

Shallow water Stomatopoda of New Caledonia (0–100 m)

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The most recent summary of the Stomatopoda of New Caledonia and adjacent localities recorded 69 species in 31 genera and 10 families of which 60 occurred at depths of 100 m or less. Richer de Forges & Moosa (1992) analysed the distribution patterns of the stomatopods from the lagoons of New Caledonia and Chesterfield Atoll based on the results of Moosa (1991). The present revised list of New Caledonian Stomatopoda is derived from recent revisionary studies (Ahyong, 2001) and reexamination of the stomatopod collections in the Muséum national d'Histoire naturelle, Paris (Ahyong, unpublished). Sixty-two species of stomatopod distributed in 35 genera and 9 families occur in the 0–100 m depth range in the New Caledonian EEZ.

The New Caledonian stomatopod fauna can be broadly divided into coral reef and lagoon components. The coral reef component largely corresponds to the cavity dwelling gonodactyloids of the families Gonodactylidae, Odontodactylidae, Protosquillidae, Pseudosquillidae and Takuidae. The gonodactyloids are the most speciose and abundant stomatopods on hard substrates and all, except for the pseudosquillids, are 'smashers'. The lagoonal component corresponds to the soft-bottom burrowing families, all of which are 'spearers', namely Eurysquillidae, Lysiosquillidae, Nannosquillidae and Squillidae. The division between reef and lagoon components, however, is not a strict one. Many gonodactyloids also occur in the lagoon amongst rubble and coral outcrops, and many burrowers, mainly lysiosquillids and nannosquillids also live in the reef flat sediments. The minute squillid, *Parvisquilla multituberculata*, lives only in deep coral cavities, and odontodactylids occupy both coral reef crevices and burrows constructed on the lagoon floor.

Fifty New Caledonian species range widely in the Indo-West Pacific, extending beyond Oceania. Seven stomatopod species are shared only with Australia. At present, only two shallow water species have not been recorded beyond New Caledonia: *Pontiosquilla caledonica* and *Neoanchisquilla semblatae*. Whether these prove to be endemic awaits further study of regional faunas. Additional described and undescribed genera and species that are apparently endemic to New Caledonia are known, but these live at depths exceeding 100 m (Ahyong, unpublished). Thus, taking present data at face value, the shallow water stomatopods of New Caledonia appear to form part of a more widespread western Pacific fauna, with low levels of endemism. Of course, sampling that specifically targets stomatopods remains to be conducted in the region, particularly in deep coral crevices and deep burrows in soft substrates. Study of these habitats will almost certainly reveal a rich undescribed fauna that will probably also include numerous endemic species.

The new records of *Gonodactylellus micronesicus*, *G. espinosus*, *Gonodactylaceus ternatensis* and *Odontodactylus hansenii* from New Caledonia represent incremental range extensions of species previously recorded from Australia or other western Pacific localities. The record of *Gonodactyloideus tricarinatus*, however, previously known only from French Polynesia, represents a significant range extension (Ahyong, 2002).

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Checklist of the shallow water Stomatopoda of New Caledonia(0–100 m)

New records are marked *, widespread Indo-West Pacific species are marked +, species shared only with Australia %, and species presently known only from New Caledonia @.

STOMATOPODA Latreille, 1817

EURYSQUILLIDAE Manning, 1977

Coronidopsis bicuspis Hansen, 1926 +

Manningia australiensis Manning, 1970 +

GONODACTYLIDAE Giesbrecht, 1910

Gonodactylaceus falcatus (Forskäl, 1775) +

Gonodactylaceus randalli (Manning, 1978) +

Gonodactylaceus ternatensis (Manning, 1978) +

Gonodactylellus affinis (de Man, 1902) +*

Gonodactylellus erdmanni Ahyong, 2001 +

Gonodactyellus espinosus (Borradaile, 1898) +*

Gonodactylellus micronesicus (Manning, 1971) +*

Gonodactylellus rubriguttatus Erdmann & Manning, 1978 +

Gonodactylellus viridis (Serène, 1954) +

Gonodactylus chiragra (Fabricius, 1781) +

Gonodactylus platysoma Wood-Mason, 1895 +

Gonodactylus smithii Pocock, 1893 +

Gonodactyloideus tricarinatus Ahyong, 2002 +*

LYSIOSQUILLIDAE Giesbrecht, 1910

Lysiosquilla maculata (Fabricius, 1793) +

NANNOSQUILLIDAE Manning, 1980

Acanthosquilla derijardi Manning, 1969 +

Acanthosquilla multifasciata (Wood-Mason, 1895) +

Pullosquilla pardus Moosa, 1991 %

ODONTODACTYLIDAE Bigelow, 1893

Odontodactylus cultrifer (White, 1850) +

Odontodactylus hansenii (Pocock, 1893) +*

Odontodactylus latirostris Borradaile, 1907 +

Odontodactylus scyllarus (Linné, 1758) +

PROTOSQUILLIDAE Brooks, 1886

Chorisquilla hystrix (Nobili, 1899) +

Chorisquilla pococki Manning, 1975 +

Chorisquilla tuberculata (Borradaile, 1907) +

Chorisquilla tweediei (Serène, 1950) %

Echinosquilla guerinii (White, 1861) +

Haptosquilla glyptocercus (Wood-Mason, 1875) +

Haptosquilla trispinosa (Dana, 1852) %

PSEUDOSQUILLIDAE Manning, 1977

Pseudosquilla ciliata (Fabricius, 1787) +

Pseudosquillana richeri (Moosa, 1991) +

Raoulserenea hieroglyphica (Manning, 1972) +

Raoulserenea komaii (Moosa, 1991) +

SQUILLIDAE Latreille, 1803

Alimopsoides tuberculatus Moosa, 1991 %

Anchisquilla chani Ahyong, 2001 %

Areosquilla indica (Hansen, 1926) +

Areosquilla interstincta Manning, 1976 +

Areosquilla sp.nov. *

Busquilla quadraticauda (Fukuda, 1911) +
Carinosquilla australiensis Ahyong, 2001 %
Carinosquilla redacta Ahyong, 2001 %
Clorida denticauda (Chhapgar & Sane, 1967) +
Clorida gaillardi Moosa, 1985 +
Cloridina chlorida Brooks, 1886 +
Cloridina ichneumon (Fabricius, 1798) +
Cloridina inflata (Moosa, 1991) %
Cloridina moluccensis Moosa, 1973 +
Cloridina malaccensis (Manning, 1968) +
Cloridina verrucosa (Hansen, 1926) +
Fallosquilla fallax (Bouvier, 1914) +
Harpiosquilla japonica Manning, 1969 +
Leptosquilla schmeltzii (A. Milne Edwards, 1873) +
Levisquilla jurichi (Makarov, 1979) +
Miyakea nepa (Latreille, 1828) +
Neoanchisquilla semblatae Moosa, 1991 @
Oratosquilla fabricii (Holthuis, 1941) +
Oratosquillina gravieri (Manning, 1978) +
Paralimopsis carinata Moosa, 1991 +
Pontiosquilla caledonica Moosa, 1991 @
Quollastria subtilis Manning, 1978 +

TAKUIDAE Manning, 1995

Taku spinosocarinatus (Fukuda, 1909) +

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II7

Volume spécial

COMPENDIUM
of marine species from
New Caledonia



Edited by
CLAUDE E. PAYRI
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Publication éditée par:
Centre IRD de Nouméa
BP A5, 98848 Nouméa CEDEX
Nouvelle-Calédonie
Téléphone: (687) 26 10 00
Fax: (687) 26 43 26

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Modèle de référence bibliographique à cette revue :

Adjeroud M. *et al.*, 2000. Premiers résultats concernant le benthos et les poissons au cours des missions TYPATOLL.
Doc. Sci. Tech. II 3, 125 p.

ISSN 1297-9635

Numéro II7 - Octobre 2006

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Distribué pour le Pacifique par le Centre de Nouméa.

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La traduction en anglais des textes d'introduction, des Ascidies et des Echinodermes a été assurée par EMMA ROCHELLE-NEWALL, la préface par MINA VILAYLECK.

Ce document a été produit par le Service ISC, imprimé par le Service de Reprographie du Centre IRD de Nouméa et relié avec l'aimable autorisation de la CPS, financé par le Ministère de la Recherche et de la Technologie.

ISSN 1297-9635
Numéro II7 - Octobre 2006
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