

## Thalassinideans shrimps of New Caledonia

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### History and remarks

The first thalassinidean shrimp reported from New Caledonia was *Neaxius acanthus* (A.Milne-Edwards, 1878). More than 100 years later, Sakai & Saint Laurent (1989) recorded two axiids and one calocaridid and Ngoc-Ho (1989) described two new species of upogebiids from that region. The most detailed study on the thalassinidean fauna of New Caledonia is that of Ngoc-Ho (1991) who reported six species (three of them new) of callianassids and seven (three new) species of upogebiids. Later, Ngoc-Ho (1994) described another two new species of Upogebiidae. Poore (1997) added three new species of Micheleidae and Thomassiniidae. Recently, Lin (2006) added one new species each of Micheleidae and Axiidae and Ngoc-Ho (2006) another axiid to the fauna of this region.

It is remarkable, that most thalassinidean species came from deeper sediment bottoms where they have been collected with grabs, trawls and dredges. Except for *N. acanthus* and the unpublished record of *G. armatus*, nothing is known about the Thalassinidea inhabiting intertidal and shallow subtidal habitats.

### Taxonomic remarks (off the record)

The validity of some species is still unclear:

*Callianassa caledonica* Ngoc-Ho, 1991 was synonymised with *C. amboinae* Bate, 1888 by Sakai (1999d), later with *C. tonkinae* Grebenjuk, 1975 by Sakai (2002) and again with *C. amboinae* by Sakai (2005b). I think it is rather *amboinae*, probably *tonkinae* is also synonymous with *amboinae*.

*Callianassa rectangularis* Ngoc-Ho, 1991 was synonymised with *C. bouvieri* Nobili, 1904 by Sakai (1999d). I consider *C. rectangularis* as a synonym of *C. maldivensis* Borradaile, 1904, another species synonymised with *C. bouvieri* by Sakai (1999). My studies show that *C. bouvieri* and *C. maldivensis* are different morphologically as well as ecologically. As my results are unpublished, I would list this species as *C. rectangularis*.

*Glypturus armatus* (A.Milne-Edwards, 1878) is an unpublished record for New Caledonia (pers. comm. M. de Saint Laurent, 1988). Sakai (1999b) synonymised *G. laurae* (de Saint Laurent, 1984) as synonym of *G. armatus*; I do not agree. On the other hand, Sakai (1999, 2005) lists *Glypturus motupore* Poore & Suchanek, 1988 from Papua New Guinea as member of *Neocallichirus*. I consider *G. motupore* as synonym of *G. armatus*. My results are still unpublished.

Systematic arrangement of families follows Poore (1994).

Sakai (1999a) erected Gourretiinae for *Gourretia* and *Dawsonius*, placing *Paracalliix* in Ctenochelinae. Later, Sakai (2004) elevated the subfamily to family rank adding *Callianopsis*, *Laurentgourretia*, and *Paragourretia* and placing *Paracalliix* this time in Callianassidae. If this taxonomic arrangement is followed, Callianopsinae Manning and Felder, 1991 has precedence as a family level name over Gourretiidae. I therefore follow Manning & Felder and list *Gourretia* under Ctenochelidae.

With respect to generic placement of the Callianassidae, I followed Manning & Felder (1991) for the Callichirinae. The Callianassinae are listed all as *Callianassa* sensu lato. This genus is considered here as polyphyletic clade, with the species (except *C. rectangularis*) included as listed in Tudge *et al.* (2000), but not in the sense of Sakai (1999d) who proposed a much larger genus.

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## List of taxa

### THALASSINIDEA Latreille, 1831

#### THOMASSINIIDAE de Saint Laurent, 1979

*Crosniera panie* Poore, 1997 New Caledonia 40 m

#### MICHELEIDAE Sakai, 1992

*Meticonaxius dentatus* Lin, 2006 New Caledonia 250-386 m

*Meticonaxius noumea* Poore, 1997 New Caledonia, 275-320 m

*Michelea novaecalidoniae* Poore, 1997 New Caledonia 37-52 m

#### AXIIDAE Huxley, 1879

*Oxyrynchaxius tricarinatus* Lin, 2006 New Caledonia 253-600 m

*Acanthaxius gadaletae* Ngoc-Ho, 2006 Solomon Islands, New Caledonia 135-300 m

*Acanthaxius miyazakiensis* (Yokoya, 1933) Japan, Philippines, New Caledonia 120-210 m

*Bouvieraxius rudis* (Rathbun, 1906) Hawaii, Madagascar, Australia, New Caledonia 75-420 m

**CALOCARIDIDAE Ortmann, 1891**

*Ambiaxius alcocki* (McArdle, 1900) Japan, Sri Lanka, Natal, New Caledonia 380-1000 m

**STRAHLAXIIDAE Poore, 1994**

*Neaxius acanthus* A.Milne-Edwards, 1878 New Caledonia, Australia, Indonesia, Mauritius, Comores, Guam, Taiwan 0-1 m

**UPOGEBIIDAE Borradaile, 1903**

*Gebiacantha lagonensis* Ngoc-Ho, 1989 New Caledonia 12-58 m

*Gebiacantha richeri* Ngoc-Ho, 1989 New Caledonia 43-47 m

*Gebiacantha lifuensis* Ngoc-Ho, 1994 New Caledonia, Loyalty Isl. 6-10 m

*Gebiacantha multispinosa* Ngoc-Ho, 1994 New Caledonia, Loyalty Isl. 6-10 m

*Upogebia allobranchus* Ngoc-Ho, 1991 New Caledonia n.d.

*Upogebia holthuisi* Sakai, 1982 Gilbert Islands, New Caledonia 4-75 m

*Upogebia ovalis* Ngoc-Ho, 1991 New Caledonia n.d.

*Upogebia pugnax* de Man, 1905 Indonesia, Japan, Maldives, New Caledonia 36-55 m

*Upogebia stenorhynchus* Ngoc-Ho, 1991 New Caledonia n.d.

**CALLIANASSIDAE Dana, 1852**

[*Glypturus armatus* (A.Milne-Edwards, 1878) Indo-Pacific 0-20 m]

*Callianassa amboinensis* de Man, 1888 Indonesia, Australia, Philippines, Mauritius, Red Sea, New Caledonia 18-366 m

*Callianassa caledonica* Ngoc-Ho, 1991 New Caledonia 21 m

*Callianassa joculatrix* de Man, 1905 Indonesia, Australia, Philippines, Vietnam, Taiwan, New Caledonia 10-330 m

*Callianassa rectangularis* Ngoc-Ho, 1991 New Caledonia 36 m

*Cheramus propinquus* (de Man, 1905) Indonesia, Australia, New Caledonia 75-300 m

**CTENOCHELIDAE Manning & Felder, 1991**

*Gourretia crosnieri* Ngoc-Ho, 1991 New Caledonia 29 m

**GLYPHEOIDEA Wrinckler, 1883**

**GLYPHEIDAE Zittel, 1883**

*Neoglyphea novaecaledonica* Richer de Forges, 2006



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