

CYCLASPIS RUSTII N. SP.
(CRUSTACEA, CUMACEA, BODOTRIIDAE)
FROM JAMAICA, CARIBBEAN SEA

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Abstract: Petrescu, Iliffe and Sarbu found in 1993 *Cyclaspis alba* Roccatagliata (1986) in Jamaica. A more accurate description has revealed that it was a new species, *Cyclaspis rustii* n. sp., that is described.

Keywords: Cumacea, *Cyclaspis alba*, *Cyclaspis rustii*, Jamaica, new description.

Introduction:

Several species of the genus *Cyclaspis* from the Caribbean Sea have been described over time: *Cyclaspis angelae* (Petrescu and Iliffe 2009), *C. bacescui* (Omholt and Heard (1979), *C. dentifrons* (Zimmer 1944), *C. dolera* (Zimmer 1944) from Costa Rica, *C. goesi* (Sars 1871), *C. granulata* (Radha Devi and Kurian 1981), *C. iorgui* (Ortiz and Lalana 2002), *C. jamaicensis* (Petrescu et al. 1993), *C. longipes* (Calman 1907) from Cuba, *C. platymerus* (Zimmer 1944) from Gulf of Mexico, *C. sterreri* (Petrescu 2002) from Belize, *C. mexicansis* (Radha Devi and Kurian 1981) from Mexico, *C. kensleyi* (Petrescu 2002), *C. mihaibacescui* (Petrescu 2008), *C. reticulata* (Roccatagliata 1985) from Belize, *C. simonae* (Petrescu et al. 1993), *C. unicornis* (Calman 1907), *C. varians* (Calman 1912) described from Jamaica, *Cyclaspis gurui* (Petrescu et al.

2014, in press), *C. mariae* (Petrescu et al. 2014, in press).

Petrescu et al. (1993) mentioned *Cyclaspis alba* (Roccatagliata 1985) from Discovery Bay and Jackson Bay, Jamaica, the Caribbean Sea.

Materials and methods:

The material for the present study was collected by Thomas Iliffe and Serban Sarbu as follows: from Jamaica, Caribbean Sea, 1 immature female, from Discovery Bay, St. Ann Parish, st. 90-012, 2-8 m, coarse sand between corals, 14.06.1990; 2 manca, from Jackson Bay, Clarendon Parish, st. 90-019, 3 m, 22.06.1990, between shrubs of *Thalassia*.

Results and discussion:

Material examined: holotype, immature ♀, MGAB 256.215; paratypes: 2 manca, MGAB 256.217. Type locality: Discovery Bay, St. Ann Parish, st. 90-012, 2-8 m, coarse sand patches between corals, 14.06.1990, coll. Th. Iliffe and Serban Sarbu.

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Type of material deposited in “Grigore Antipa” Museum collection.

Etymology

The species is dedicated in honour of Dorel Marian Ruști as a sign of sheer friendship.

Description of immature female

Body (Fig. 1 A, Annexes), size: 2.81 mm, with smooth tegument.

Carapace (Fig. 1 A, B, Annexes) is 0.36 times length of the entire body, 1.62 times as high as long, 1.53 times as long as broad, short pseudorostrum, ocular lobe with five lenses, marked antennal notch.

Pereon is 0.15 length of the entire body, all five segments visible.

Pleon is half of entire the body length.

Antennule (Fig. 1 C, Annexes), the basal article of the peduncle is longer than the rest of the peduncle, the 2nd article is 0.8 times the length of the apical article, a minute accessory flagellum.

Maxilliped 3 (Fig. 1 D, Annexes), the basis is 1.28 times the rest of the articles combined length, the long outer process reaching merus-carpus articulation, eight plumose setae on the medial margin, nude outer margin, two plumose setae on top of the outer process; merus is 1.33 times ischium length, 2 plumose setae on the medial margin, 1 longer plumose on the outer margin; carpus is 0.75 times merus length, 2 plumose setae on the medial margin, of which 1 plumose is longer on the outer margin; propodus is 1.2 times carpus length, 2 pappose setae on the medial margin, 1 plumose on the outer margin; dactylus 0.55 times propodus length, the terminal robust seta being as long as the dactylus; with a fully developed exopod.

Pereopod 1 (Fig. 2 A, Annexes), basis 1.08 times the rest of the articles combined length, 1 plumose seta on the outer margin; merus 2.42 times ischium length, 1 short simple seta on the outer margin of the merus; carpus 1.66 times merus length, 2 simple short setae on the medial margin, 1 plumose

on the outer margin, propodus 0.66 times carpus length, 2 simple short setae on medial margin; dactylus 0.75 times propodus length, the terminal robust setae being subequal with the dactylus; with a developed exopod.

Pereopod 2 (Fig. 2 B, Annexes), its basis is 1.14 times the rest of the articles combined length, the short plumose seta on medial margin; merus 4 times ischium length, 1 simple short seta on medial margin; carpus as long as merus, 2 short robust setae on the medial apical corner; dactylus 3 times propodus length, 1 simple short seta on medial margin, 2 subterminal shorter simple setae, the terminal seta being as long as dactylus length; without exopod.

Pereopod 3 (Fig. 2 C, Annexes), its basis is 0.75 times the rest of the articles combined length; the merus is twice as long as ischium length, 1 simple seta on the outer margin of the ischium and merus; carpus is 1.5 times merus length, long medial annulate seta; propodus is 0.61 times carpus length; dactylus is 0.54 times propodus length, the terminal robust seta is a little longer than dactylus.

Pereopod 4 (Fig. 2 D, Annexes), its basis 0.85 times the rest of the articles combined length, 1 simple outer seta; merus is 1.85 times ischium length, 2 simple setae on the outer margin of ischium, 1 on merus; dactylus is 0.37 times propodus length, 1 annulate seta on propodus, the terminal robust seta being 3 times dactylus length.

Pereopod 5 (Fig. 2 E, Annexes), its basis is 0.68 times the rest of the articles combined length, 1 simple short seta on medial margin; merus is 1.16 times ischium length, being as long as carpus; propodus and dactylus are 0.71 times carpus length, featuring a minute robust terminal seta.

Uropod (Fig. 2 F, Annexes), its peduncle is 0.65 times the last pleonite length, serrate medial margin, 0.84 times endopod length; exopod is 0.93 times endopod length, the terminal robust seta is 0.33 times exopod length, short subterminal robust seta, an endopod with a terminal robust seta of 0.37 times article length, a short robust

subterminal seta, 2 sensory setae on the endopod.

Conclusions:

That material was previously erroneously described as being *Cyclaspis alba* Roccatagliata, 1986.

C. rustii n. sp. differs from *C. alba* with: 1) carapace with smooth tegument vs. beset with pits, 2) maxilliped 3 without setae on both margins of the basis process, 3) pereopod 1 with carpus longer than dactylus vs. the same length, propodus longer than merus vs. the same length, 4) pereopod 2 with 1 seta on the medial margin of dactylus vs. setae on both margins, 5) uropodal peduncle shorter than the last pleonite vs. equal in length, 6) uropodal endopod with 1 seta vs. 5.

Rezumat:

CYCLASPIS RUSTII N. SP.
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FROM JAMAICA, CARIBBEAN SEA

Petrescu, Iliffe și Sârbu au redescris în 1993 specia *Cyclaspis alba* Roccatagliata (1986) pe baza unui material colectat din Jamaica, Marea Caraibilor. O descriere mai atentă a acestui material a dus la descrierea unei specii noi, *Cyclaspis rustii* n. sp. Sunt făcute observații privind deosebirile între noua specie și descrierea făcută de Roccatagliata pentru *Cyclaspis alba*.

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References:

- CALMAN W.T. (1907), On new or rare Crustacea of the Order Cumacea from the collection of the Copenhagen Museum, *Transactions of the Zoological Society of London*, 18: 1-56.
- CALMAN W.T. (1912), The Crustacea of the Order Cumacea in the collection of the United States National Museum, *Proceedings of the United States National Museum*, 41(1876): 603-676.
- OMHOLT P.E., HEARD R.W. (1979), A species of *Spilocuma* (Cumacea: Bodotriidae: Mancocuminae) from the Gulf of Mexico. *Proceedings of the Biological Society of Washington*, 92: 184-194.
- ORTIZ M., LALANA R. (2002), Una nuevo especie de cumáceo del género *Cyclaspis* (Cumacea, Bodotriidae), de aguas cubanas, *Avicennia*, 15: 23-30.
- PETRESCU I. (2002), Cumacea (Crustacea: Peracarida) from Belize, *Travaux du Muséum d'Histoire Naturelle "Grigore Antipa"*, 64: 141-203.
- PETRESCU I. (2008), Redescriptions of the species *Cyclaspis goesi* (Sars 1873), *Cyclaspis unicornis* (Calman 1907) and the description of a new species: *Cyclaspis mihaibacescui* n. sp. (Crustacea: Cumacea) from the Caribbean Sea, *Travaux du Muséum National d'Histoire Naturelle "Grigore Antipa"*, 51: 79-96.
- PETRESCU I., ILIFFE T.M., SARBU S. (1993), Contributions to the knowledge of Cumacea (Crustacea) from the littoral waters of Jamaica Island, including the description of three new species, *Travaux du Muséum d'Histoire Naturelle "Grigore Antipa"*, 33: 373-395.
- PETRESCU I., CHATTERJEE T., SCHIZAS N.V. (2014), New records of Bodotriidae (Crustacea: Cumacea) from Puerto Rico with descriptions of three new species, *Zootaxa* (in press).
- RADHA DEVI A., KURIAN C.V. (1981), *Bodotria platybasis* sp. nov. (Crustacea-Cumacea) from the Indian Seas, *Bulletin of the Department of Marine Science*, University of Cochin, 12 (1): 23-28.
- ROCCATAGLIATA D.C. (1985), Three new species of the genus *Cyclaspis* (Cumacea) from the South-West Atlantic with a redescription of *Cyclaspis platymerus*

- Zimmer, 1944, *Crustaceana*, 49 (2): 177-192.
- ROCCATAGLIATA D.C. (1986), On some *Cyclaspis* (Cumacea) from the South American Atlantic coast with the description of two new species, *Crustaceana*, 50 (2): 113-132.
- ZIMMER C. (1944), Cumaceen des tropischen Westatlantiks, *Zoologischer Anzeiger*, 144: 121-137.

Annexes:

Figure no. 1 *Cyclaspis rustii* n. sp. Holotype immature female A, body, lateral view; B, carapace, dorsal view; C, antennule; D, maxilliped 3. Scales in mm: A, 0.5; B, 0.2; C, D, 0.1.

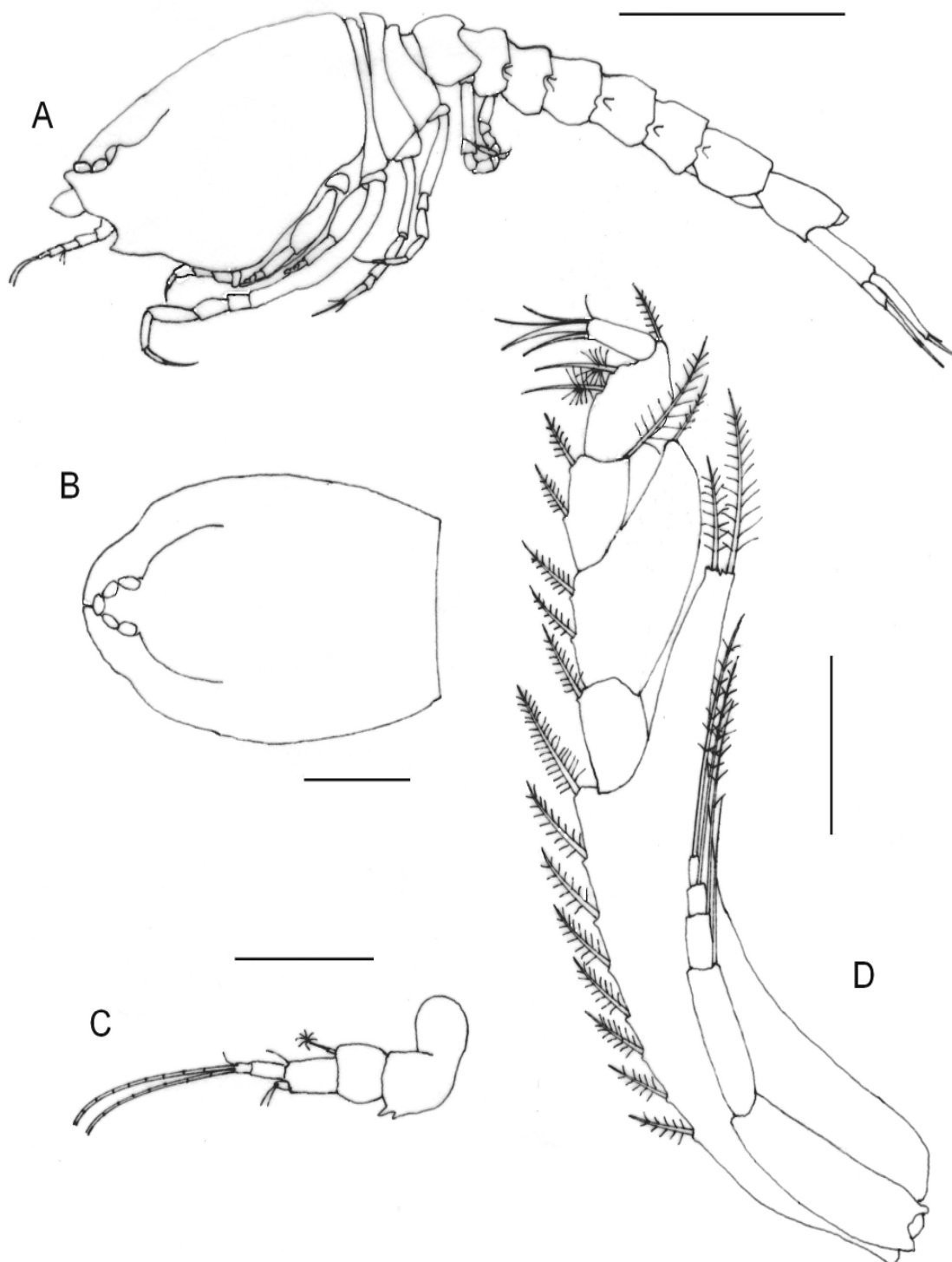


Figure no. 2 *Cyclaspis rustii* n. sp. Holotype immature female A, pereopod 1; B, pereopod 2; C, pereopod 3; D, pereopod 4; E, pereopod 5; F, uropod. Scales in mm: A-F, 0.1.

