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Résultats de campagnes océanographiques du M.S. «Marion-Dufresne»
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NOTES ON STOMATOPOD CRUSTACEA FROM LA RÉUNION AND MAURITIUS

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Résumé

Cinq espèces de Stomatopodes ont été récoltées lors de la campagne MD 32 du « Marion Dufresne » autour de La Réunion. Deux d'entre elles n'étaient connues ni de La Réunion, ni de l'île Maurice, ce qui porte à 26 le nombre des espèces de Stomatopodes connues de cette région. La liste de ces espèces est publiée.

Abstract

Five species of Stomatopoda have been collected during the "Marion Dufresne" cruise MD 32 around La Réunion Island. Two of them had never been reported from La Réunion or Mauritius; the number of species of Stomatopoda known from this area is thus of 26. The list of these species is given.

During the cruise of the ship "Marion Dufresne" off La Réunion Island from 11 August to 10 September 1982 (Campagne MD 32 de la Mission de Recherche des Terres Australes et Antarctiques Françaises), a small collection of stomatopods has been sampled. Among the species identified, some have never been recorded before from La Réunion.

Several species of stomatopods have been reported from La Réunion and Mauritius. H. MILNE EDWARDS (1837) reported two species of stomatopods, *Pseudosquilla ciliata* (Fabricius, 1787) (as *Squilla stylifera*) and *Odontodactylus scyllarus* (Linnaeus, 1758) (as *Gonodactylus scyllarus*), from Mauritius and A. MILNE EDWARDS (1862) mentioned these two species together with *Gonodactylus chiragra* (Fabricius, 1781) in the fauna of La Réunion. MIERS (1880) recorded one male specimen he identified as, or a closely allied form of, *Protosquilla folinii* (A. Milne Edwards, 1868) which HANSEN (1895) identified as *Haptosquilla ectypa* (Müller, 1886) (as *Gonodactylus (Protosquilla) ectypa*). In his latter works MIERS (1882) added *Lysiosquilla maculata* (Fabricius, 1793) and then (MIERS, 1884) two other species, *Neocoronida trachurus* (von Martens, 1881) (as *Gonodactylus trachurus*) and *Leptosquilla schmeltzii* (A. Milne Edwards, 1873), to the fauna of Mauritius. BIGELOW (1894) recorded four more species from Mauritius : *Gonodactylus spinosus* Bigelow, 1893, *Pseudosquilla megalophthalma* Bigelow, 1893, *P. oculata* (Brullé, 1836), and *P. ornata* Miers, 1880, the latter was then identified by MANNING (1977) as *P. hieroglyphica* Manning, 1972. Observations on the specimens labelled as *Gonodactylus glabrous* preserved in the Muséum national d'Histoire Naturelle, Paris, collected by P. CARIÉ in 1913 from Mauritius showed that three species were included : *G. mutatus* Lanchester, 1903, *G. randalli* Manning, 1978, and *G. falcatus* (Forskål, 1775) and none is *G. glabrous* Brooks, 1886. Since the revision of the *G. falcatus* Group by MANNING (1978c), distribution of this group of species needs verification. Presently, a total of 26 species of Stomatopoda are known from La Réunion and Mauritius. A list of species is herewith presented. All the specimens studied are deposited in the Muséum national d'Histoire Naturelle, Paris.

Stomatopods collected from La Réunion (Mission MD 32)

Echinosquilla guerini (White, 1861)

Gonodactylus Guerini, Miers, 1880 : 43.

Gonodactylus (Protosquilla) Guerini, Bouvier, 1914 : 698 ; 1915 : 313 (136), pl. 7, fig. 10. — Carié, 1915 : 151.

Echinosquilla guerini, Manning, 1977 : 280.

MATERIAL EXAMINED. — MD 32, St. CP 125, 2-9-1982, 20°52'5 S, 55°36'9 E, 45 m : 1 ♂ 78.4 mm, 4 ♀♀ 46.0 – 93.5 mm, MNHN-P st 924.

REMARKS. — *Echinosquilla guerini* has never been reported before from La Réunion, but it was recorded from Mauritius (BOUVIER, 1914, 1915 ; CARIÉ, 1915 ; and MANNING, 1977).

Odontodactylus scyllarus (Linnaeus, 1758)

Gonodactylus scyllarus, H. Milne Edwards, 1837 : 259. — A. Milne Edwards, 1862 : 16. — Miers, 1880 : 37. — Richters, 1880 : 169.

Odontodactylus scyllarus, Bouvier, 1915 : 312 (135). — Ward, 1942 : 56. — Manning, 1967 : 10, fig. 3 ; 1977 : 284.

MATERIAL EXAMINED. — La Réunion, coll. ISTPM Le Port : 2 ♂♂ 130.5 – 154.8 mm, MNHN-P st 927. — MD 32, St. DC 85, 27-8-1982, 20°59'5 S, 55°15'1 E, 58 – 72 m, coral blocks and fragments, with sandy organic material : 1 ♀ (without head).

REMARKS. — *Odontodactylus scyllarus* has been reported from La Réunion (A. MILNE EDWARDS, 1862) and Mauritius (H. MILNE EDWARDS, 1837 ; MIERS, 1880 ; RICHTERS, 1880 ; WARD, 1942 ; and MANNING, 1967, 1977). One of the specimens is a juvenile female without head which undoubtedly belongs to *O. scyllarus*.

Pseudosquilla ornata Miers, 1880

Pseudosquilla ornata Miers, 1880 : 33, pl. 3, figs. 5-6. — Bouvier, 1915 : 311 (134). — nec Bigelow, 1894 : 500 (= *P. hieroglyphica* Manning, 1972).

MATERIAL EXAMINED. — La Réunion, coll. ISTPM Le Port : 1 ♂ 61.3 mm, MNHN-P 928.

REMARKS. — BIGELOW (1894) mentioned the presence of *Pseudosquilla ornata* in Mauritius, his specimen was regarded by MANNING (1977) as *P. hieroglyphica* Manning, 1972. *P. ornata* has never been recorded from La Réunion, the present record is new for the area.

Leptosquilla schmeltzii (A. Milne Edwards, 1873)

Squilla Schmeltzii A. Milne Edwards, 1873 : 11, pl. 2, fig. 7. — Richters, 1880 : 168.

Leptosquilla schmeltzii, Miers, 1884 : 15.

MATERIAL EXAMINED. — MD 32, St. DR 154, 6-9-1982, 21°00'6 S, 55°43'8 E, 45 m, fine sand : 1 ♂ 16.3 mm, 1 ♂ (juv.) 9.4 mm, 1 ♀ 10.8 mm, 1 ♀ (juv.) 10.4 mm, MNHN-P st 925.

REMARKS. — In the juvenile specimens the lateral process of the fifth thoracic somite is blunt and directed laterally, it gradually curves anterolaterally in the larger specimens. Pigmentation is not seen in the juvenile female, appearing faintly in the juvenile male and gradually marked in the larger specimens. *Leptosquilla schmeltzii* has never been recorded from La Réunion but is known from Mauritius (RICHTERS, 1880 ; MIERS, 1884).

Oratosquilla striata Manning, 1978

Oratosquilla striata Manning, 1978d : 30, figs. 17-18.

MATERIAL EXAMINED. — MD 32, St. DC 126, 2-9-1982, 20°52'2 S, 55°37'6 E, 110 m, black basaltic sand with gravels and blocks : 1 ♀ (juv.) 20.2 mm (not in good condition).

REMARKS. — *Oratosquilla striata* Manning, 1978, is known from Persian Gulf and the Gulf of Oman. The specimen from La Réunion, a juvenile female, shows close resemblances with the description of MANNING for the species. The carination on the dorsal surface of telson is not yet developed. The record of this species in La Réunion extends its distribution southwardly.

List of Stomatopoda from La Réunion and Mauritius

- Manningia zehntneri* Manning, 1874 (Mauritius : MANNING, 1977).
- Gonodactylus chiragra* (Fabricius, 1781) (La Réunion : A. MILNE EDWARDS, 1862 ; Mauritius : RICHTERS, 1880 ; BOUVIER, 1915).
- Gonodactylus falcatus* (Forskål, 1775) (Mauritius : MANNING, 1977 ; specimen in MNHN-P identified by the author).
- Gonodactylus mutatus* Lanchester, 1903 (Mauritius : specimens in MNHN-P identified by the author).
- Gonodactylus platysoma* Wood-Mason, 1895 (La Réunion : MANNING, 1977 ; Mauritius : MANNING, 1977).
- Gonodactylus randalli* Manning, 1978 (Mauritius : specimen in MNHN-P identified by the author).
- Gonodactylus smithii* Pocock, 1893 (La Réunion : MANNING, 1977 ; Mauritius : MANNING, 1977).
- Gonodactylus spinosus* Bigelow, 1893 (Mauritius : BIGELOW, 1894 ; MANNING, 1967b).
- Hoplosquilloides coronatus* Manning, 1978 (La Réunion : MANNING, 1978a).
- Mesacturoides crinitus* (Manning, 1962) (La Réunion : MANNING, 1978b ; Mauritius : MANNING, 1978b).
- Odontodactylus scyllarus* (Linnaeus, 1758) (La Réunion : A. MILNE EDWARDS, 1862 ; present record ; Mauritius : H. MILNE EDWARDS, 1837 ; MIERS, 1880 ; RICHTERS, 1880 ; BOUVIER, 1915 ; WARD, 1942 ; MANNING, 1967a, 1977).
- Echinosquilla guerini* (White, 1861) (La Réunion : present record ; Mauritius : BOUVIER, 1914, 1915 ; CARIÉ, 1915 ; MANNING, 1977).
- Haptosquilla ectypa* (Müller, 1886) (Mauritius : MIERS, 1880, see HANSEN, 1895).
- Pseudosquilla ciliata* (Fabricius, 1787) (La Réunion : A. MILNE EDWARDS, 1862 ; MANNING, 1977 ; Mauritius : H. MILNE EDWARDS, 1837 ; BOUVIER, 1915 ; MANNING, 1977).
- Pseudosquilla hieroglyphica* Manning, 1972 (Mauritius : BIGELOW, 1894 ; see MANNING, 1977).
- Pseudosquilla megalophthalma* Bigelow, 1893 (Mauritius : BIGELOW, 1894 ; MANNING, 1977).
- Pseudosquilla oculata* (Brullé, 1836) (Mauritius : RICHTERS, 1880 ; BIGELOW, 1894 ; BOUVIER, 1915 ; MANNING, 1977).
- Pseudosquilla ornata* Miers, 1880 (La Réunion : present record ; Mauritius : BOUVIER, 1915).
- Neocoronida trachurus* (von Martens, 1881) (Mauritius : MIERS, 1884 ; MANNING, 1978a).
- Lysiosquilla maculata* (Fabricius, 1793) (La Réunion : MANNING, 1977 ; Mauritius : MIERS, 1882 ; WARD, 1942).
- Clorida fallax* (Bouvier, 1914) (Mauritius : BOUVIER, 1914, 1915).
- Leptosquilla schmeltzii* (A. Milne Edwards, 1873) (La Réunion : present record ; Mauritius : RICHTERS, 1880 ; MIERS, 1884).
- Oratosquilla hesperia* (Manning, 1968) (Mauritius : MANNING, 1977).
- Oratosquilla juxtaoratoria* (Ward, 1942) (Mauritius : WARD, 1942 ; MANNING, 1977).
- Oratosquilla mauritiana* (Kemp, 1913) (Mauritius : KEMP, 1913).
- Oratosquilla striata* Manning, 1978 (La Réunion : present record).

REFERENCES

- BIGELOW R.P., 1894. – Report upon the Crustacea of the order Stomatopoda collected by the steamer Albatross between 1885 and 1891, and on other specimens in the U.S. National Museum. *Proc. U.S. natn. Mus.*, 17 : 489-550, 28 figs.
- BOUVIER E.L., 1914. – Sur la faune carcinologique de l'île Maurice. *C.R. hebd. Séanc. Acad. Sci., Paris*, 169 : 698-705.
- BOUVIER E.L., 1915. – Décapodes marcheurs (Reptantia) et stomatopodes recueillis à l'île Maurice par M. Paul Carié. *Bull. Scient. Fr. Belg.*, 7^e ser., 48 (3) : 178-318 (1-141), 42 figs., 4 pls.

- CARIÉ P., 1915. — Note sur *Gonodactylus (Prostosquilla) Guerini* White. *Bull. Mus. Hist. nat., Paris*, 21 : 151.
- HANSEN H.J., 1895. — Isopoden, Cumaceen und Stomatopoden der Plankton-Expedition. *Ergebn. Plankton-Exped.*, 2 (G.c.) : 1-105, 8 pls.
- KEMP S., 1913. — An account of the Crustacea Stomatopoda of the Indowest Pacific region based on the collection of the Indian Museum. *Mem. Indian Mus.*, 4 : 1-217, 5 figs., 10 pls.
- MANNING R.B., 1967a. — Review of the genus *Odontodactylus* (Crustacea : Stomatopoda). *Proc. U.S. natn. Mus.*, 123 (3606) : 1-36, 8 figs., 1 pl.
- MANNING R.B., 1967b. — Notes on the *demanii* section of the genus *Gonodactylus* Berthold with descriptions of three new species (Crustacea : Stomatopoda). *Proc. U.S. natn. Mus.*, 123 (3618) : 1-27, 8 figs.
- MANNING R.B., 1977. — Stomatopod Crustacea in the Muséum d'Histoire naturelle, Geneva. *Revue suisse Zool.*, 84 (2) : 279-296, 1 fig.
- MANNING R.B., 1978a. — New and rare stomatopod Crustacea from the Indowest Pacific region. *Smithson. Contrib. Zool.*, 264 : 1-36, 16 figs.
- MANNING R.B., 1978b. — A new genus of stomatopod crustacean from the Indowest Pacific region. *Proc. biol. Soc. Wash.*, 91 (1) : 1-4, 1 fig.
- MANNING R.B., 1978c. — Notes on some species of the *falcatus* Group of *Gonodactylus* (Crustacea : Stomatopoda : Gonodactylidae). *Smithson. Contrib. Zool.*, 258 : 1-15, 13 figs.
- MANNING R.B., 1978d. — Further observations on *Oratosquilla* with accounts of two new genera and nine new species (Crustacea : Stomatopoda : Squillidae). *Smithson. Contrib. Zool.*, 272 : 1-44, 25 figs.
- MIERS E.J., 1880. — On the Squillidae. *Ann. Mag. nat. Hist.*, (5) 5 : 1-30 (108-127), 3 pls.
- MIERS E.J., 1882. — On the Crustacea from the Mauritius. *Proc. zool. Soc., London*, (2) : 538-543, 1 pl.
- MIERS E.J., 1884. — On some crustaceans from Mauritius. *Proc. zool. Soc., London* : 10-17, 1 pl.
- MILNE EDWARDS A., 1862. — Faune Carcinologique de l'île de la Réunion. In : L. Maillard, Notes sur l'île de la Réunion, annexe F : 1-16, 3 pls.
- MILNE EDWARDS A., 1873. — Description de quelques Crustacés nouveaux ou peu connus provenant du Musée de M.-C. Godeffroy. *J. Mus. Godeffroy*, 1 (4) : 77-88 (1-12), 2 pls.
- MILNE EDWARDS H., 1837. — Histoire naturelle des Crustacés, comprenant l'anatomie, la physiologie et la classification de ces animaux, 2 : 1-532 ; Atlas : 1-32, 42 pls.
- RICHTERS F., 1880. — Decapoda. In : K.A. Möbius, Beiträge zur Meeresfauna der Insel Mauritius und der Seychellen, bearbeitet von K. Möbius, F. Richters und E. von Martens..., Berlin : 139-178, 3 pls.
- WARD M., 1942. — Notes on the Crustacea of the Desjardins Museum, Mauritius Institute, with descriptions of new genera. *Bull. Maurit. Inst.*, 2 (2) : 49-108, 2 pls.