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THE AFRICAN SWIMMING CRABS OF THE GENUS
CALLINECTES.*

BY MARY J. RATHBUN.

This paper is supplementary to the one on 'The Genus *Callinectes*,' † since the publication of which the writer has examined the types of a number of species of doubtful position and has been able to correct the synonymy. ‡ It becomes necessary to change the name of two species, *larratus* to *marginatus*, *tumidus* to *exasperatus*, and advisable to consider the subspecies, *tumidus gladiator*, a species. One new species is added, *C. latimanus*.

***Callinectes marginatus* (A. Milne Edwards).**

Neptunus marginatus A. Milne Edwards, Arch. Mus. Hist. Nat. Paris, X, 318, pl. xxx, fig. 2, 1861. Gabon. Types examined (3 juv. ♀).

Callinectes larratus Ordway, Boston Journ. Nat. Hist., VII, 573, 1863. Key West, Tortugas, Bahamas, Haiti.

Callinectes larratus A. Milne Edwards, Crust. Rég. Mex., 225, 1879 (variety of *C. diacanthus*).

Callinectes africanus A. Milne Edwards, *op. cit.*, 229, 1879 (variety of *C. diacanthus*). Cape Verde Islands. Types examined.

Callinectes larratus, var. *africanus*? Benedict, Proc. U. S. Nat. Mus., XVI, 1893, 537.

Distribution.—African coast: Cape Verde Islands (U. S. Nat. Mus., No. 14880; Paris Mus.); Liberia (Paris Mus.); Beyah River, Elmina, Ashantee (U. S. Nat. Mus., No. 14878); Gaboon (Paris Mus.); St. Paul de Loando (U. S. Nat. Mus., No. 14877). American coast: Florida Keys to Bahia, Brazil.

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† Proc. U. S. Nat. Mus., XVIII, 1895, 349-375, pls. xii-xxviii, 1896.

‡ *C. nitidus* A. Milne Edwards, 1879, is a synonym of *C. arcuatus* Ordway, 1863.

Callinectes gladiator Benedict.

Callinectes tumidus, var. *gladiator* Benedict, Proc. U. S. Nat. Mus., XVI, 1893, 537.

Callinectes tumidus gladiator Rathbun, Proc. U. S. Nat. Mus., XVIII, 1895, 360, 1896.

This form should, I think, be considered a distinct species from *C. exasperatus* (Gerstaecker), 1856* (= *C. tumidus* Ordway, 1863).

Type specimen, ♂.—Carapace, exclusive of lateral spines, wider than in *C. exasperatus*; less convex, but more deeply areolated; the branchial region, besides the two distinct areolae at the inner angle, has outside these areolae a higher elevation on which the granules are most crowded. Granules scattered on the lateral regions. Intramedial region wider than in *C. exasperatus*, but posteriorly narrower than in *C. marginatus*. Median teeth of the front small, tuberculiform. Lateral teeth gradually increasing in size from the second to the eighth, excepting that the fifth is slightly wider than the sixth; rather long, and distinctly separated, as in *C. marginatus*. Lateral spine nearly three times the length of the preceding tooth. Abdomen most nearly related to that of *C. exasperatus*.

Additional material.—To this species may be referred two small females, one in spirit, one dried, which are preserved in the British Museum. They were collected on the west coast of Africa by Mr. John Cranch of the Congo Expedition, 1816. One was labeled by Leach '*Lupa Snythianus*,' but was not described.†

In these specimens the lateral spine is more than three times as long as the preceding tooth; the inner supraorbital fissure is open to the base; the abdomen (of the female) is allied to that of *C. marginatus*, but the fifth segment is longer than the sixth. Specimens, also young, of both sexes, in the Berlin Museum, agree with the above.

Dimensions.—Type, immature ♂: Length to median sinus of front, 27.9; to tips of frontal teeth, 28.6; width to tips of spines, 67; to last sinus, 52.3 mm. Immature ♂, Berlin Museum: Length to sinus, 23; to tips of frontal teeth, 23.5; width to tips of spines, 55.5; to last sinus, 42 mm.

Type locality.—Beyah River, Elmina, Ashantee; U. S. Eclipse Expedition, 1889 (U. S. Nat. Mus., No. 14879).

Distribution.—Liberia (Berlin Mus., No. 2979); Chinchoxo, West Africa (Berlin Mus., No. 5568); West Africa, Congo Expedition (British Mus.).

* *Lupea exasperata* Gerstaecker, Arch. f. Natur., XXII, pt. 1, 129, 1856. Puerto Cabello, Venezuela. Type examined.

† In Appendix No. IV to 'Narrative of an Expedition to explore the River Zaire, usually called the Congo, in South Africa, in 1816, under the direction of Captain J. K. Tuckey, R. N.,' London, 1818, Leach says, under *Lupa*, "Of this genus three new species were discovered, all of which belong to that section in which the hinder lateral spine of the shell is very much elongated."

Callinectes bocourti A. Milne Edwards.

Callinectes bocourti A. Milne Edwards, Crust. Rég. Mex., 226, 1879 (variety of *C. diacanthus*). Rivière de Mullins, 20 miles south of Belize, Honduras. Types examined.

Callinectes cayennensis A. Milne Edwards, *loc. cit.* (variety of *C. diacanthus*). Cavenne. Types examined.

Callinectes ? bocourti Rathbun, *op. cit.*, 360. Not *C. africanus* A. Milne Edwards.

Specimens of *C. bocourti* from British Guiana in the British Museum are labeled "*C. trispinosus* Leach;" so also are specimens of *C. crasperatus* from Jamaica. Probably neither are types, as the locality of *Lupa trispinosa* is not given by Leach.

Distribution.—West Africa: Senegal (U. S. Nat. Mus., No. 18735); Liberia (Berlin Mus., No. 3647); Chinehoxo (Berlin Mus., No. 5566). American coast: Honduras to Rio de Janeiro, Brazil.

Callinectes latimanus Rathbun, new species.

This species is so closely related to *C. torotes* Ordway, from the west coast of America, that it may be described by comparison with that species.

Cardiac and inner branchial areolets less elevated. Length of intramedial area about equal to, but not exceeding, its posterior width. Four frontal teeth (fig. 6) less advanced, triangular and subacute instead of rounded or lobiform. Suborbital tooth broader

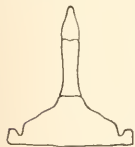


FIG. 7.—*C. latimanus*. Abdomen of male. $\times \frac{1}{2}$.

toward the extremity. Antero-lateral teeth shorter, that is, less projecting; margins of second to fifth pairs, inclusive, considerably shorter than their basal width.

In the abdomen of the male (fig. 7) the third or compound segment is shorter than in *C. torotes*; the penultimate segment is broader at its proximal end and much constricted at one-third the distance from the proximal end. Sides of terminal segment sinuous. Appendages reaching beyond the tip of the abdomen. In the female the sixth segment is only slightly longer than the fifth.

Meri of chelipeds three-spined on inner margin. Propodus of larger cheliped (fig. 8) with the lower margin very convex below the basal half of the pollex. The fingers are therefore more gaping, the pollex being no wider than in *C. torotes*.



FIG. 8.—*C. latimanus*. Larger chela. $\times \frac{1}{2}$.

Dimensions.—♂, No. 19877: Length to median sinus of front, 51 mm.; to tips of frontal teeth, 52.5; width, 115; length of lateral spine, 11.3; of preceding tooth, 4.5.

Type locality.—Lagos, Bight of Benin, Guinea; Sir A. Molony, collector. A fine series of this species is preserved in the British Museum (No. 91.4.1). One specimen, a male, has been presented to the U. S. National Museum (No. 19877).

FIG. 6.—*Callinectes latimanus*. Frontal teeth. $\times \frac{1}{2}$.