°18.79'E, 58 m, 2.IX.1988, 1 ♂ 6.5 mm (MNHN).

**Landsdowne-Cairway reef.** CHALCAL 1, stn D 10, 20°36.09'S, 161°05.82'E, 87 m, 12-31.VII.1984, 2 ♂ 6.7, 8.8 mm (MNHN). — Stn D 28, 19°24.18'S, 158°31.40'E, 51 m, 12-31.VII.1984, 1 ♂ 6.4 mm (MNHN B19234). — Stn D 40, 20°31.70'S, 158°50.90'E, 65 m, 23.VII.1984, 2 ♀ 7.0 mm, 9.5 mm (MNHN B21252). — Stn D 43, 20°41.50'S, 158°38.40'E, 78 m, 1984, 1 ♂ 7.3 mm, 2 ♀ 6.9 mm, 10.4 mm (MNHN Na27538).

**Macclesfield Bank.** South China Sea, Egeria, 84 m, coll. Bassett-Smith, 1 ♂ 6.9 mm (NHM 93.11.3.210).

**Flinders Entrance.** Torres Straits, 36-55 m, coll. A.C. Haddon, id. W.T. Calman as *Arcania gracilipes*, 1 ♂ 6.4 mm (NHM 1954.9.14.102).

**Anima Sola Island.** Philippines, Albatross, stn 5218, 13°11.15'N, 123°02.45'E, 37 m, 22.IV.1908, 1 ♂ 9.1 mm (USNM).

**Distribution.** — New Caledonia, Chesterfield Island, South China Sea, Torres Straits, New Guinea, Philippines, 26-87 m.
DESCRIPTION

Male first pleopod with basal stalk stout, internal flange rounded, disto-external appendix short; distally trilobate, distal margin of proximal lobe minutely denticulate.

REMARKS
*R. mirabilis* differs from *R. gracilipes* and *R. coniculifera* n. gen. n. sp. in having two, rather than three, midlateral marginal spines, and from *R. uenoi* in having obtuse dorsal tubercles, and distal lobe of first male pleopod trilobate rather than petaloid. The specimen from Torres Straits that Calman (1900: 28) “referred with some doubt” to *Arcania gracilipes*, proved to belong to *R. mirabilis*. Zarenkov’s description and figure (1969: 24, fig. 8) leave no doubt as to the identity of the species. However his suggestion that it is most closely related to *Randallia lanata* Alcock, 1896, is incorrect. Serène & Soh (1976: 13) wrote that *Randallia mirabilis* Zarenkov, 1969 “Obviously […] belongs to another genus” but refrained from assigning it elsewhere.
**Raylilia uenoi** (Takeda, 1995)  
(Figs 7; 8)

*Arcania uenoi* Takeda, 1995: 151, figs 1; 2.

**Type Material.** — *Ryukyu Island*. Ie-Jima Islet, 35 m National Science Museum, Tokyo, 1♂ 9.0 mm (NSMT-Cr 11432).

**Material Examined.** — *Grand Récif Sud*. New Caledonia, stn 572, 22°52’S, 167°00’E, 65 m, 17.VII.1985, 1♂ 10.5 mm (MNHN).

*East Lagoon*. Stn 662, 21°44’S, 166°32’E, 50 m, 8.VIII.1986, 1♂ broken (MNHN B18384).

*Prony Bay*. Ouen Island, stn 131, 22°27.9’S, 166°50’E, 38 m, VIII.1984, coll. Richer de Forges, 1♀ 15.9 mm (MNHN B18379).

*Chesterfield Island*. CORAIL 2, stn DW 119, 19°25.3’S, 158°24.60’E, 56 m, 28.VIII.1988, 1♂ 8.6 mm (MNHN).


*Java*. Indonesia, 5°40’S, 106°8’E, 54 m, 28.VII.1922, 1♀ ovi 10.7 mm (ZMK).

*Madagascar*. NW coast, near Nosy Be, 30 m, on madreporean, 17.I.1971, coll. P. Laboute, 1♀ 9.3 mm (MNHN B18780).

**Distribution.** — New Caledonia, Chesterfield Island, Ryukyu Island, Philippines, Indonesia, Madagascar, 30-65 m.

**Description**  
Sternites closely set with rounded granules. Plastron lacking lateral projections. Abdominal segments minutely granulate. Male first pleopod with basal stalk slender, internal flange reduced, disto-external appendix minute; anterior margin of distal, petal-shaped tip evenly denticulate.

Color


Remarks

*R. uenoi* differs from *R. gracilipes* and *R. coniculifera* n. gen. n. sp. in having two, rather than three, midlateral marginal spines, and from *R. mirabilis* in having conic dorsal tubercles, and first male pleopod distally petaloid. Takeda (1995) placed *A. uenoi* “close to *Arcania gracilipes* Bell, 1855 […] and *A. sagamiensis* Sakai, 1969” and stated that it “has relation also to *A. pulcherrima* (Haswell, 1880)”. However, only *R. gracilipes* is congeneric.

Acknowledgements

I am grateful to P. Clark, A. Crosnier, P. Davie, D. Eibye-Jacobsen, M. Hewitt, the late R. Manning and D. Platvoet for entrusting me with valuable material from their collections. P. Clark kindly supplied me with photographs of Bell’s fragile type specimen. I thank Chen Huilian for the preliminary sorting of the MUSORSTOM leucosiids. Special thanks to the librarians of the American Museum of Natural History, New York. A. Shoob took the photographs, H. Bernard inked the drawings.

References


A new genus of leucosi crabs (Crustacea, Decapoda, Brachyura)

Fig. 8. — Raylilia uenoi (Takeda, 1995), 1 ♂ 10.5 mm, New Caledonia, Grand Récif Sud, 22°52’S, 167°00’E (MNHN), first male pleopod. Scale bar: 1 mm.


Submitted on 23 December 1999; accepted on 13 October 2000