

BRACHYURAN CRABS

COLLECTED BY THE WILLIAMS GALAPAGOS EXPEDITION, 1923

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(Plate VII. Fig. 38)

The collection numbers 23 species, 12 of these being from the Galapagos and the remainder from the Atlantic side of Panama and the vicinity of Key West.

There are several interesting occurrences. Two very small crabs are referable to *Xanthias insculpta*, a species not reported since the type from Lower California was described by Stimpson. The author had in hand but one individual, which is no longer extant, having probably been destroyed with extensive collections by the Chicago fire of 1871.

The grey box crab, *Calappa convexa*, had not up to this time been taken at the Galapagos. Its occurrence there was to be expected, as the crustacean fauna of the archipelago is in great part identical with that of the adjacent mainland.

Colon is a new locality for the seemingly rare fiddler crab, *Uca heterochelos*, although this is not an extension of its range.

It is a satisfaction to report a new form of megalops, referable probably to the Galapagos sand crab, thus adding another bit of knowledge to that little known subject, the development of the crab from the egg to the mature crab form.

Mithrax bellii Gerstaecker. (Moss-back Crab).

Mithrax ursus Bell, *Proc. Zool. Soc. London*, vol. 3, 1835 (1836), p. 171 (not *Cancer ursus* Herbst, 1788); *Trans. Zool. Soc. London*, vol. 2, 1836, p. 52, pl. 10, figs. 2, 2c, 2d, 2e and 3.

Mithrax bellii Gerstaecker, *Arch. f. Naturg.*, vol. 22, part 1, 1856, p. 112.

Eden Island, Galapagos Islands, in rock pools, April 6; 1 young male, with carapace 11.7 mm. long, 10.3 wide. The young of this species are almost concealed by a dense mosslike covering of setae, which largely disappears with age; the carapace also grows broader until its breadth exceeds the length. The young have only five marginal spines.

Range.—Galapagos Islands; Chile.

First form on press April 28, 1924.

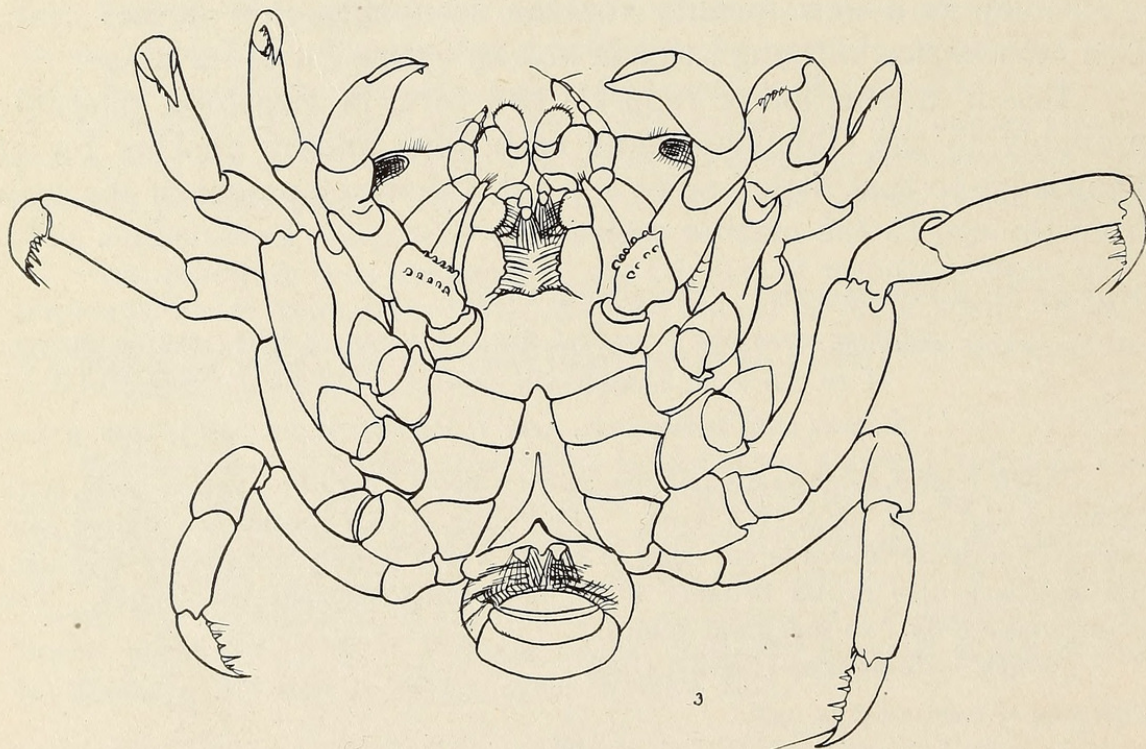
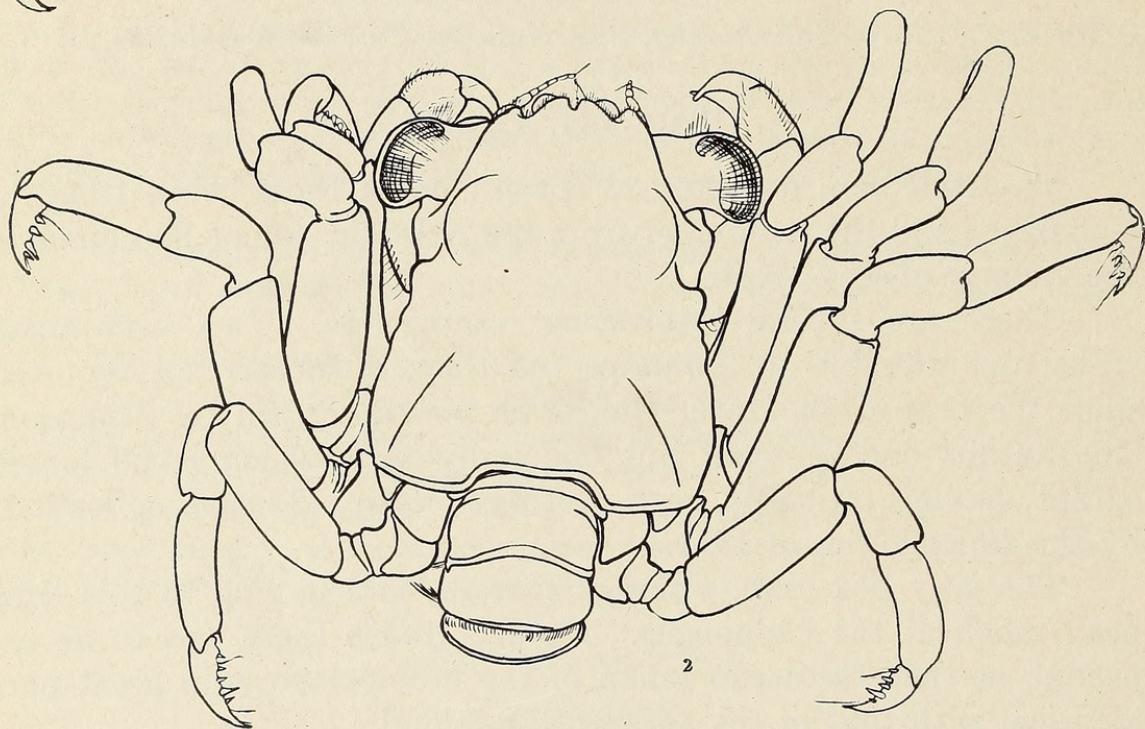
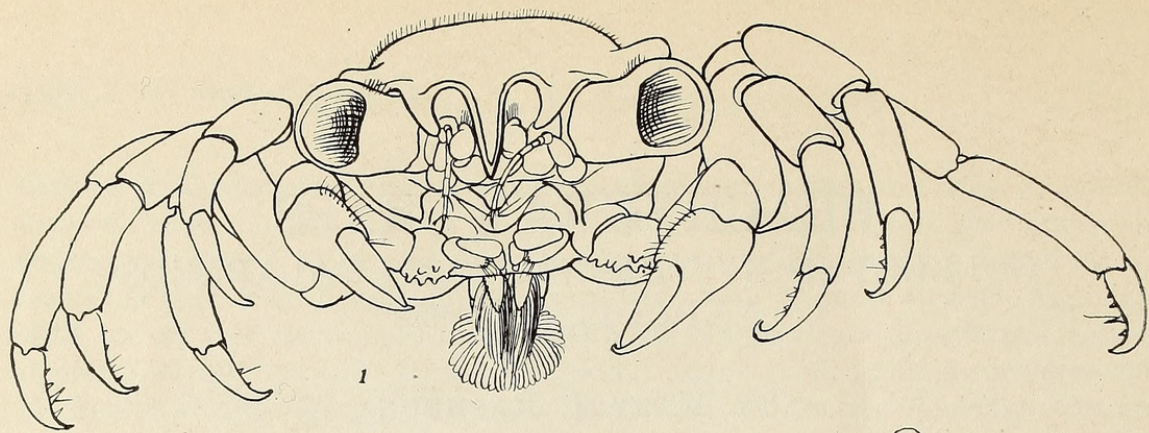


PLATE VII. MEGALOPS OF (?) *OCYPODE GAUDICHAUDII*.
 From surface of a puffer in a pool at Eden Island. Carapace 4.6 mm. long.
 1, front view; 2, dorsal view; 3, ventral view. Drawn by C. J. Fish.

Ocypode albicans Bosc. (Ghost Crab or Sand Crab).

Ocypoda albicans Bosc, *Hist. Nat. Crust.*, vol. 1, an X (1801-1802), p. 196, not pl. 4, fig. 1.

Ocypode arenarius Say, *Journ. Acad. Nat. Sci. Philadelphia*, vol. 1, 1817, p. 69.

Ocypode albicans Rathbun, *Bull.* 97, *U. S. Nat. Mus.*, 1918, p. 367, pls. 127 and 128.

Colon, Panama; 2 males (1 young).

This is the common sand crab of the eastern coast of America, ranging from Block Island to Brazil.

Ocypode gaudichaudii Milne Edwards and Lucas.

Ocypode gaudichaudii Milne Edwards and Lucas, *d'Orbigny's Voyage dans l'Amér. Mérid.*, vol. 6, 1843, *Crust.*, p. 26; vol. 9, atlas, 1847, pl. 11, figs. 4-4b.

(Plate VII, figs. 1-3).

A small crab was taken from the surface of a puffer, *Spheroides annulatus*, in a pool at Eden Island. It proved to be a megalops, or one of the later developmental stages of a crab; it is similar to a known megalops of *Ocypode albicans*, and for that reason I have ventured to give it the name of the only sand crab occurring at the Galapagos, viz.: *O. gaudichaudii*. In the adult of this species the eyes are remarkable in having a slender style projecting from them; this style may be as long as the eye and its stalk.

The carapace of the megalops is 4.6 mm. long, 4 mm. wide. Its sides are high and are crossed obliquely by three furrows into which as many ambulatories may fit; between the first (or anterior) and the second groove, there is a prominent, rectangular, hepatic tubercle; on the branchial region on the posterior margin of the second groove there is a sharp oblique ridge. The mesogastric and cardiac regions are each set off by deep grooves; the mesogastric is partially divided into three parts. The front is deeply cut into three narrow, deflexed lobes, of which the lateral are only half as long as the median lobe. A deep median groove extends forward from the gastric region. The body is covered with pigment spots which are larger anteriorly and diminish in size and number posteriorly, being very few on the sixth abdominal somite and absent from the telson. The raised portions of the carapace are covered with a short pubescence, while a transverse line of hairs crosses the branchial and anterior cardiac regions. The posterior border of the first six abdominal somites is fringed with short hair, and of the pleopods with long hair.

The ambulatories are sparingly dotted with fine pigment spots which thin out distally, being absent from the dactyls and upper half of the propodites. Five spines below each dactyl, the second spine from the tip being the longest. No hairs between bases of second and third ambulatories.

Uca galapagensis Rathbun. (Broad-fronted Fiddler Crab).

Uca galapagensis Rathbun, *Proc. Washington Acad. Sci.*, vol. 4, 1902, p. 275, pl. 12, figs. 1 and 2; *Bull.* 97, *U. S. Nat. Mus.*, 1918, p. 403, pl. 142, text-fig. 167.

James Island, common about salt ponds, April 4; 3 males, 1 female, all very small.

South Seymour Island, April 21, 1 male from a salt pool, 1 female from the beach.

Indefatigable Island, April 25; 1 male.

Eden Island; 1 male.

This is the larger of the two fiddlers that inhabit the Galapagos.

Uca heterochelos (Lamarck). (Narrow-fronted Fiddler Crab).

Ocypoda heterochelos Lamarck, *Syst. Anim. sans Vert.*, 1801, p. 150.
Gelasimus heterocheles, Kingsley, *Proc. Acad. Nat. Sci. Philadelphia*, 1880, p. 137, pl. 9, fig. 2 (part).
Uca heterochelos Rathbun, *Bull. 97, U. S. Nat. Mus.*, 1918, p. 381, pl. 131, figs. 1 and 2.

Colon; 1 male, half grown.

This is one of the groups of fiddlers in which the front between the eyes is very narrow, tongue-like. While the species ranges from the Bahamas to Brazil, it has not before been noted from Panama.

Cardisoma guanhumi Latreille. (Large Land Crab).

Cardisoma guanhumi Latreille, *Encyc. Méth., Hist. Nat., Entom.*, vol. 10, 1825, p. 685. Rathbun, *Bull. 97, U. S. Nat. Mus.*, 1918, p. 341, pls. 106 and 107, text-fig. 155.

Colon; 1 male. Found in great numbers, all having the same light blue color. Widely distributed on the Atlantic coast of America, from Bahamas to Brazil.

Gecarcinus lateralis (Fremenville). (Small Land Crab).

Ocypoda lateralis Fremenville, *Ann. Sci. Nat., ser. 2, Zool.*, vol. 3, 1835, p. 224.
Gecarcinus lateralis Guérin, *Icon. Règne Anim.*, pl. 5, fig. 1. Rathbun, *Bull. 97, U. S. Nat. Mus.*, 1918, p. 355, pls. 119 and 120, text-fig. 161.

Colon; 1 female. This species is considerably smaller than the *Cardisoma* and is always of a deeper, richer color. It ranges on the Atlantic coast from the Bahamas to Guiana.

Grapsus grapsus (Linnaeus). (Rock Crab).

Cancer grapsus Linnaeus, *Syst. Nat.*, ed. 10, vol. 1, 1758, p. 630.
Grapsus grapsus Ives, *Proc. Acad. Nat. Sci. Philadelphia*, 1891, p. 190.
Rathbun, *Bull. 97, U. S. Nat. Mus.*, 1918, p. 227, pls. 53 and 54, text-fig. 135.

Eden Island, off Indefatigable Island; 1 male, 1 female.

Indefatigable Island; 1 young female.

Common in the tropics on rocky shores on both sides of the American continent.

Geograpsus lividus (Milne Edwards). (Small Rock Crab).

Grapsus lividus Milne Edwards, *Hist. Nat. Crust.*, vol. 2, 1837, p. 85.
Geograpsus lividus Stimpson, *Ann. Lyc. Nat. Hist. New York*, vol. 7, 1860, p. 230. Rathbun, *Bull. 97, U. S. Nat. Mus.*, 1918, p. 232, pl. 55.

Tower Island, Galapagos; 1 young.

A smaller, and duller-colored form than the preceding; it has acutely pointed fingers instead of spoon-shaped ones. Found on both sides of the continent.

Goniopsis cruentata (Latreille). (Mangrove Crab).

Grapsus cruentatus Latreille, *Hist. Nat. Crust.*, vol. 6, 1803, p. 70.
Goniopsis cruentatus Rathbun, *Bull. U. S. Fish. Comm.*, vol. 20, for 1900, pl. 2 (1901), p. 15, pl. 1 (colored); *Bull. 97, U. S. Nat. Mus.*, 1918, p. 237, pl. 57, text-fig. 136.

Colon, Panama; 1 young specimen.

This crab can be told by its brilliant coloring in connection with the flashing white outer surface of its palms.

Planes minutus (Linnaeus). (Sargassum Crab).

Cancer minutus Linnaeus, *Syst. Nat.*, ed. 10, vol. 1, 1758, p. 625.
Planes minutus White, *List Crust. Brit. Mus.*, 1847, p. 42.

Off eastern Cuba, in *Sargassum*, 13 specimens from four different stations. For variations in this widely distributed species, see Verrill, *Trans. Connecticut Acad. Sci.*, vol. 13, 1908, p. 325, pl. 13.

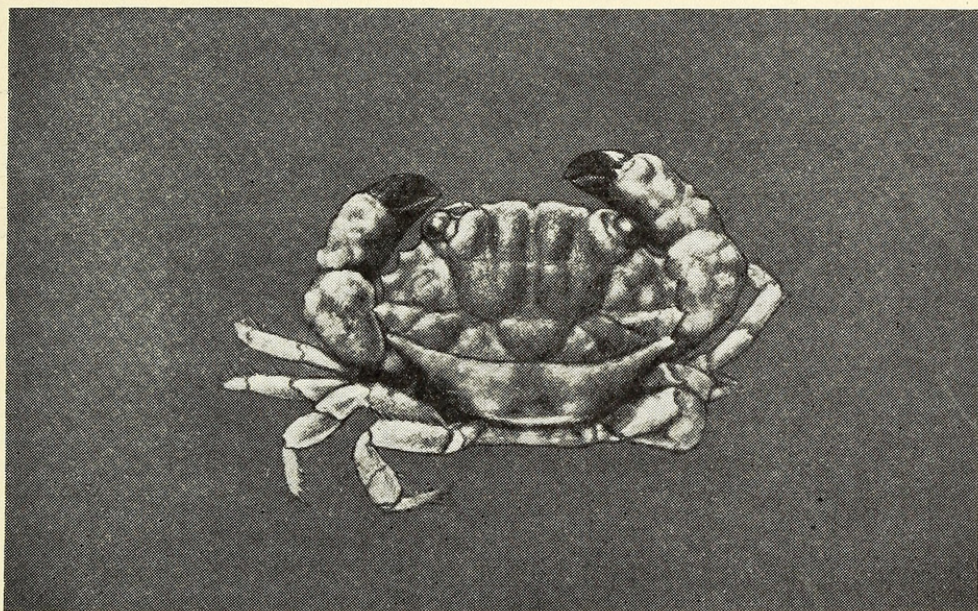


FIG. 38. *XANTHIAS INSCULPTA* STIMPSON.
Immature male, carapace 4 mm. wide. Off Eden Island.

Xanthias insculpta (Stimpson). (Sculptured Crab).

Xanthodes insculpta Stimpson, *Ann. Lyc. Nat. Hist. N. Y.*, vol. 10, 1871, p. 105.
Xanthias insculptus Rathbun, *Bull. Labor. Nat. Hist. State Univ. Iowa*, vol. 4, 1898, p. 271.

Off Eden Island, 5 fathoms; 1 immature male, 1 young.

This species was known hitherto only from the type from Cape St. Lucas. The larger of the Galapagos specimens is about the same size as the type. The species probably grows much larger. The gastric and frontal regions are deeply lobulated, the antero-lateral regions and also the dorsal aspect of the wrist and palm are lumpy. There are four equal, small, but well-marked teeth on the antero-lateral margin of the carapace behind the orbital angle, and a

small tooth at the outer end of each of the frontal lobes. There is a longitudinal ridge through the middle of the palm and above it a few obsolescent transverse ranges of minute granules. The dark color of the immovable finger is continued back on the palm for a ways.

Extreme length of carapace 3 mm., width 4 mm.

Xanthodius lobatus (A. Milne Edwards). (Oblong Crab).

Leptodius lobatus A. Milne Edwards, *Crust. Rég. Mex.*, 1880, p. 271, pl. 49, fig. 4.

Eden Island, rock pools; 1 male. Inhabits Clarion Island and Chile as well as the Galapagos.

Menippe nodifrons Stimpson. (Stone Crab).

Menippe nodifrons Stimpson, *Ann. Lyc. Nat. Hist. N. Y.*, vol. 7, 1859, p. 53. Rathbun, *Bull. U. S. Fish Comm.*, vol. 20, for 1900, pl. 2 (1901), p. 37.

A young specimen of this species was taken from the dock piles at Colon Harbor.

Ozius verreauxii Saussure.

Ozius verreauxii Saussure, *Rev. et Mag. de Zool.*, ser. 2, vol. 5, 1853, p. 359, pl. 12, fig. 1.

Indefatigable Island, April 25; 1 male.

Is found also on the mainland from Lower California to Ecuador.

Eriphia granulosa A. Milne Edwards.

Eriphia granulosa A. Milne Edwards, *Crust. Rég. Mex.*, 1880, p. 339, pl. 56, fig. 2.

Eden Island, rock pools, April 6; 1 young.

This species has been recorded from Chile as well as the Galapagos Islands.

Eriphides hispida (Stimpson). (Red-Bristle Crab).

Eriphia hispida Stimpson, *Ann. Lyc. Nat. Hist. N. Y.*, vol. 7, 1860, p. 218. *Pseuderipha hispida* A. Milne Edwards, *Crust. Rég. Mex.*, 1880, p. 340, pl. 56, fig. 1.

Eden Island; 1 female. Known from Central America, Panama and the Galapagos.

Portunus sayi (Gibbes). (Sargassum Crab).

Lupa sayi Gibbes, *Proc. Amer. Assoc. Adv. Sci.*, vol. 3, 1850, p. 178 [14]. *Neptunus sayi* A. Milne Edwards, *Arch. Mus. Hist. Nat., Paris*, vol. 10, 1861, p. 317, pl. 29, fig. 2.

This is the common pelagic swimming crab of the Atlantic; 5 specimens were taken at 3 stations off eastern Cuba, in *Sargassum*.

Callinectes danae Smith. (Brown Swimming Crab).

Callinectes danae Smith, *Trans. Conn. Acad. Sci.*, vol. 2, 1869, p. 7. Rathbun, *Proc. U. S. Nat. Mus.*, vol. 18, 1895, p. 357, pl. 16; 26, fig. 4; 25, fig. 3; 26, fig. 3; 27, fig. 3.

Colon; 1 male. Extends from Florida to Brazil. Differs from the common edible or "blue" crab of our coast, by its dull color, four teeth instead of two on its front margin between the antennae, by the greater width of the circumscribed area in the middle of the carapace, and by other less evident characters.

Cronius ruber (Lamarck). (Red Swimming Crab).

Portunus ruber Lamarck, *Hist. Nat. Anim. sans Vert.*, vol. 5, 1818, p. 260.
Cronius ruber Stimpson, *Ann. Lyc. Nat. Hist. N. Y.*, vol. 7, 1860, p. 225.
Achelous ruber A. Milne Edwards, *Arch. Mus. Hist. Nat., Paris*, vol. 10, 1861, p. 345, pl. 23, fig. 1.

Off Eden Island, 5 fathoms, April 1; 1 young specimen.

This form appears to be indistinguishable on opposite sides of the continent. It ranges from South Carolina to Brazil and from Lower California to Ecuador.

Cronius tumidulus (Stimpson). (Small Swimming Crab).

Achelous tumidulus Stimpson, *Bull. Mus. Comp. Zoöl.*, vol. 2, 1871, p. 149.
Cronius bispinosus Miers, *Challenger Rept., Zool.*, vol. 17, 1886, p. 188, pl. 15, fig. 2.

Off eastern Cuba, in Sargassum; 4 young specimens.

This is not one of the two so-called "Sargassum crabs," but a much more uncommon swimming-crab than *Portunus sayi*. *C. tumidulus* has been found sparingly from the Bahamas to Bahia.

Calappa convexa Saussure. (Grey Box Crab).

Calappa convexa Saussure, *Rev. et Mag. de Zool.*, ser. 2, vol. 4, 1853, p. 362, pl. 13, fig. 3.

Eden Island; 1 male. This is known from Cape St. Lucas to Ecuador.

Calappa flammea (Herbst). (Purple-striped Box Crab).

Cancer flammeus Herbst, *Natur. Krabben u. Krebse*, vol. 2, 1794, p. 161, pl. 40, fig. 2; vol. 3, part 3, 1803, p. 19.
Calappa flammea Bosc, *Hist. Nat. Crust.*, vol. 1, 1802, p. 185. Rathbun, *Bull. U. S. Fish Comm.*, vol. 20, for 1900, pt. 2 (1901), p. 84, pi. 2.

Key West; 1 male. This is the common box crab of our Atlantic coast, from North Carolina to Brazil.

This is one of the series of scientific papers of the Harrison Williams Galapagos Expedition, under the directorship of William Beebe, sent out by the Department of Tropical Research of the New York Zoological Society. The general account and narrative of the expedition, together with the natural history and photographs of the fauna, are embodied in a volume by William Beebe, published by G. P. Putnam's Sons, under the auspices of the Zoological Society. Its title is "Galapagos; World's End."



Rathbun, Mary Jane. 1924. "Brachyuran crabs collected by the Williams Galapagos Expedition, 1923." *Zoologica : scientific contributions of the New York Zoological Society* 5(14), 153–159. <https://doi.org/10.5962/p.203771>.

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