

NOTE ON SOME STOMATOPODA FROM THE ATLANTIC COASTS OF AFRICA AND AMERICA, WITH THE DESCRIPTION OF A NEW SPECIES

by

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The Stomatopoda dealt with here belong to the collections of the Rijksmuseum van Natuurlijke Historie at Leiden and of the Zoological Museum at Amsterdam; they were collected at the African Westcoast and in the Caribbean Sea.

I wish to express here my sincere gratitude to Prof. Dr. H. Boschma at Leiden and to Prof. Dr. L. F. de Beaufort at Amsterdam, who kindly placed this material at my disposal.

Some of the specimens are already mentioned by Rathbun (1919) in the "Rapport betreffende een voorloopig onderzoek naar den toestand van de Visscherij in de kolonie Curaçao".

All the specimens are preserved in spirit.

Squilla Fabr.

Squilla empusa Say

- Squilla empusa* Say, 1818, Journ. Acad. Nat. Sci. Philad., vol. 1, p. 250.
Squilla empusa H. Milne-Edwards, 1837, Hist. Nat. Crust., vol. 2, p. 525.
Squilla empusa DeKay, 1844, Nat. Hist. New York, vol. 4, p. 32, pl. 13 fig. 54.
Squilla empusa White, 1847, List Crust. Brit. Mus., p. 84.
Squilla empusa Gibbes, 1850, Proc. Amer. Assoc., 3rd meeting, p. 199.
Squilla empusa Coues & Yarrow, 1878, Proc. Acad. Nat. Sci. Philad., p. 298.
Squilla empusa Miers, 1880, Ann. Mag. Nat. Hist., ser. 5 vol. 5, p. 23, pl. 2 fig. 1, 2.
Squilla empusa Brooks, 1886, Report Challenger Exped., vol. 16, p. 25, pl. 1 fig. 4, 5; pl. 2 fig. 7.
Squilla empusa Bigelow, 1893, Johns Hopkins Univ. Circ., no. 106, p. 102.
Squilla empusa Sharp, 1893, Proc. Acad. Nat. Sci. Philad., p. 107.
Squilla empusa Bigelow, 1894, Proc. U. S. Nat. Mus., vol. 17, p. 525.
Squilla empusa Faxon, 1896, Bull. Mus. Comp. Zoöl., vol. 30, p. 165.
Squilla empusa Osorio, 1898, Jorn. Sci. Math. Phys. Nat., ser. 2 vol. 5, p. 194.
Squilla empusa Moreira, 1903, Lavoura Bol. Soc. Nac. Agric., vol. 7, p. 5.
Squilla empusa Jurich, 1904, Wiss. Ergebn. Deutsche Tiefsee Exped. Valdivia, vol. 7, p. 366.
Squilla empusa Moreira, 1905, Arch. Mus. Nac. Rio de Janeiro, vol. 13, p. 125.
Chloridella empusa Rathbun, 1905, Occ. Papers Boston Soc. Nat. Hist., vol. 7, p. 29.

- Squilla empusa* Kemp, 1913, Mem. Ind. Mus., vol. 4, p. 200.
Squilla empusa Balss, 1916, Meeresfauna Westafrikas, Crust., vol. 3, p. 50.
Squilla empusa Parisi, 1922, Atti Soc. Ital. Sci. Nat., vol. 61, p. 91.
Squilla mantis Boone, 1930, Bull. Vanderbilt Mar. Mus., vol. 2, p. 32, pl. 4.
Chloridella empusa Lunz, 1935, Journ. E. Mitchell Sci. Soc., vol. 51, p. 157, fig. 6.
Chloridella empusa Lunz, 1937, Bull. Bingham Oceanogr. Coll., vol. 5, No. 5, p. 8.

Museum Leiden:

Liberia; 1882; coll. Dr. J. Büttikofer — 1 ♀.

As Glasell (1934) remarked the *Squilla mantis* described by Boone (1930) is in reality *Squilla empusa*; this is distinctly shown by the figure and the description.

Distribution. This species has a wide distribution. It is recorded from the American east coast from New England to Rio de Janeiro, from the Bermudas and from the Antilles; in Africa it is recorded from Gambia to Angola.

***Squilla quadridens* Bigelow**

- Squilla quadridens* Bigelow, 1893, Johns Hopkins Univ. Circ., no. 106, p. 101.
Squilla quadridens Bigelow, 1894, Proc. U. S. Nat. Mus., vol. 17, p. 511, fig. 27, 28.
Squilla quadridens Kemp, 1913, Mem. Ind. Mus., vol. 4, p. 202.

Museum Amsterdam:

Gairaca, Santa Marta; dredged 0—30 m; February 29, 1896; coll. Yacht "Chazalie". — 1 ♀.

This specimen is in a rather bad condition, therefore I refer it with some hesitation to this species.

Distribution. Bigelow recorded this species from Florida; as far as I know this is the only record in literature.

***Squilla tricarinata* nov. spec. (fig. 1)**

Museum Amsterdam:

Testigos Islands, Antilles; bottom net 11 m; January 20, 1896; coll. Yacht "Chazalie". — 1 ♀ 21 mm.

Description. The surface of the carapace is smooth and shining. Carinae are absent. Gastric grooves distinct; there are only faint indications of a cervical groove. Posteriorly the carapace is much broader than anteriorly. Posterior margin straight; the median part of the anterior margin, between the gastric grooves, is reaching further forwards than the lateral parts. The lateral margins of the carapace are slightly concave. The posterolateral angles are broadly rounded, the anterolateral bluntly rectangular.

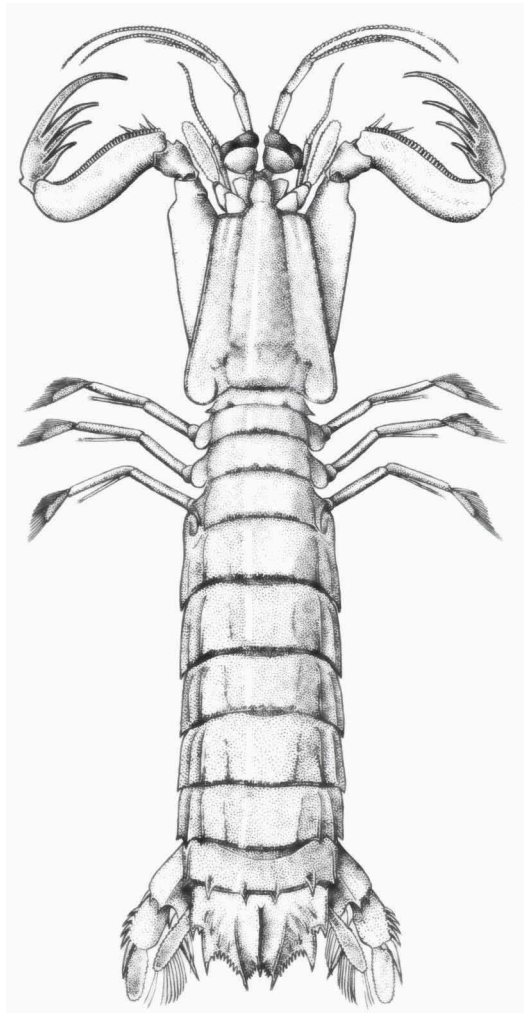
The rostrum is cordiform, the greatest breadth being a little anterior

of the base; it is somewhat longer than broad. The rostrum reaches to the dorsal processes of the ophthalmic segment. These processes have rounded tops and are fused in the median. The eyes are triangular, the base of the stalk is about one third as broad as the cornea. Towards the cornea the stalk becomes gradually broader, being at last of the same breadth. The length of the cornea, which is distinctly bilobed, is about half the length of the stalk. The breadth of the cornea is larger than the length of the stalk. The corneal axis is placed obliquely at the peduncular axis. The eyes fail to reach to the articulation between the first and the second segment of the antennular peduncle.

The mandibular palp is absent.

The merus of the raptorial claw has the distal ventral angle without a tooth. The carpus possesses a dorsal carina, which ends rectangularly. At its inner margin the propodus bears three movable spines, the outer margin is provided with a row of pectinations. The outer margin of the dactylus is straight and notched at the base. The dactylus possesses four teeth, included the apical one.

The surface of the free thoracic and abdominal segments is smooth and shining. With the exception of the sixth abdominal, the segments bear no submedian carinae. The place of these carinae, however, is indicated by dark lines of pigment.



Squilla tricarinata nov. spec. $\times 5$.

On the thoracic segments the intermediate carinae are well developed. The fifth thoracic segment bears a lateral bluntly pointed process; that of the sixth and seventh is broadly rounded and directed posteriorly; the lateral process of the eighth segment is pointed.

On the abdominal segments the intermediate, lateral and marginal carinae are well developed. The following carinae end in spines:

carinae	segments
submedian	6
intermediate	5 6
lateral	5 6
marginal	(3) 4 5 .

The telson is about as long as broad. The median carina is well developed; it is notched at the base and ends posteriorly in a spine. Lateral of this median carina there are two well developed submedian ones, which extend over the entire length of the telson ending in the posterior submedian marginal teeth. At each side of these three long carinae there are four short curved ones; they are placed fanshaped from the median towards the lateral margin of the telson. The innermost of them ends between the submedian and intermediate marginal teeth of the telson, the second near the base of the intermediate tooth, the third between the intermediate and lateral ones and the last near the base of the lateral tooth.

The six marginal teeth of the telson are well developed; the submedian ones bear movable tips. There are four submedian, eight intermediate and one lateral denticle at each half of the telson. There is no ventral keel.

The basal segment of the uropod bears dorsally two carinae, the innermost of them ends distally in a sharp spine, which is reaching over the articulation with the basal segment of the exopod. The bifurcated ventral process of the uropod has the inner spine about two times longer than the outer. The larger spine bears at its outer margin a distinct lobe. The inner margin of the bifurcated process bears five or six well developed teeth. The two segments of the exopod are of about equal size. The basal segment bears at its outer margin five movable spines, which become distally longer. The ultimate spine reaches four fifth of the length of the last segment. Dorsally the basal segment bears a distinct carina; at its ventral side there is a sharp fixed tooth placed at the distal margin and reaching over the articulation with the last segment. The endopod is long and narrow.

The colour of this spirit specimen is yellowish. There are dark lines of pigment along the entire margin of the carapace and rostrum, along

the gastric grooves and at the posterior margins of the telson, the free thoracic and abdominal segments; also the margins of the uropodal segments are faintly pigmented. The carinae of the abdominal and free thoracic segments and the three long carinae on the telson are coloured dark; dark lines also indicate the places of the absent submedian carinae on the thoracic and abdominal segments.

This species is closely related to *Squilla quadridens* Bigelow, but is easily distinguished from it by the large number of dorsal carinae on the telson.

Pseudosquilla Dana

Pseudosquilla ciliata (Fabr.)

- Squilla ciliata* Fabricius, 1787, Mantissa Insectorum, vol. 1, p. 333.
Squilla stylifera Gibbes, 1850, Proc. Amer. Assoc., 3rd meeting, p. 200.
Pseudosquilla stylifera Dana, 1852, U. S. Exploring Exped., vol. 13, Crust., p. 622.
Pseudosquilla stylifera von Martens, 1872, Arch. f. Naturgesch., vol. 38 p. 146.
Pseudosquilla ciliata Brooks, 1886, Report Challenger Exped., vol. 16, p. 53, pl. 15 fig. 10.
Pseudosquilla ciliata Bigelow, 1893, Johns Hopkins Univ. Circ., no. 106, p. 101, 102.
Pseudosquilla ciliata Bigelow, 1894, Proc. U. S. Nat. Mus., vol. 17, p. 499.
Pseudosquilla ciliata Faxon, 1896, Bull. Mus. Comp. Zool., vol. 30, p. 165.
Pseudosquilla ciliata Nobili, 1898, Boll. Mus. Zool. Anat. Comp. Torino, vol. 13 no. 314, p. 2.
Pseudosquilla ciliata Rankin, 1898, Ann. New York Acad. Sci., vol. 11, p. 253.
Pseudosquilla ciliata var. *occidentalis* Borradaile, 1900, Willey's Zool. Results, vol. 4, p. 402.
Pseudosquilla ciliata Rankin, 1900, Ann. New York Acad. Sci., vol. 12, p. 545.
Pseudosquilla ciliata Bigelow, 1902, Bull. U. S. Fish. Comm., vol. 20, p. 154, fig. 3, 4.
Pseudosquilla ciliata Kemp, 1913, Mem. Ind. Mus., vol. 4, p. 96.
Pseudosquilla ciliata Rathbun, 1919, Rapport Visscherij Curaçao, vol. 2, p. 347.
Pseudosquilla ciliata var. *occidentalis* Verrill, 1923, Trans. Conn. Acad. Arts Sci., vol. 26, p. 192, pl. 50 fig. 1, 2; pl. 51 fig. 1—1b; pl. 54 fig. 2.
Pseudosquilla ciliata Schmitt, 1924, Bijdr. Dierk. Amsterdam, vol. 23, p. 81.
Pseudosquilla ciliata Boone, 1927, Bull. Bingham Oceanogr. Coll. vol. 2 no. 2, p. 6.
Pseudosquilla ciliata var. *occidentalis* Boone, 1930, Bull. Vanderbilt Mar. Mus., vol. 2, p. 24, pl. 2.
Pseudosquilla ciliata Lunz, 1937, Bull. Bingham Oceanogr. Coll., vol. 5 no. 5, p. 6.

Museum Leiden:

- Curaçao; March 6, 1905; coll. Prof. Boeke. — 1 ♀.
 West of Oranjestad, St. Eustatius; August 17, 1905; coll. Prof. Boeke. — 1 ♂, 2 ♀♀.
 Wacaobay, Curaçao; October 3, 1905; coll. Prof. Boeke. — 2 ♂♂, 2 ♀♀.
 Aruba; August 2, 1905; coll. Prof. Boeke. — 1 ♀ 18 mm (monodactyla stage).

Museum Amsterdam:

- Tagangabay Santa Marta; dredged; February 18, 1896; coll. Yacht "Chazalie". — 3 ♀♀.
 Gairaca, Santa Marta; dredged; February 29, 1896; coll. Yacht "Chazalie". — 1 ♂, 4 ♀♀.

Borradaile (1900) thought that *Pseudosquilla ciliata* from the Atlantic is different from the Indopacific form, as it possesses a postero-lateral spine at the fourth abdominal segment. He made it a new variety, *Pseudosquilla ciliata* var. *occidentalis* Borradaile. Later, however, other authors recorded this spine also in Indopacific specimens, and as Bigelow (1931) pointed out these spines disappear in larger specimens; the presence or absence of these spines is therefore only due to age.

The specimen from Aruba was described by Rathbun (1919) as *Pseudosquilla monodactyla* (A. Milne-Edw.); as Hansen (1895) pointed out *Pseudosquilla monodactyla* is not a distinct species but only a stage in the development of a *Pseudosquilla*. Bigelow (1931) gave good descriptions of the monodactyla stages of *Pseudosquilla ciliata* (Fabr.), *P. ornata* Miers and *P. oculata* (Brullé).

Distribution. This species is recorded from the east coast of America from Carolina to Brazil, from the Antilles and the Bermudas. In the Indopacific region too it is widely distributed.

Lysiosquilla Dana

Lysiosquilla glabriuscula (Lam.)

- Squilla glabriuscula* Lamarck, 1818, Hist. Nat. Anim. s. Vert., vol. 5. p. 188.
Squilla glabriuscula Latreille, 1825, Encycl. Méthod., vol. 10 p. 470.
Squilla glabriuscula H. Milne-Edwards, 1837, Hist. Nat. Crust., vol. 2 p. 519.
Squilla vittata H. Milne-Edwards, 1837, Hist. Nat. Crust., vol. 2 p. 519
Squilla vittata White, 1847, List Crust. Brit. Mus., p. 83.
Squilla vittata Gibbes, 1850, Proc. Amer. Assoc., 3rd meeting, p. 199.
Squilla vittata Herklots, 1861, Tijdschr. v. Entomol., vol. 4, p. 152.
Squilla glabriuscula Miers, 1880, Ann. Mag. Nat. Hist., ser. 5 vol. 5, p. 7.
Lysiosquilla glabriuscula Sharp, 1893, Proc. Acad. Nat. Sci. Philad., p. 106.
Lysiosquilla glabriuscula Bigelow, 1894, Proc. U. S. Nat. Museum, vol. 17, p. 508.
Lysiosquilla glabriuscula Kemp, 1913, Mem. Ind. Mus., vol. 4, p. 203.
Lysiosquilla glabriuscula Luederwaldt, 1919, Revista Mus. Paulista, vol. 11, p. 429.

Museum Leiden:

West Indies; 1885; coll. Neervoort van de Poll. — 3 ♂♂.
 Locality unknown. — 1 ♂.

Distribution. This species is recorded from the east coast of America from South Carolina to Sao Paulo and from the Antilles.

Lysiosquilla scabricauda (Lam.)

- Squilla scabricauda* Lamarck, 1818, Hist. Nat. Anim. s. Vert., vol. 5, p. 188.
Squilla scabricauda Desmarest, 1823, Dict. Sci. Nat., vol. 28, p. 341, atl., vol. 4, plate without number.
Squilla scabricauda Desmarest, 1825, Consid. Gén. Crust., p. 251, pl. 42.
Squilla scabricauda Latreille, 1825, Encycl. Méthod., vol. 10, p. 470, pl. 325 fig. 1.
Squilla scabricauda H. Milne-Edwards, 1837, Hist. Nat. Crust., vol. 2, p. 519.

- Squilla scabricauda* White, 1847, List Crust. Brit. Mus., p. 83.
Squilla scabricauda Gibbes, 1850, Proc. Amer. Assoc., 3rd meeting, p. 199.
Squilla Hoveenii Herklots, 1851, Addit. Faun. Carc. Afr. Occ., p. 17, pl. 1 fig. 11.
Lysiosquilla inornata Dana, 1852, U. S. Expl. Exped., Crust., p. 616, pl. 41 fig. 1a—e.
Squilla scabricauda Herklots, 1861, Tijdschr. v. Entomol., vol. 4, p. 152.
Squilla inornata Smith, 1869, Trans. Conn. Acad. Arts Sci., vol. 2, p. 41.
Squilla scabricauda Smith, 1869, Trans. Conn. Acad. Arts Sci., vol. 2, p. 41.
Lysiosquilla scabricauda Miers, 1880, Ann. Mag. Nat. Hist., ser. 5 vol. 5, p. 7.
Lysiosquilla scabricauda Bigelow, 1893, Johns Hopkins Univ. Circ., no. 106, p. 101.
Lysiosquilla scabricauda Sharp, 1893, Proc. Acad. Nat. Sci. Philad., p. 106.
Lysiosquilla scabricauda Bigelow, 1894, Proc. U. S. Nat. Mus., vol. 17, p. 508.
Lysiosquilla scabricauda Osorio, 1898, Journ. Sci. Math. Phys. Nat., ser. 2 vol. 5, p. 194.
Squilla hoveenii Osorio, 1898, Journ. Sci. Math. Phys. Nat., ser. 2 vol. 5, p. 194.
Lysiosquilla scabricauda Moreira, 1901, Arch. Mus. Nac. Rio de Janeiro, vol. 11, p. 1.
Lysiosquilla maculata Stebbing, 1902, Mar. Invest. S. Afr., vol. 2, p. 4.
Lysiosquilla scabricauda Rathbun, 1905, Occ. Papers Boston Soc. Nat. Hist., vol. 7, p. 29.
Lysiosquilla scabricauda Kemp, 1913, Mem. Ind. Mus., vol. 4, p. 204.
Lysiosquilla scabricauda Parisi, 1922, Atti Soc. Ital. Sci. Nat., vol. 61, p. 110.
Lysiosquilla maculata Boone, 1930, Bull. Vanderbilt Mar. Mus., vol. 2, p. 29, pl. 3.
Lysiosquilla scabricauda Lunz, 1935, Journ. E. Mitchell Sci. Soc., vol. 51, p. 15, fig. 3.
Lysiosquilla scabricauda Lunz, 1937, Bull. Bingham Oceanogr. Coll., vol. 5 no. 5, p. 7.

Museum Leiden:

Boutry coast of Guinea; coll. Pel; type of *Squilla Hoveenii* Herkl. — 1 ♂.
 Liberia; coll. Büttikofer. — 1 ♂.

The specimens described by Stebbing (1902) from Antigua and by Boone (1930) as *Lysiosquilla maculata* (Fabr.) are undoubtedly *Lysiosquilla scabricauda* (Lam.), as Schmitt (1940) and Glasell (1934) justly remark.

Distribution. This species is recorded from the same region as *Squilla empusa* Say.

Odontodactylus Bigelow**Odontodactylus havanensis** (Bigelow)

- Gonodactylus havanensis* Bigelow, 1893, Johns Hopkins Univ. Circ. no. 106, p. 101.
Odontodactylus havanensis Bigelow, 1894, Proc. U. S. Nat. Mus., vol. 17, p. 497, pl. 20, textfig. 1, 2.
Odontodactylus havanensis Kemp, 1913, Mem. Ind. Mus. vol. 4, p. 204.
Odontodactylus havanensis Rathbun, 1919, Rapport Visscherij Curaçao, vol. 2, p. 346.
Odontodactylus havanensis Lunz, 1937, Bull. Bingham Oceanogr. Coll., vol. 5 no. 5, p. 5, fig. 2.

Museum Leiden:

Piescadera Bay, Curaçao; March 20, 1905; coll. Prof. Boeke. — 1 ♂.

This specimen was already described by Rathbun (1919).

Distribution. This species is recorded from Florida, Bahama Isles, Cuba, Mexico and Curaçao.

Gonodactylus Latr.**Gonodactylus oerstedii** Hansen

- Gonodactylus chiragra* Gibbes, 1850 Proc. Americ. Assoc., 3rd meeting, p. 201.
Gonodactylus chiragra Dana, 1852, U. S. Expl. Exped., Crust., p. 623, pl. 41 fig. 5.
Gonodactylus chiragra A. Milne-Edwards, 1868, Nouv. Arch. Mus. Hist. Nat., vol. 4, p. 65.
Gonodactylus chiragra Smith, 1869, Trans. Conn. Acad. Arts Sci., vol. 2, p. 31 and p. 41.
Gonodactylus chiragra von Martens, 1872, Arch. f. Naturgesch., vol. 33, p. 147.
Gonodactylus chiragra Miers, 1880, Ann. Mag. Nat. Hist., ser. 5 vol. 5, p. 118.
Gonodactylus chiragra Brooks, 1886, Report Challenger Exped., vol. 16, p. 56.
Gonodactylus chiragra Pocock, 1890, Journ. Linn. Soc., Zool., vol. 20, p. 526.
Gonodactylus chiragra Bigelow, 1893, Johns Hopkins Univ. Circ., no. 106, p. 100, p. 102.
Gonodactylus falcatus Sharp, 1893, Proc. Acad. Nat. Sci., Philad., p. 105.
Gonodactylus chiragra Bigelow, 1894, Proc. U. S. Nat. Mus., vol. 17, p. 495.
Gonodactylus oerstedii Hansen, 1895, Isop., Cumac. u. Stomatop. Plankton Exped., p. 65, footnote.
Gonodactylus chiragra Nobili, 1897, Boll. Mus. Zool. Anat. Comp. Torino, vol. 12 no. 280, p. 6.
Gonodactylus chiragra Nobili, 1898, Boll. Mus. Zool. Anat. Comp. Torino vol. 13 no. 314, p. 2.
Gonodactylus oerstedii Rankin, 1898, Ann. New York Acad. Sci., vol. 11, p. 253.
Gonodactylus chiragra var. E, Borradaile, 1900, Willey's Zool. Results, vol. 4, p. 402.
Gonodactylus oerstedii Rankin, 1900, Ann. New York Acad. Sci., vol. 12 p. 545.
Gonodactylus chiragra Rathbun, 1900, Proc. Wash. Acad. Sci., vol. 2, p. 155.
Gonodactylus falcatus Moreira, 1901, Arch. Mus. Nac. Rio de Janeiro, vol. 11, p. 1.
Gonodactylus oerstedii Bigelow, 1902, Bull. U. S. Fish Comm., vol. 20, p. 152, fig. 1, 2.
Gonodactylus oerstedii Kemp, 1913, Mem. Ind. Mus., vol. 4 p. 204.
Gonodactylus oerstedii Rathbun, 1919, Rapport Visscherij Curaçao, vol. 2, p. 155.
Gonodactylus oerstedii Kemp & Chopra, 1921, Rec. Ind. Mus., vol. 22, p. 309.
Gonodactylus oerstedii Parisi, 1922, Atti Soc. Ital. Sci. Nat., vol. 61 p. 111.
Gonodactylus oerstedii Verrill, 1923, Trans. Conn. Acad. Arts Sci., vol. 26, p. 189, pl. 50 fig. 3, 4; pl. 51 fig. 2—2b; pl. 55 fig. 3, textfig. 1.
Gonodactylus oerstedii Schmitt, 1924, Bijdr. Dierk. Amsterdam, vol. 23, p. 80.
Gonodactylus oerstedii Schmitt, 1924, Univ. Iowa Stud. Nat. Hist. vol. 10 no. 4, p. 96.
Gonodactylus oerstedii Boone, 1930, Bull. Vanderbilt Mar. Mus., vol. 2, p. 21, pl. 1.
Gonodactylus oerstedii Bigelow, 1931, Bull. Mus. Comp. Zoöl., vol. 72, p. 120.
Gonodactylus oerstedii Lunz, 1935, Journ. E. Mitchell Sci. Soc., vol. 51, p. 152, fig. 1
Gonodactylus oerstedii Lunz, 1937, Bull. Bingham Oceanogr. Coll., vol. 5 no. 5, p. 4.
Gonodactylus oerstedii Schmitt, 1940, Allan Hancock Pac. Exped. vol. 5 no. 4, p. 211, fig. 26—29.

Museum Leiden:

- Aruba; 1883; coll. A. J. van Koolwijk. — 5 ♂♂, 11 ♀♀.
 Bonaire; shore; April 5, 1900; coll. C. C. Kayser. — 1 ♀.
 Curaçao; March 6, 1905; coll. Prof. Boeke — 2 specimens.
 Bonaire; July 10, 1905; coll. Prof. Boeke. — 1 specimen.
 T. D. Dickbay, St. Eustatius; September 17, 1905; coll. Prof. Boeke — 2 juv.

Museum Amsterdam:

- Testigos Islands, Antilles; January 20, 1896; coll. Yacht "Chazalie". — 15 ♂♂, 33 ♀♀.
 Schollegat, Curaçao; February 3, 1896; coll. Yacht "Chazalie". — 1 specimen.

Gairaca, Santa Marta; dredged 0—15 m; February 29, 1896; coll. Yacht "Chazalie". —
1 ♂.
Curaçao, rifwater; 1905; coll. prof. Boeke. — 1 ♂.
Curaçao, Caracas bay; 1924; coll. H. Lamp. — 1 ♀.

The specimen collected by the yacht "Chazalie" at Curaçao was in such a bad condition, that it was nearly impossible to be identified.

Distribution. This species is recorded from the east coast of America from South Carolina to the Abrolhos Islands (Brazil), from the Bermudas and the Antilles. Furthermore it is recorded from the American west coast from California to Ecuador.

LITERATURE

In this list I only give literature, which deals with Stomatopoda from West Africa and East America. For an almost complete bibliography on the literature on Stomatopoda I refer to

BALSS, H., 1938. Stomatopoda. In: Bronn's Klassen und Ordnungen des Tierreichs. Bd. 5, Abt. 1, Buch 6, Teil 2.

The papers marked with an asterisk (*) were not at my disposal.

- *BALSS, H., 1914. Dekapode Crustaceen von den Guinea-Inseln, Süd-Kamerun und dem Congo-Gebiet. *Ergebn. der zweiten deutschen Zentralafrika-Expedition, 1910, unter Führung Adolf Friedrichs, Herzog von Mecklenburg*, vol. 1, Zool., p. 106.
- *—, 1916. Crustacea III. Stomatopoda. *Beitr. zur Kenntnis der Meeresfauna Westafrikas*, herausgegeben von W. Michaelsen, vol. 2, p. 49.
- BERG, C., 1900. Datos sobre algunos crustaceos nuevos para la fauna argentina. *Comunicaciones del Museo Nac. Buenos Aires*, vol. 1 no. 7, p. 223.
- BIGELOW, R. P., 1891. Preliminary notes on some new species of *Squilla*. *Johns Hopkins Univ. Circ.*, vol. 10, p. 93.
- , 1893. Preliminary notes on the Stomatopoda of the Albatross collections and on other specimens in the National Museum. *Johns Hopkins Univ. Circ.*, no. 106, p. 100.
- , 1893. The Stomatopoda of Bimini. *Johns Hopkins Univ. Circ.*, no. 106, p. 102.
- , 1894. Report on the Crustacea of the order Stomatopoda, collected by the steamer "Albatross" between 1885—1891, and on other specimens in the U. S. National Museum. *Proc. U. S. Nat. Mus.*, vol. 17, p. 489.
- , 1902. The Stomatopoda of Porto Rico. *Bull. U. S. Fish Comm.*, vol. 20, p. 151.
- , 1931. Stomatopoda of the Southern and Eastern Pacific Ocean and the Hawaiian Islands. *Bull. Mus. Comp. Zoöl.*, vol. 72, p. 105.
- BOONE, L., 1927. Crustacea from tropical East American seas. *Bull. Bingham Oceanogr. Coll.*, vol. 1 no. 2, p. 1.
- , 1930. Scientific results of the cruises of the yachts "Eagle" and "Ara", 1921—1928, William K Vanderbilt commanding. *Bull. Vanderbilt Mar. Mus.*, vol. 2, p. 1.
- BORRADAILE, L. A., 1900. On the Stomatopoda and *Macrura* brought by Dr. Willey from the South Seas. *Willey's Zool. Results on material etc.*, vol. 4, p. 399.
- BOUVIER, E. L., 1906. Sur une petite collection de Crustacés, Décapodes et Stomatopodes, recueillis par M. Ch. Gravier à l'île San Thomé (Afrique occidentale). *Bull. Mus. Hist. Nat. Paris*, vol. 12, p. 492.
- BROOKS, W. K., 1866. The Stomatopoda collected by H. M. S. "Challenger". *Rep. Sci. Res. ... "Challenger"*, Zool., vol. 16, p. 1.
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