

“TYCHE POTIGUARA”, A NEW SPECIES OF DECAPOD CRUSTACEAN FROM BRAZIL (Maiidae, Ophthalmiinae)¹

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(With 8 text-figures)

While reviewing the genus *Tyche* Bell in the course of preparing to monograph the spider crabs of Pacific America, the writer had occasion to request reexamination of the series of specimens referred to the Atlantic species, *T. emarginata* White, by the late MARY J. RATHBUN (1925, p. 509). A single specimen dredged off the Brazilian coast by the U. S. Fish Commission Steamer “Albatross” while on a voyage from Norfolk, Virginia, to San Francisco, California, in 1887-1888, was found by Dr. FENNER A. CHACE, JR., curator of marine invertebrates, United States National Museum, to differ materially from the remainder of the series and was forward for description. Since its country of origin lies outside the territory covered by the projected monograph, it has been thought best to accord the new species separate treatment in a journal accessible to Brazilian carcinologists, who may be stimulated to search for additional examples.

Tyche potiguara n. sp. (Figs. 1-7)

Tyche emarginata Rathbun (not White), *Proc. U. S. Nat. Mus.*, 21 : 573, 1898;
Bull. U. S. Nat. Mus., 129 : 508, 1925 (part: the Brazilian specimen).

Type: Male holotype, U. S. N. M. Cat. No. 21906, from off Cape St. Roque (Cabo de São Roque), Brazil, Lat. 06° 59' 30" S., Long. 34° 47' 00" W., December 16, 1887, 20 fathoms, broken shell, *Albatross* station 2758.

¹ Received for publication November 19, 1951.

Measurements: Holotype male: length 10.5 mm., width opposite anterior branchial tubercles 6.2 mm., length posterior to gastric tubercle 5.7 mm., width of gastrocardiac shield 5.7 mm., length of rostrum 1.7 mm., width of rostrum 1.8 mm., exorbital width 6.0 mm., length of cheliped *ca.* 7.6 mm., length of legs (detached), from first to last, *ca.* 11.2, 9.6, 8.1, and 7.1 mm..

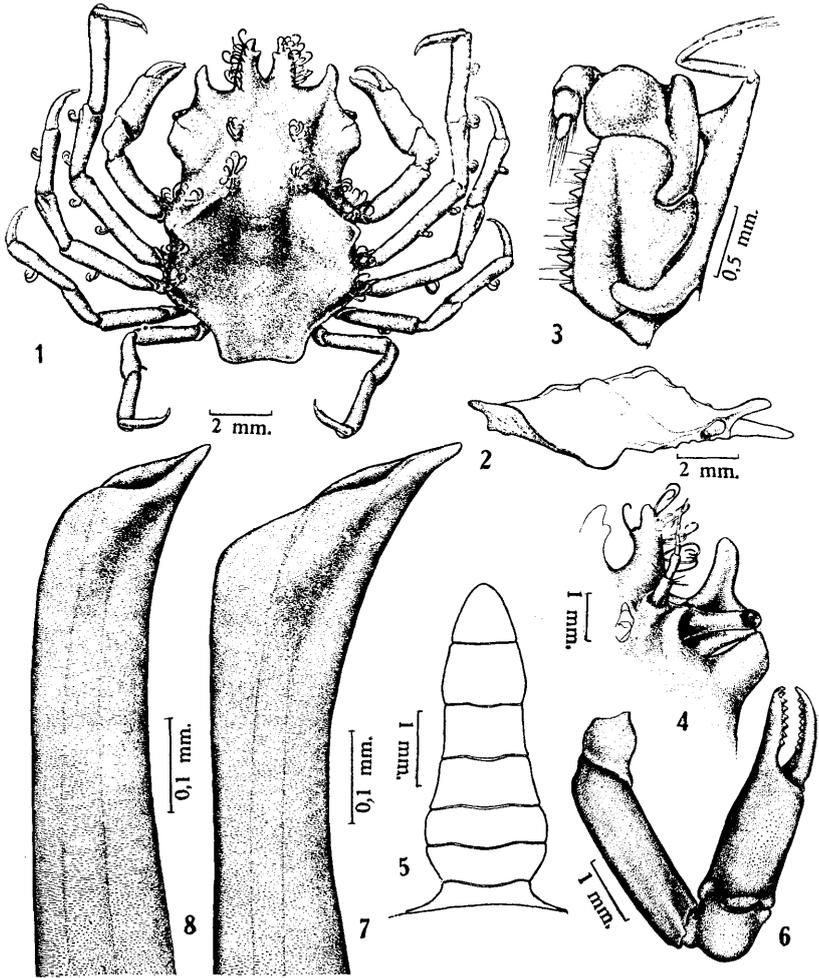
Diagnosis: Rostral horns exceeding preorbital, which are directed anteriorly and but little outwardly. Length and breadth of cardiac shield subequal. Posterior extension of carapace broad and but faintly bilobed. Merus of external maxilliped with outer one-fourth separated by a deep cleft from inflated inner three-fourths. Male first pleopod not recurving.

Description: Carapace as broad anteriorly as posteriorly, divided by two sharp diagonal branchial ridges into a depressed, octagonal gastrocardiac shield and a declivitous anterior portion, which is again subdivided into an elevated median and two concave lateral areas. Rostral horns broad, flat, surmounted by hooked hairs, tips rounded, incurving, a subterminal projection extending inward from each to enclose an oval interspace. Preorbital horns similarly rounded and incurving, their tips falling short of the tips of the rostral horns by half the length of the latter, their axes subparallel or diverging but slightly. Postorbital horn expanded broadly to conceal all but the tip of the cornea dorsally, intervening fissure completely closed; carapace widest at postorbital level if projecting anterobranchial tubercles be excluded from branchial width. Gastric region moderately high, surmounted by a tubercle, four clusters of hooked hairs arranged in a square defining the area, which slopes abruptly toward the rostrum. Concave hepatic regions each separated from gastrocardiac region by a sharp diagonal anterior branchial ridge, a prominent tubercle closely set with hooked hairs on its outer slope; posterior to this two similar tubercles. Cardiac region a polished dome surmounted by a faint tubercle and joined to gastric summit by a low median ridge. Posterior extension of carapace broadly lamellate and but faintly bilobed, in marked contrast to the narrow and deeply indented lobes of *T. emarginata*.

Basal antennal article moderately broad, a blunt spine at anteroexternal angle, first movable segment cylindrical. Orbit open beneath, some protection to the eye afforded by the triangular exorbital tooth, the thickness of which equals the diameter of the eyestalk, and the margin of which is fringed with hairs. Ischium of outer maxilliped with a shallow groove into which the recurving basal projection of the exognath fits smoothly; merus inserting deeply into external border of ischium and with outer one-fourth deeply cleft anteriorly and separated by a groove from the smooth and inflated inner three-fourths.

Chelipeds smooth and cylindrical, slightly more robust than first walking leg; merus with a proximal tubercle; carpus inflated; manus elongate, but little narrowed distally, slightly compressed superiorly; fingers slender, moder-

ately deflexed, incurving, in contact throughout and finely denticulate. Ambulatory legs slender, the first much the longest, decreasing rapidly in length thereafter; meri, carpi, and propodi provided with a few curls of setae; dactyli toothed in middle third; merus and carpus of anterior limbs provided with a prominent distal blunt spine or tubercle.



Tyche potiguara n.sp., male holotype — Fig. 1: Dorsal view; fig. 2: right lateral view; fig. 3: left outer maxilliped; fig. 4: ventral view of orbit; fig. 5: abdomen; fig. 6: left cheliped; fig. 7: first pleopod. Fig. 8 — *Tyche emarginata* White, Florida Keys, male first pleopod. A. Petersen, del.

Abdomen of male with seven free segments, widest opposite third segment, tip narrowly triangular. Male first pleopod not recurving, tip sharply pointed, large spermiducal opening unprotected (fig. 7). Sternum moderately concave between segments, a prominent pair of tubercles opposite terminal segment of abdomen.

Remarks: The external maxilliped with the cleft and inflated merus is diagnostic of the new species, that of a specimen of *T. emarginata* of like size from Key West, Florida (U.S.N.M. Cat. No. 20018), having the anterior margin entire, but the inner margin basal to the insertion of the palpus triply divided. Because the unique holotype of *potiguara* is immature, certain of the other characters may prove unreliable as additional, mature specimens become available. The indicated proportion of length of rostral to preorbital horns may not obtain in adult specimens, as can be demonstrated in related species, and the simple pleopod may show elaboration with increasing age.

The specific name *potiguara* is derived from *potiguar*, a designation applied to the State of Rio Grande do Norte, in which Cape St. Roque is located.

SUMÁRIO

Uma nova espécie de Crustacea Decapoda, Maiidae, Ophthalmiinae é descrita neste trabalho, *Tyche potiguara* n. sp., proveniente do Cabo de São Roque, Brasil, coligida a 20 braças de profundidade, em 16 de Dezembro de 1887, estação *Albatross* 2758. O holótipo, um espécime macho, acha-se depositado na coleção do U. S. National Museum e catalogado sob n.º 21906. A nova espécie distingue-se de *T. emarginata* White, para a qual o espécime foi anteriormente referido, pelo mero do maxilípede externo que possui o 1/4 externo separado por uma fenda profunda da área intumescida que ocupa os 3/4 internos.

LITERATURE CITED

- RATHBUN, M. J., 1898, The Brachyura collected by the U. S. Fish Commission Steamer "Albatross" on the Voyage from Norfolk, Virginia, to San Francisco, California, 1887-1888. *Proc. U. S. Nat. Mus.*, 21 : 567-616, pls. 41-44.
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