

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

DESCRIPTIONS OF THREE NEW MANGROVE CRABS
FROM COSTA RICA.

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By permission of the Secretary of the Smithsonian Institution.

Prof. J. Fid. Tristan and Prof. P. Biolley of San José are making a study of the fauna of the mangroves of Costa Rica, and have submitted the crabs to me for examination. Three new species have been discovered, the types of which have generously been given to the U. S. National Museum.

Sesarma (Sesarma) rhizophoræ sp. nov.

Type.—Male, in alcohol. Boca del Jesus Maria, in the mud of mangroves, January, 1906. J. Fid. Tristan and P. Biolley, collectors. Cat. No. 32,491, U. S. National Museum.

Characters.—Carapace $\frac{4}{5}$ as long as wide, short-pubescent, smooth, punctate, very convex longitudinally, less so transversely. Front more than $\frac{1}{2}$ width of carapace, steeply inclined, sides parallel, lower edge sinuous in top view, convex in front view, superior lobes smooth, low, outer pair narrower than inner pair. Orbital margin directed strongly backward and outward, with a curved tooth at outer angle, behind which on the lateral margin there is a second strong tooth separated from the first by a deep sinus.

Arm and wrist crossed by short granulated rugæ; palms coarsely punctate, upper margin a single line of granules, inner surface partly granulous, some oblique lines near the top; dactylus punctate at base and with a granulate line above on the basal half. Legs pubescent, with some longer hairs, third pair about $2\frac{1}{4}$ times as long as carapace; merus joints armed with a slender subterminal spine; dactyli having a long slender tip; merus of third pair about $2\frac{1}{2}$ times as long as wide.

Abdomen of ♂ narrow except at its base; appendages of first segment ending in long needle-like points.

Measurements.—Length, 10.9; anterior width, 13; width at lateral tooth, 13.7; posterior width, 12.8; width of front, 7.5 mm.

Remarks.—This is the representative on the Pacific coast of *S. curacaoense* de Man*, in which, however, the legs are much shorter and broader, meral spines shorter and stouter, abdomen of ♂ broader, appendages of first segment stouter and devoid of slender tips.

* Notes Leyden Mus., XIV, p. 257, pl. X, fig. 6, 1892.

Sesarma (Holometopus) biolleyi sp. nov.

Type.—Male, in alcohol. Salinas de Caldera, Boca del Jesus Maria, January, 1906. J. Fid. Tristan and P. Biolley, collectors. Cat. No. 32,490, U. S. National Museum.

Characters.—Carapace a little broader than long, and broader behind than before, very uneven, granulate anteriorly, punctate and wrinkled posteriorly, nearly naked. Front $\frac{1}{2}$ width of carapace, vertical, widening below, lower edge projecting, convex in front view. Superior lobes well marked, the middle pair wider. Upper margin of orbit sinuous, very oblique, outer tooth acuminate.

Chelipeds rugose, the rugae changing to single granules or tubercles on the distal half of the palms; the latter much inflated, inner face sparingly granulous, a transverse row of granules near the distal end. Daetyli very broad at base viewed from above and granulous. Legs long and narrow, third pair $2\frac{1}{2}$ times as long as carapace, its merns 3 times as long as wide.

Measurements.—Length, 19.1; anterior width, 20.2; posterior width, 21; width of front above, 11.3 mm.

Remarks.—Allied to *S. (H.) miersii* Rathbun,* but differs in its carapace narrower anteriorly, upper border of orbit inclined more strongly backward, front wider, and ambulatory legs much longer and narrower. Occurred in abundance at the type locality.

Eurytium tristani sp. nov.

Type.—Male, in alcohol. Boca del Jesus Maria, hidden in the fine mud of rotten trees. J. Fid. Tristan and P. Biolley, collectors. Cat. No. 32,366, U. S. National Museum.

Characters.—Carapace slightly convex from side to side, strongly convex from front to back. Gastric region with its subdivisions and cardiac region well delimited. Surface finely granulate, without transverse striae. Front $\frac{1}{4}$ as wide as carapace, bilobed, each lobe convex except for an inconspicuous outer tooth. Two distinct notches in the upper border of the orbit; tooth at outer angle blunt, prominent, and partly fused with the next or second lateral tooth which is nearly as advanced as the first and slightly larger; third, fourth and fifth teeth prominent, with convex outer margins; anterior border of third tooth straight and transverse, of fourth and fifth teeth concave and directed outward and backward. Lower teeth of orbit strongly projecting. Merns of outer maxilliped not dilated at outer angle. Chelipeds and legs as in *E. limosum* (Say). †

Measurements.—Length, 18; width, 28.2 mm.

Color.—Traces of violet on upper surface of chelipeds and of red on upper surface of movable finger.

Remarks.—This species resembles *E. limosum* in its convexity but differs in the cut of the front and antero-lateral teeth; *E. affine* (Streets and Kingsley) ‡ is a much flatter species with inconspicuous side teeth.

* Proc. Biol. Soc. Wash., XI, p. 91, 1897.

† Jour. Acad. Nat. Sci. Phila., I, p. 446, 1817.

‡ Bull. Essex Inst., IX, p. 106, 1877.