John S. Garth
Buitendijk, 1950

MINISTERIE VAN ONDERWIJS, KUNSTEN EN WETENSCHAPPEN

ZOOLOGISCHE MEDEDELINGEN

UITGEGEVEN DOOR HET

RIJKSMUSEUM VAN NATUURLIJKE HISTORIE TE LEIDEN

DEEL XXX, No. 17 19 Januari 1950

NOTE ON A COLLECTION OF DECAPODA BRACHYURA FROM THE COASTS OF MEXICO, INCLUDING THE DESCRIPTION OF A NEW GENUS AND SPECIES

by

A. M. BUITENDIJK

With Plate X and 1 text-figure

The material of Brachyura on which this paper is based was collected during some years on the Mexican coasts and I am greatly indebted to Dr. F. Bonet of the Escuela Nacional de Ciencias Biologicas in Mexico, D. F., for the opportunity he offered me to study this interesting material and for his kindness in presenting the larger part of it to the Rijksmuseum van Natuurlijke Historie at Leiden. At Dr. Bonet's request the seven specimens of *Platychirograpsus typicus* Rathbun were compared with De Man's cotype of *Platychirograpsus spectabilis* from Gaboon and my best thanks are due to the director and staff of the Zoological Museum in Amsterdam for their kindness in placing this male at my disposal.

On examining the Majids of this collection I came across two specimens (a male and a female) which I was unable to place. At my request Dr. John S. Garth of the Allan Hancock Foundation in Los Angeles was kind enough to examine the male and he informed me that not only he agreed with me that it belongs to a new species but that according to his opinion it should even be placed in a new genus; he also informed me that in the collections of the Allan Hancock Foundation some more specimens belonging to this interesting species are present and he most kindly sent me on loan a female and two young specimens which formed a valuable addition to the material at my disposal. I want to express here my sincere thanks for his kind advice and help.

DROMIIDAE

Dromidia larraburei Rathbun, 1910

Dromidia sarraburei by error Rathbun, 1910, Proc. U. S. Nat. Mus., vol. 38, p. 553, pl. 48 fig. 4.

Yavaros, Son.; 27.5.1945; M. Cárdenas. — 1 ♂, 1 ♀.
Bahia de Guaymas, Son.; 1946; M. Cárdenas. — 1 ♂.

CALAPPIDAE

Hepatus kossmanni Neumann, 1878

Hepatus kossmanni Neumann, 1878, Cat. pod. Crust. Heidelb. Mus., p. 28.

Huatabampo, Son.; 23.11.1944; M. Cárdenas. — 1 ♂.
Topolobampo, Sin.; 24 & 27. 11. 1944; M. Cárdenas. — 1 ♂, 2 ♀♀.
Yavaros, Son.; Bahia de Sta. Bárbara; 29.11.1944; M. Cárdenas. — 1 ♂, 1 ♀.
Yavaros, Son.; 28.11.1944; M. Cárdenas. — 1 ♀, 1 ♂.
Macapule, Sin.; 15.3.1945, 22-23.4.1945, 7.5.1946; M. Cárdenas. — 2 ♂♂, 3 ♀♀.

Hepatus lineatus Rathbun, 1898

Hepatus lineatus Rathbun, 1898, Proc. U. S. Nat. Mus., vol. 21, p. 610, pl. 44 fig. 4.
Macapule, Sin.; 22 & 23. 4. 1945; M. Cárdenas. — 1 ♀.

Rathbun describes in 1898 as well as in 1937 (Bull. 166 U. S. Nat. Mus., p. 246, fig. 44, pl. 74 figs. 1 & 2, pl. 75 figs. 1 & 2) this species with clusters of tubercles; now the figure given in 1898 which is used again as a text-figure in 1937 shows these clusters, but in the photograph given in the latter year no trace of these clusters can be observed. Probably these clusters only exist in the young specimens for in the female from Macapule which is far larger than the cotype figured (carapace breadth in cotype 22 mm, in the female 55 mm) no trace of the clusters is left; only the line extending from the junction of the antero- and postero-lateral margin is marked by a row of low granules, while a group of still lower granules may be observed in front of the protogastric region.

The carapace form of our female agrees with Rathbun's photograph but differs considerably from the textfigure. The tooth near either end of the posterolateral margin is tuberculiform.

LEUCOSIIDAE

Persephona edwardsii Bell, 1855

Persephona edwardsii Bell, 1855, Trans. Linn. Soc. London, vol. 21, p. 294, pl. 31 fig. 8.

Macapule, Sin.; 22.4.1945; M. Cárdenas. — 1 ♂.

Teleophrys cristulipes Stimpson, 1860

Teleophrys cristulipes Stimpson, 1860, Ann. Lyc. nat. Hist. N. Y., vol. 7, p. 190, pl. 2 fig. 2.

Acapulco, Gro.; 21.7.1943; M. Cárdenas. — 4 young specimens probably belonging here.

Persephona townsendi (Rathbun, 1893)

Myra townsendi Rathbun, 1893, Proc. U. S. Nat. Mus., vol. 16, p. 255.

Topolobampo, Sin.; 24.11.1944; M. Cárdenas. — 1 much damaged ♂ which probably belongs here.

MAIIDAE

Stenorynchus debilis (Smith, 1871)

Leptopodia debilis Smith, 1871, Rep. Peabody Ac. Sc., p. 87.

Bahia de Guaymas, Son.; 1946; M. Cárdenas. — 1 ♀.

Acanthonyx petiverii H. M. Edw., 1834

Acanthonyx petiverii H. Milne Edwards, 1834, Hist. nat. Crust., vol. 1, p. 343.

Bahia de Manzanillo, Col.; 16.1. 1943; F. Bonet. — 1 ♀.

Tampico, Tamps.; 24.5.1944; F. Bonet. — 1 ♀.

Neodoclea nov. gen.

Body as well as legs tomentose.

Carapace circular, convex; armed on the antero lateral margin as well as on the dorsal surface with tubercles or, in young specimens, with spines.

Rostrum exceedingly short, hardly breaking the general outline of the carapace and formed by a single spine.

Eyes very small.

Meri of the external maxillipeds less broad than the ischium and tapering at the distal end.

Pterygostomian region longitudinally grooved; this groove surrounded by long hairs.

Genotype: *Neodoclea boneti* nov. spec.

Neodoclea boneti nov. spec.

Macapule, Sin.; May, 1946; M. Cárdenas. — 1 ♂, 1 ♀.

Allan Hancock Foundation: Off San José Light, Guatemala; 11.1.1938; Station 770 of the cruises of the Velero III, Allan Hancock Expeditions. — 1 ♀ (paratype) and 2 young specimens.

Description of the male from Macapule. The carapace is circular, covered as well as the legs, with the exception of the fingers and the

dactyli, with a short close tomentum and some tubercles. On the branchial region there are three tubercles, placed on an oblique line; the foremost of these tubercles is very small and scarcely visible through the fur, the second is better developed and the third is much stronger and sharper; the gastric region bears two tubercles, the foremost is small again and scarcely visible, the second is better developed; the cardiac region bears a tubercle of about the same height.

The antero-lateral margin is armed with three tubercles, the anterior of these tubercles is small, the others are much better developed, more spine like.

The rostrum is exceedingly short and hardly breaks the general outline of the front; it is formed by a single rather broad spine.

The eyes are small; the upper outer and lower inner orbital angle are tuberculiform; the latter is formed by the basal antennal joint. The next two antennal articles are swollen and the proximal of the two is, moreover, broadened distally. The flagellum is rather long and slender.

The pterygostomian region is longitudinally grooved; the upper outer angle of this groove is marked by a strong spine. Both inner and outer margin are fringed by long hairs; those on the inner margin are implanted on the exognath and on the outer part of the merus and the ischium of the outer maxillipeds. The form of the merus of the outer maxilliped is rather obscured by these hairs; but when denuded the merus is less broad than the ischium and tapering distally.

The chelipeds are slender, about as long as the equally slender walking legs of the last pair; the other walking legs are missing.

The abdomen is seven jointed.

Male pleopod as in figure 1a.

The cephalothorax length is 41 mm.

Remarks. In the female from Macapule (cephalothorax length 34 mm) the chelipeds are shorter and still more slender than in the here described male; but in every other respect it resembles this male. The two specimens with their circular tomentose carapace, armed at the sides as well as on the dorsal surface with tubercles and spines and with the grooved pterygostomian region at first sight resemble a *Doclea*. It was, however, with none of the known species of this indopacific genus that they agreed and a closer inspection brought to light a good many differences. Before forming a definite opinion I asked Dr. Garth of the Allan Hancock Foundation in Los Angeles to help me out with his wide knowledge of western American Brachyura. The male was sent over and Dr. Garth most kindly gave me as his opinion that not only he agreed with me that the specimens belong

to a new species, but he also advised me to describe it in a new genus if none of the *Doclea* species to which I could get access showed a closer approach to the Macapule male in point of structure of the pleopod. Moreover Dr. Garth stated that in the collections of the Allan Hancock Founda-

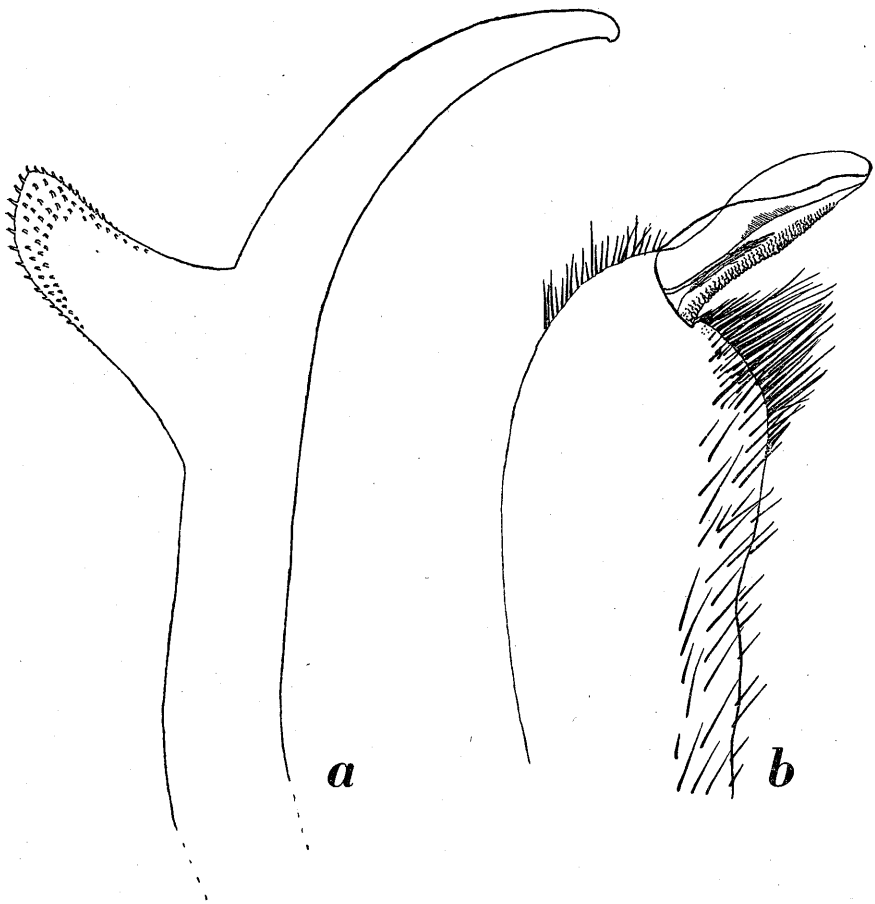


Fig. 1. a, *Neodoclea boneti* nov. spec., apex of first male pleopod; b, *Platychirograpsus spectabilis* De Man, apex of first male pleopod. a, × 75; × 10.

tion there is more material which belongs to the same species and he kindly sent me on loan a female and two young specimens which were taken by the Velero III in 1938 at Station 770. Now it proved that in this female from off San José Light (cephalothorax length 27 mm) all the tubercles of the carapace are broken off, while the second and third antero lateral tubercles are far longer and sharper, more spine like, than

in the described male; the chelipeds agree with those of the female from Macapule.

In the two young specimens all the protuberances of the cephalothorax are exceedingly long and spine like; the branchial region bears two of these spines (the small anterior tubercle of the larger specimens seems to be missing) while anteriorly of the two gastric spines a third but lower one can be observed.

The generic differences which according to Dr. Garth and myself separate this new genus from *Doclea* are:

The form of the male pleopod. This pleopod does not at all agree with any of the pleopods of the *Doclea* species I could examine. However, as Dr. Garth wrote me, it fits nicely into the series of pleopods of Pacific coast Majids of which Dr. Garth has drawings ready for publication. It falls then near *Libinia* and compares well with either *L. setosa* Lockington of Lower California or with *L. mexicana* Rathbun of the Gulf of California. The *Libinia*'s, however, according to Dr. Garth, when canaliculated, have the channels on the under side of the rostrum rather than on the pterygostomian region. Moreover in *Libinia* the rostrum is always longer and bifid; in *Doclea* the rostrum is sometimes short, but it is always formed by two spines.

In the *Doclea* species which I could examine the outer angle of the buccal cave is marked by a tubercle or spine; in our *Neodoclea* this angle is not at all heightened.

In all the *Doclea* species the merus of the external maxilliped is always broader than the ischium and often its anterior angle is distinctly produced. In our *Neodoclea* specimens the merus is more narrow than the ischium and distinctly tapering distally.

Mithrax (Mithraculus) denticulatus Bell, 1836

Mithrax denticulatus Bell, 1836, Proc. Zool. Soc. London, vol. 3, p. 172.
Bahia de Acapulco, Gro.; 22.1.1941; Exp. E. N. C. B. — 1 juv.
Bahia de Manzanillo, Col.; 16.1.1943; F. Bonet. — 1 ♂.

Tyche lamellifrons Bell, 1836

Tyche lamellifrons Bell, 1836, Proc. Zool. Soc. London, vol. 3, p. 173.
Acapulco, Gro.; 22.1.1943; Exp. E.N.C.B. — 1 ♀.

This species is probably rather rare. Rathbun (1925, Bull. 129 U. S. Nat. Mus., p. 508, pl. 273 figs. 1-6) enumerates as material examined only

two specimens, a male from the Gulf of California and an ovigerous female from Lower California.

PORTUNIDAE

Portunus (Portunus) panamensis (Stimpson, 1871)

Achelous panamensis Stimpson, 1871, Ann. Lyc. nat. Hist. N. Y., vol. 10, p. 112.
Canjeme, Son.; 22.11.1944; M. Cárdenas. — 1 ♀.
Topolobampo, Sin.; a unas 150 millas al S. E. de Guaymas; 27.11.1944; M. Cárdenas. — 1 ♂.
Macapule, Sin.; 22.4.1945; M. Cárdenas. — 1 ♀.

These specimens with certainty belong to the *acuminatus, asper, panamensis* group and as Rathbun (1925, Bull. 152 U.S. Nat. Mus.) remarks: "The species of this group have so much in common and the variation within the species is so great that it is difficult to determine whether they should be considered as forms of a single species or be recognized as three species, as described by Stimpson." The material mentioned here is far too small to identify it with certainty, probably it belongs in *panamensis*.

Callinectes bellicosus (Stimpson, 1859)

Lupa bellicosa Stimpson, 1859, Ann. Lyc. nat. Hist. N. Y., vol. 7, p. 57.
Topolobampo, Sin.; 12.3 & 21.4.1945; M. Cárdenas. — 2 ♂♂ (1 with soft carapace), 1 ♀.
Ahome, Sin.; 1.6.1945; M. Cárdenas. — 1 young specimen.
Guaymas, Son.; 25.9.1945; M. Cárdenas. — 1 young specimen.
La Paz, B. C.; 15.10.1945; M. Cárdenas. — 1 young specimen.

In the young specimens from Guaymas and La Paz the inner orbital fissure is open and therefore they probably belong in this species.

Callinectes arcuatus Ordway, 1863

Callinectes arcuatus Ordway, 1863, Journ. Boston Soc. nat. Hist., vol. 7, p. 578.
Manzanillo, Col.; 13.1.1943. — 1 ♂, 1 ♀.
Canjeme, Son.; 22.11.1944; M. Cárdenas. — 1 ♀.
Costas de Sonora; 23.11—1.12.1944; M. Cárdenas. — 1 ♂, 1 ♀.
Yavaros, Son.; Bahia de Sta. Barbara; 29.11.1944. — 1 ♂, 1 ♀.
Yavaros, Son.; 28.11.1944; M. Cárdenas. — 2 ♂♂, 1 ♀.
Guaymas, Son.; 20.5.1945, 25.7 & 27.7.1946; M. Cárdenas. — 3 ♂♂, 1 ♀.
Ahome, Sin.; 1.6.1945; M. Cárdenas. — 1 ♀.
Topolobampo, Sin.; 21.6.1945; M. Cárdenas. — 1 ♀.
Macapule, Sin.; 7.5.1946 & 22-23.4.1948; M. Cárdenas. — 1♂, 2 ♀♀.

Callinectes bocourti A. M. Edw., 1879

Callinectes bocourti A. Milne Edwards, 1879, Crust. Rég. Mex., p. 226.
Nautla, Ver.; 17.9.1944; R. Mercado Ramirez. — 2 ♂♂.

Arenaeus cribrarius (Lam., 1818)

Portunus cribrarius Lamarck, 1818, Hist. nat. An. s. Vert., vol. 5, p. 259.
Nautla, Ver.; 15.9.1944; R. Mercado Ramirez. — 3 ♂♂.

Euphylax dovii Stimpson, 1860

Euphylax dovii Stimpson, 1860, Ann. Lyc. nat. Hist. N. Y., vol. 7, p. 226, pl. 3 figs. 5, 5a.
Bahia de Manzanillo, Col.; 15.1.1943. — 1 ♀.

Euphylax robustus A. M. Edw., 1874

Euphylax robustus A. Milne Edwards, 1874, Les Fonds de la Mer, vol. 2, p. 249.
Yavaros, Son.; 28.11.1944; M. Cárdenas. — 1 ♂.
Yavaros, Son.; Bahia de Sta Barbara; 29.11.1944; M. Cárdenas. — 2 ♂♂.
Costas de Sonora; 23.11-1.12.1944; M. Cárdenas. — 1 ♂.
Macapule, Sin.; 7.5.1946; M. Cárdenas. — 2 ♂♂.

Rathbun (1930, Bull. 152 U. S. Nat. Mus., p. 148) made the remark that *E. robustus* might be conspecific with *dovii,* and that its pecularities might be due to its greater size. In 1944 Coventry (mon. nr. 6, Ac. nat. Sc. Phil., p. 540) stated that *robustus* is a good species Although the one specimen of *dovii* present in this collection is a female and I have therefore not been able to compare the male pleopods of both species, I agree with Coventry, for two of the males belonging to *robustus* are smaller than the *dovii* female and therefore the differences listed here cannot be due to a difference of size; and I am of opinion that they are too conspicuous to endorse the opinion of synonymy

dovii	*robustus*
Five small teeth or spines on the antero-lateral margin.	Three strong spines on the antero-lateral margin.
Carapace smooth.	Carapace with granulated lines and prominences.
Lower orbital plate smooth.	Lower orbital plate granulated.

XANTHIDAE

Actaea sulcata Stimpson, 1860

Actaea sulcata Stimpson, 1860, Ann. Lyc. nat. Hist. N. Y., vol. 7, p. 253.
Bahia de Manzanillo; 16.1.1943. — 1 young specimen.

Xantho occidentalis (Stimpson, 1871)

Chlorodius occidentalis Stimpson, 1871, Ann. Lyc. nat. Hist. N. Y., vol. 10, p. 108.
La Paz, B. C.; 1.1.1944; M. Correa. — 1 ♂.

Xantho cooksoni (Miers, 1877)

Leptodius cooksoni Miers, 1877, Proc. Zool. Soc., p. 73, pl. 12, figs. 1-1a.
San José del Cabo, B. C.; 17.3.1945; M. Cárdenas. — 1 ♂, 1 ♀.

Xantho sternberghii (Stimpson, 1859)

Xanthodius sternberghii Stimpson, 1859, Ann. Lyc. nat. Hist. N. Y., vol. 7, p. 52.
Bahia de Manzanillo, Col.; 13.1.1943. — 2 ♂♂.

Xantho stimpsoni A. M. Edw., 1879

Xantho stimpsoni A. Milne Edwards, 1879, Crust. Rég. Mex., p. 252, pl. 46 figs. 2-2b.
Acapulco, Gro.; 21.7.1943; M. Cárdenas. — 3 young ♂♂.

Metopocarcinus truncatus Stimpson, 1860

Metopocarcinus truncatus Stimpson, 1860, Ann. Lyc. nat. Hist. N. Y., vol. 7, pl. 3 fig. 4.
Bahia de Santiago, Col.; 14.1.1943; F. Bonet. — 1 ♂, 2 ovigerous ♀♀, 2 young specimens.

Panopeus chilensis Milne Edw. & Lucas, 1844

Panopeus chilensis Milne Edwards and Lucas, 1844, d'Orbigny's Voyage Am. mér., vol. 6, pt. 1, p. 16; atlas,, 1847, vol. 9, pl. 8 figs. 2-2b.
Bahia de Manzanillo, Col.; 16.1.1943. — 1 ♂.

Eurypanopeus dissimilis (Benedict and Rathbun, 1891)

Panopeus dissimilis Benedict and Rathbun, 1891, Proc. U. S. Nat. Mus., vol. 14, p. 366, pl. 20 fig. 4, pl. 23 fig. 1.
Casitas, Ver.; 17.4.1945; F. Bonet. — 1 ovigerous ♀ which probably belongs here.

Eurypanopeus planus (Smith, 1869)

Panopeus planus Smith, 1869, Proc. Bost. Soc. nat. Hist., vol. 12, p. 283.
Guaymas, Son.; 20.5. and 4.7.1945; M. Cárdenas. — 4 ♂♂, 7 ♀♀.

In two of the females, one of which is ovigerous, the dark colouration of the immovable fingers of the chelipeds is not continued on the palm. Now as this is one of the characteristics which separates *planus* from *planissimus* Stimpson [1]) the two specimens ought to be placed in the latter species. As, however, no trace is found of the other characteristic of *planissimus* (the two grooves at right angles on the wrists of the chelipeds) which in my opinion is of more value than the colouration of the fingers, I identified both specimens as *planus*.

1) *Xantho planissimus* Stimpson, 1860, Ann. Lyc. nat. Hist. N. Y., vol. 7, p. 205.

Eurytium affine (Streets and Kingsley, 1877)

Panopeus affinis Streets and Kingsley, 1877, Bull. Essex Inst., vol. 9, p. 106.
Guaymas, Son.; 5.7.1945; M. Cárdenas. — 1 ♂.

Pilumnus townsendi Rathbun, 1923

Pilumnus townsendi Rathbun, 1923, Bull. Am. Mus. nat. Hist., vol. 48, p. 624, pl. 28.
Canjeme, Son.; 22.11.1944; uns 70 millas al S. E. de Guaymas, a la altura de Canjeme, entre Ciaris y la desembocadura del Rio Mayo, a unos 2 kilómetros de la costa; M. Cárdenas. — 1 ♂.
Yavaros, Son.; Bahia de Sta Bárbara; a 125 millas al sud de Guaymas; 29.11.1944; M. Cárdenas. — 1 ♂, 3 ♀♀, 1 young specimen.
La Paz, B. C.; 15.10.1945; M. Cárdenas. — 2 ♂♂, 1 ♀.

Ozius perlatus Stimpson, 1860

Ozius perlatus Stimpson, 1860, Ann. Lyc. nat. Hist. N. Y., vol. 7, p. 211.
Bahia de Manzanillo, Col.; 13.1.1943; F. Bonet. — 1 ♀.

Eriphia squamata Stimpson, 1859

Eriphia squamata Stimpson, 1859, Ann. Lyc. nat. Hist. N. Y., vol. 7, p. 56.
Guaymas, Son.; 4.7.1945; M. Cárdenas. — 1 ♀.

Trapezia ferruginea Latreille, 1825

Trapezia ferruginea Latreille, 1825, Enc. méth. vol. 10, p. 695.
Acapulco, Gro.; 15.12.1941; M. Cárdenas. — 1 ♂.
Acapulco, Gro.; 15.2.1946. — 1 ♀.

POTAMONIDAE

Pseudothelphusa americana Saussure, 1857

Pseudothelphusa americana Saussure, 1857, Rev. et Mag. Zool. (2), vol. 9, p. 305.
San Martin, Mex.; 8.6.1941; F. Bonet. — 2 ♀♀.
Tepozotlán, Mor.; 23.6.1941; M. Correa. — 1 ♀.
Las Estacas, Mor.; 8.11.1941; M. Cárdenas. — 1 ♂, 1 ♀.
San José Puruá, Mich.; 8.10.1946; M. Cárdenas. — 1 ♀.

OCYPODIDAE

Ocypode albicans Bosc, 1801

Ocypode albicans Bosc, 1801, Hist. nat. Crust., vol. 1, p. 196.
Veracruz, Ver.; 19.8.1942; M. Correa; M. Cárdenas. — 3 young ♂♂, 1 young ♀.
Playa de Tecoluthla, Ver.; 6.6.1943; C. Bolivar. — 1 ♀.
Tecoluthla, Ver.; 20.5.1945; F. Bonet. — 1 ♂, 1 ♀.

Ocypode occidentalis Stimpson, 1860

Ocypode occidentalis Stimpson, 1860, Ann. Lyc. nat. Hist. N. Y., vol. 7, p. 229.
Acapulco, Gro.; 16.11.1940 & 24.1.1941; J. Honey. — 1 ♂.
Pié de la Cuesta, Gro.; 12.10.1942; C. Bolivar. — 1 ♂, 1 ♀.
Guyutlan, Col.; 8.1943; F. Bonet. — 1 ♂, 1 ♀.
Los Pascuales, Col.; 10.1.1943; F. Bonet. — 1 ♂.
Gutierrez Zamora, Ver.; 15.4.1945; F. Bonet. — 1 young specimen.
Las Copas, Topolobampo, Sin.; 21.4.1945; M. Cárdenas. — 1 young specimen.
Todos Santos, B. C.; M. Correa. — 1 ♂, 1 ♀.

Uca princeps (Smith, 1870)

Gelasimus princeps Smith, 1870, Trans. Conn. Ac. Arts and Sc., vol. 2, p. 120, pl. 2 fig. 10, pl. 3 figs. 3-3c.
Guaymas, Son.; 26.9.1945; M. Cárdenas. — 1 ♂.

As the dactylus of the larger cheliped is broken off, I am not absolutely certain of the identification; for the form of the dactylus together with the contact of the fingers of the larger cheliped provide the characteristics for the identification of the males in this group of *Uca* species.

Uca mordax (Smith, 1870)

Gelasimus mordax Smith, 1870, Trans. Conn. Ac. Arts and Sc., vol. 2, p. 135, pl. 2 fig. 3; pl. 4 figs. 4 & 4a.
Boca del Rio, Ver.; 27.5.1941; F. Bonet. — 3 ♂♂.
Nautla, Ver; 15.9.1944; R. Mercado Ramirez. — 2 ♂♂.
Casitas, Ver.; 22.5.1945; F. Bonet. — 5 ♂♂. 3 ♀♀.
Guyutlan, Col. — 2 young specimens.

In one of the males from Nautla the larger cheliped is missing; still both specimens probably belong in the same species.

Uca brevifrons (Stimpson, 1860)

Gelasimus brevifrons Stimpson, 1860, Ann. Lyc. nat. Hist. N. Y., vol. 7, p. 292.
San José del Cabo, B. C.; 15.3.1945; M. Correa. — 1 ♂, 2 ♀♀.
M. C. Pichilingue, B. C.; 22.4.1945. — 1 ♂.

Uca speciosa (Ives, 1891)

Gelasimus speciosus Ives, 1891, Proc. Ac. nat. Sc. Phil., p. 179, pl. 5 figs. 5 & 6.
Casitas, Ver.; 17.4.1945; F. Bonet. — 1 ♂, 1 ♀.

GRAPSIDAE

Grapsus grapsus (L., 1758)

Cancer grapsus Linnaeus, 1758, Syst. nat., ed. 10, vol. 1, p. 630.
Acapulco, Gro.; 22.1.1941; Exp. E.N.C.B. — 1 ♂, 4 young specimens.
Acapulco, Gro.; 15.12.1941; M. Cárdenas. — 1 ♂, 1 ♀.
Isla Rosa, B. C.; 21.12.1944; M. Cárdenas. — 1 ♂, 1 ♀.

It is somewhat doubtful whether the young specimens collected at Acapulco really belong to this species. They have only one lateral tooth behind the orbit; but the meri of the outer chelipeds are as broad as long. This is one of the characteristics of the genus *Leptograpsus,* but in this genus the lateral border bears a second tooth.

Geograpsus lividus (H. M. Edw., 1837)

Grapsus lividus H. Milne Edwards, 1837, Hist. nat. Crust., vol. 2, p. 85.
Sta. Barbara; 2.11.1945. — 1 ♂.

Goniopsis cruentata (Latr., 1803)

Grapsus cruentatus Latreille, 1803, Hist. nat. Crust., vol. 6, p. 70.
Los Pascuales, Col.; 10.1.1943; F. Bonet. — 1 ♂, 1 ♀.
San José del Cabo, B. C.; 17.3.1945; M. Cárdenas. — 1 ♀.
Casitas, Ver.; 22.5.1945. — 1 ♂.

The carapace of the ovigerous female collected at Los Pascuales is beautifully marbled, yellow with dark red; the legs are yellow with red spots. The chelipeds are missing in both specimens collected at this locality; the bottle contains only one cheliped.

Pachygrapsus transversus (Gibbes, 1850)

Grapsus transversus Gibbes, 1850, Proc. Am. Ass. Adv. Sc., vol. 3, p. 181.
Acapulco, Gro.; 24.1.1941; Exp. E.N.C.B. — 1 ♂.

Platychirograpsus spectabilis De Man, 1896

Platychirograpsus spectabilis De Man, 1896, Zool. Anz., vol. 19, p. 292, 1 textfig.; De Man, 1896, Mitth. naturh. Mus. Hamburg, vol. 13, p. 97, pl. 2 figs. 4, 4a, 4b, 4d, pl. 3 fig. 4c; Rathbun, 1900, Proc. U. S. Nat. Mus., vol. 22, p. 279.
Platychirograpsus typicus Rathbun, 1914, Proc. U. S. Nat. Mus., vol. 47, p. 122, textfig. 3, pl. 5; Rathbun, 1918, Bull. 97 U. S. Nat. Mus., p. 278, textfigs. 141, 142a-c, 143a-c, pl. 73; Bolivar, 1945, Ciencia, vol. 6, p. 267, textfigs. 1-5.
Gutierrez Zamora, Ver.; 2.11.1944. — 6 ♂♂, 1 ♀.

When sending as a gift to the Rijksmuseum van Natuurlijke Historie in Leiden seven specimens of *Platychirograpsus typicus* Rathbun, 1914, Dr. Bonet asked me to compare them, if possible, with the type of *Platychirograpsus spectabilis* De Man. In her paper of 1918 Rathbun states that in the American species the dactyli of the fourth pair of walking legs are very broad and flat, ovate-lanceolate, and much broader and flatter than in the other pairs. Moreover she gives as a difference between the four American specimens she examined and *spectabilis* from Gaboon that "the dactylus of the fourth leg is flattened and broadened so that it does not resemble the other dactyli as much as in the figured type." In his second description of

Platychirograpsus spectabilis De Man remarks on page 109: "An den breiteren Dactylopoditen des letzten Fusspaares ....." In this paper De Man publishes a drawing of his species and in this drawing the dactyli of the last pair of walking legs, especially the right are rather styliform and the difference between these joints and the dactyli of the other walking legs is only small, if there exists any difference at all.

Now through the kindness of the Director and staff of the Zoological Museum at Amsterdam I was able to examine De Man's cotype of *spectabilis,* a male, which is incorporated in the said collection. In this male the dactyli of the fourth pair of walking legs are of different form but neither of the two resembles the dactylus drawn by De Man in his figure of the type. As De Man's drawings are always very accurate we can only conclude that there was much difference between the form of these joints. Those of the type were rather long and slender, while in at least one male they were broad. And the most astonishing fact is that in this male they differ even more from the other dactyli than those of the material from Gutierrez Zamora. As with the cotype I compared two males, one slightly larger and the other slightly smaller than De Man's specimen, this difference probably is not a question of size.

As De Man's cotype is a male a comparison of the pleopods of specimens from Gutierrez Zamora and Gaboon was possible; and these pleopods proved to be of exactly the same type (fig. 1b).

The minor differences stated by Rathbun as differences between the two species (the less convergent postero-lateral margin and the third tooth of the anterolateral side being placed a little more forward) are, I think, only a question of variability.

I am of opinion that we may safely decide that the same species of *Platychirograpsus* occurs on both sides of the Atlantic Ocean in East Mexico and at Gaboon on the West African coast. For priority's sake this species should be named *P. spectabilis* De Man, 1896.

Sesarma (Holometopus) tampicense Rathbun, 1914

Sesarma (Holometopus) tampicense Rathbun, 1914, Proc. U. S. Nat. Mus., vol. 47, p. 124, pl. 8, textfig. 4.

Casitas, Ver.; 22.5.1945. — 1 ♂, 1 ♀, 1 young specimen.

This material from Casitas probably belongs to *Sesarma tampicense,* but as the identification of species of the genus *Sesarma* is rather difficult and as I do not possess any material for comparison, I am not absolutely certain of this identification.

Aratus pisonii (H. M. Edw., 1837)

Sesarma pisonii H. Milne Edwards, 1837, Hist. nat. Crust., vol. 2, p. 76, pl. 19 figs. 4 and 5.
Casitas, Ver.; 22.5.1945. — 1 ♂.

GECARCINIDAE

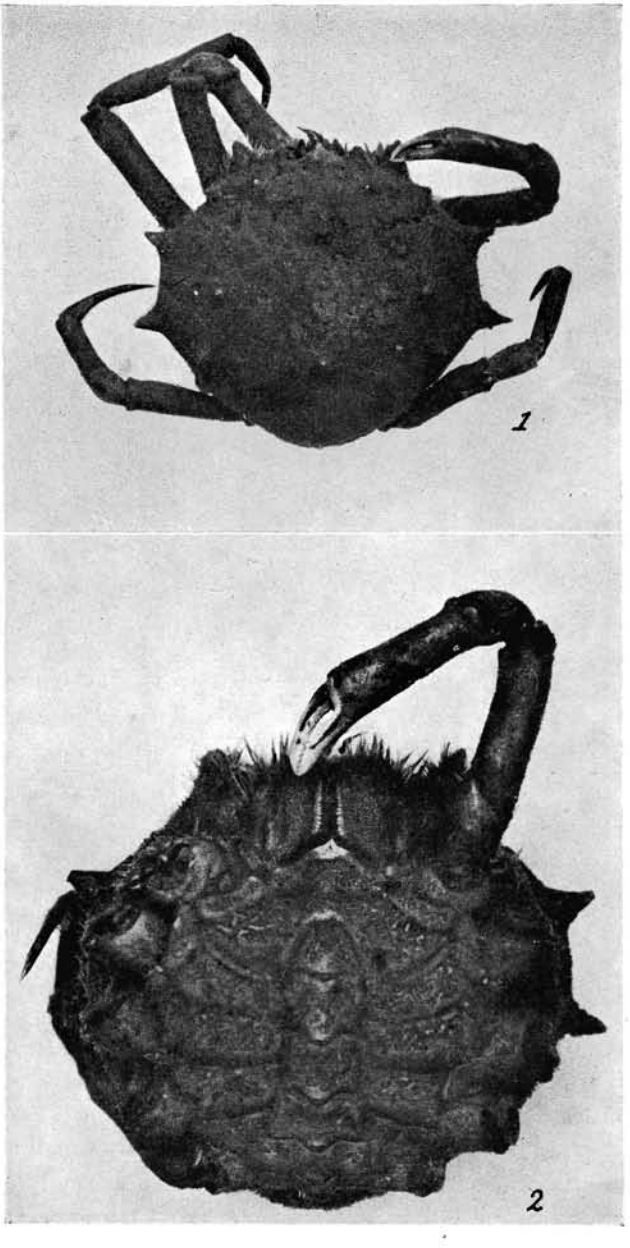
Gecarcinus quadratus Saussure, 1853

Gecarcinus quadratus Saussure, 1853, Rev. & Mag. Zool. (2), vol. 5, p. 260, pl. 12 fig. 2.
Estado de Veracruz; entre las barras de Nautla y Tecolutla, Sabana, a 500 m del mar; 5.6.1943. — 1 ♂.

As the outer maxillipeds do not cover the epistome and the antennular cavity and as the upper margin of the merus of the outer maxillipeds is practically straight, at least shows no distinct emargination, both specimens probably belong to this species. According to Rathbun (1918, Bulletin 97 of the United States National Museum, p. 358) the range of this species extends: "along the Pacific coast, from Mexico to Colombia. Also at Turbo, on Atlantic side of Colombia."

Plate X

Fig. 1. *Neodoclea boneti,* dorsal view. Natural size.
Fig. 2. Same specimen, ventral view. × 1.5.


1
2