# NIPPONOTROPHON MAKASSARENSIS, A NEW RECENTLY DREDGED MURICACEAN SPECIES OF STRANGE GENERIC AFFINITIES (GASTROPODA: MURICIDAE)

by

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## INTRODUCTION

A murieid, dredged by the French-Indonesian "CORINDON" expedition (1980) in the Strait of Makassar was recently brought to my attention.

After carefully checking in the literatures, it appears to be new, but one problem was remaining unresolved: its classification in an appropriate genus.

The most important points or indicators for a subfamilial or generic placement for Muricidae are: the general outline of the shell, the operculum and radular characteristics.

The shell of *Nipponotrophon makassarensis* shows some affinities with the ocinebrine subgenus *Ocinebrellus* Jousseaume 1880 (Type sp. by O.D. *Murex eurypteron* Reeve 1845). General form, length, winged varices ...... Unfortunately, the open canal, the typical muricine operculum and' the radula lead me to consider this genus and subfamily as not valid for the new species. The shell shows also some affinities with the genus *Pterynotus* Swainson 1833 (Type sp. by S.D.: *Murex pinnatus* Swainson 1822). However, the *Pterynotus* species bears always 3 varices (except for some species, questionably put in that genus, a.o. *Pt. martinetana* (Roding 1798) but those have a typical dentate aperture and no winged varices), which leads us once more far away from the new species. Another possible genus might be the trophonine *Trophon* Montfort, 1810 (Type sp. by O.D.: *Trophon magellanicus* Gmelin 1791). This seemed to be the best location for our species but the operculum and the winged varices are not typical for *Trophon*, species.

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The general outline of the shell; the rounded, somewhat bulbous protoconch and the obsolete spiral threads on the first whorl; the 5 to 6 sharp varices; the radula, very near those of *N. scilutus* (Dall 1891) (MYERS & D'ATTILIO 1980: p. 86, fig. 5) or those of *N. gorgon* (Dall 1913) (RADWIN & D'ATTILIO 1976: p. 84, fig. 48) leads me to consider the genus *Nipponotrophon* Kuroda and Habe 1971 as the most appropriate for this new species. The only negative aspects are the form of the aperture, of the varices, and the operculum, not typical of *Nipponotrophon* but nearly identical to some *Pterynotus* sp.

## DESCRIPTION

Shell of a medium length for the genus; covered by a very light, flat white intritacalx, weakly axially striate and showing growth striae.

Aperture large and ovate with a very broad and shallow anal sulcus and a barely visible callus. Columellar lip smooth, adherent posteriorly on a small surface, then detached and weakly erected anteriorly. Outer lip erect and smooth.

Spire high, consisting of one and one half bulbous nuclear whorls and 5 slightly convex angular, post-nuclear whorls. First and second postnuclear whorls bearing 9 varices and 2 very weak spiral costae; these costae disappearing gradually on second whorl. Third whorl ornamentated with 6 to 7 sharp varices. Fourth, and body whorl bearing 5 to 6 flaring, winglike varices. Intervarical areas smooth.

Siphonal canal moderate in length, about 1/3 of the shell, open and dor sally recurved.

Operculum corneus, brown, elongate with an apical nucleus.

Radula typical muricine with a curved lateral tooth and a rachidian bearing 5 independent cusps.

## Material examined

Holotype in the Museum National d'Histoire Naturelle, Paris.

- 2 paratypes, M.N.H.N., Paris.
- 2 paratypes, National Institute of Oceanology, Jakarta.
- 1 paratype, National Science Museum, Tokyo.
- 1 paratype, Australian Museum, Sydney, C 137972.
- 1 paratype, R. Houart collection.

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Figs. 1: N. makassarensis sp. nov., holotype.

- Fig. 2: *N. makassarensis* sp. nov., paratype National Institute of Oceanology, Jakarta.
- Fig. 3: Scanning micrograph of radula of N. makassarensis sp. nov., (X 355.)

#### Dimensions

*Holotype*: 37.5 X 25 mm. *Paratypes*: 36 x 20.5 — 36 x 24 — 30.5 x 20 (siphonal canal broken off) — 27.5 x 16.5 — 3 juveniles: 24 X 16 — 21.5 x 14 — 20 x 12.5.

## *Type locality*

Straits of Makassar: CORINDON St 209,00°07S, 117°53E, 490 m (holotype and 4 paratypes) ; St 214,00°31N, 117°50c, 595 m (2 paratypes); St 217,00°38N, 117°50E, 470 m (1 paratype). ROLAND HOUART



Fig. 4: N. makassarensis sp. nov.: junevile (X 4.5).
Figs. 5: Operculum of N. makassarensis sp. nov. (X 9).
Fig. 6: Intritacalx (X 8).
Figs. 7-8: Protoconch of N. makassarensis sp. nov. 7: X 23 - 8: X 27.

## DISCUSSION

A newly described species: *Trophonopis shingoi* Tiba 1981 may be compared with *Nipponotrophon maJcassarensis*. *T. shingoi* is smaller: holotype 27 x 14 and paratype 23 x 13 mm (both adult shells). The spire is higher, the shell present spiral sculpture on each whorl, and five to six cords on the body whorl, while *N. makassarensis* has only 2 shallow spiral cords on the first whorl and a smooth body whorl, even on juveniles. Moreover, the flaring wings of *T. shingoi* are crossed

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with spiral corals and present a channelled shoulder spine, while those of *N. makassarensis* are smooth, without any sculpture. The aperture of *T. shingoi* is different, more like a real *Nipponotrophon*. Moreover *T. shingoi* present a small callus on the tip of the columella while these of *N. makassarensis* is almost invisible.

Another species, *Boreortrophon smithi* Dall 1902 may also be compared. *B. smithi* has a different aperture: channelled and recurved spiny flaring wings, upwards pointed. It is much larger for adult specimens: up to 50 mm. It also bears a yellowish periostracum, not observed for the new species, and has a strongly recurved siphonal canal. Moreover, *B. smithi* is probably an *Amstrotrophon* which is a very different group.

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