The First Record of *Murex tenuirostrum* Lamarck, 1822 (Neogastropoda: Muricidae) from Japan

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The gastropod genus *Murex* is characterized by spiny shell morphology with a long siphonal canal, biconic whorls and long spines on varices axially spaced at almost 120 degrees. It is composed of some 26 Recent species or subspecies (Ponder & Vokes, 1988), whose geographic ranges are restricted to the tropical to subtropical waters of the Indo-West Pacific. Among them 10 species have been recorded from Japan, from Wakayama Prefecture (Higo *et al.*, 1999) and southwestward. They are all large in size and regarded as a well-recognized group in terms of geographic distribution. However, one unrecorded species, *Murex tenuirostrum*, was recently collected in Japan for the first time. In this paper we report this interesting new addition to Japanese molluscan fauna.

Murex tenuirostrum Lamarck, 1822

(Fig. 1A-C)

See Ponder & Vokes (1988) for synonymy.

Material examined: Around 1990 the second author obtained nearly 10 specimens collected alive in Yakiuchi Bay, Uken Village, Amami-Oshima Island with a net set to catch the crustacean *Ranina ranina* (Linnaeus) (Japanese name "Asahigani") by a local fisherman. Most specimens were unfortunately lost in a fire, along with detailed sampling data, but two specimens survived. One of them was donated to the Department of Historical Geology and Paleontology, The University Museum, The University of Tokyo (UMUT-RM 28653).

Descriptions of the specimen examined: Shell consisting of 5+ whorls with long anterior canal, and spines (Fig. 1B-C). Whorls biconical. Apex acutely pointed with apical angle of *ca.* 80 degrees. Protoconch and initial whorls lost. Surface of whorls sculptured by spiral ribs and prominent varices with spines. In body whorl, spiral ribs relatively prominent on shoulder, periphery and base; two secondary ribs inserted between three primary ones at even intervals; several tertiary ribs of variable thickness intercalated. Interstices of spiral ribs entirely covered with scaly microsculpture. Varices three in each whorl, formed at every 110 degrees; corresponding varices in subsequent whorls slightly offset counterclockwise in apical view (Fig. 1A). Number of spines 6 (3 major and 3 minor) on varix of outer lip, with 5 major and 3 on anterior canal. Spines on anterior canal arranged parallel to each other. All spines formed as hemitubular structures with shallow grooves but subsequent connection with aperture or anterior canal entirely closed. Single spine on back side of body whorl markedly longer than remaining ones, gently curved counterclockwise in apical view (Fig. 1A); other spines much shorter, nearly straight. Anterior canal almost straight, situated in coiling axis of whorls. Aperture oval, anteriorly pointed, orthocline. Outer lip thickened, crenulated. Inner lip also thickened with adapical 15% covering body whorl, remaining 85% disjunct. No umbilicus formed. Operculum subovate; nucleus subterminal on abapical end; growth lines rough but not reflected as lamellae.

Remarks: The identification of the specimens as *M. tenuirostrum* was confirmed by the prominently long dorsal spine, sparse spines on thick varices, small biconical whorls relative to a long siphonal canal, spiral sculpture of uneven thickness, the anteriorly pointed aperture, and the operculum with a subterminal nucleus and non-lamellate growth lines. Among these, the formation of an exceptionally long and curved dorsal spine on the body whorl is the most distinctive character of the species. In other species of the genus, all spines on back side have proportional length and the same form. Specimens possessing such a specialized spine have also been illustrated by Habe & Kosuge (1966: pl. 18, fig. 7), Springsteen & Leobrera (1986: pl. 37, fig. 16), Wilson (1994: pl. 1, fig. 6) and Sasaki (2002: figs. IX, 2-26).

The occurrence of *M. tenuirostrum* from

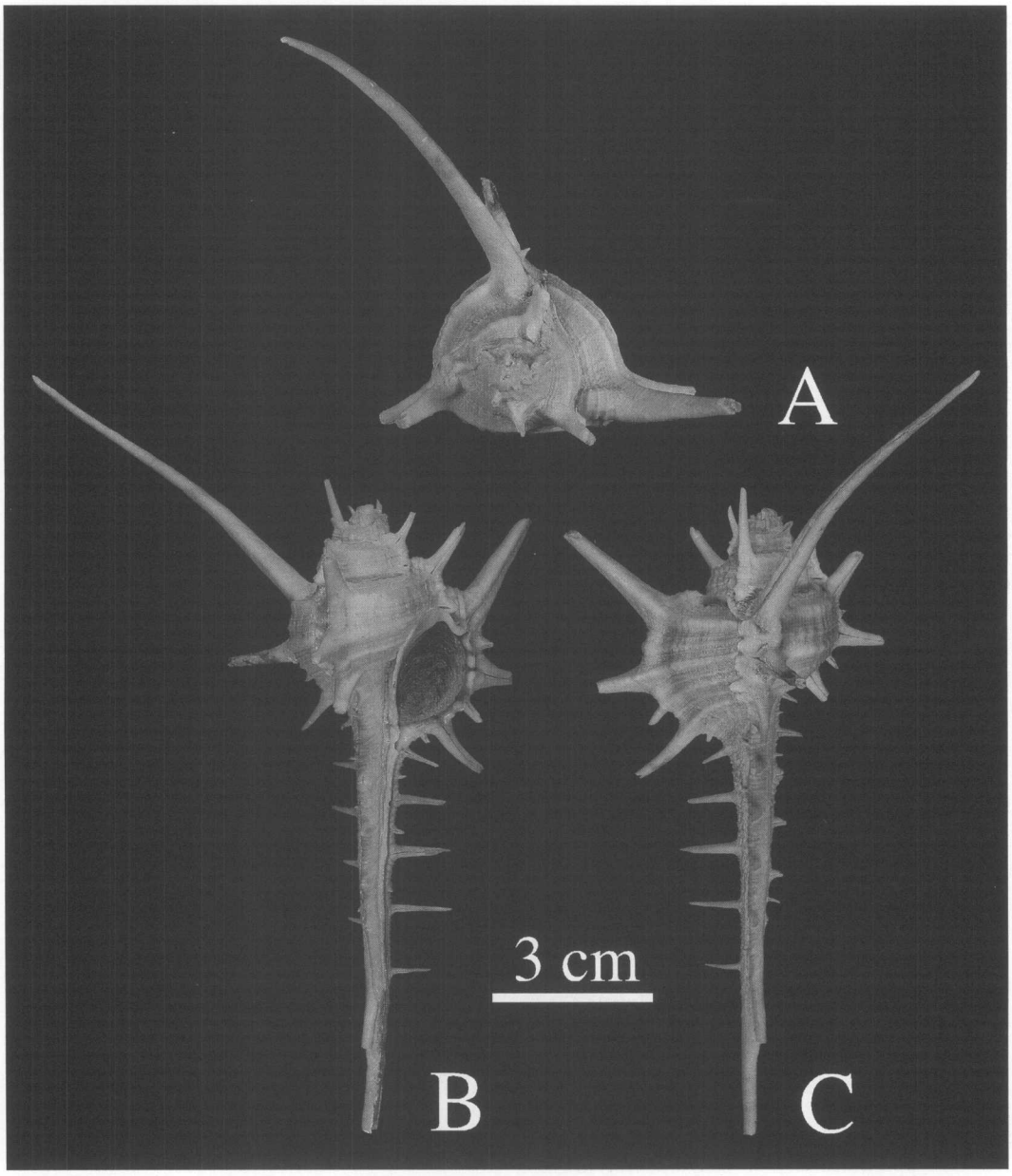

Fig. 1. *Murex tenuirostrum* Lamarck, 1822. Yakiuchi Bay, Uken Village, Amami-Oshima Island, Kagoshima Prefecture, Japan. **A.** Apical view. **B.** Front view. **C.** Back view. 115.5 mm (shell height) × 34.2 mm (shell width) excluding spines, UMUT-RM 28653.

Amami-Oshima Island is the first record of the species from the area north to the Philippines. The previously known geographic range was almost entire region of the Indian Ocean and West Pacific between Northeastern Australia and the Philippines (Ponder & Vokes, 1988).

It might be surprising that such a large-sized species has not been documented to date in southwestern Japan. One possibility for this range extension is that the species has a planktonic larval

stage and has travelled from southern tropical areas via Kuroshio Current. Some individuals possibly settled and survived to maturity in the Amami-Oshima Islands. Even if this happened, their recruitment may be too sparse to maintain sufficient population size for continuous reproduction.

This finding may also suggest that faunal lists of subtropical area are still incomplete even for large-sized molluscs. It is highly likely that actual biodiversity in the area is higher than currently known. Further attention should be paid to molluscs in the shallow subtidal zone over wide areas of subtropical islands in faunal research in Japan.

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エンマノホネガイの日本新記録

佐々木猛智・有馬康文

エンマノホネガイの生貝が鹿児島県奄美大島焼内湾から採集されたが，これは本種の日本新記録である。本種の特徴は，他のホネガイ類よりも棘の数が少なく，しかも背側の1本が極端に長く伸びる点にある。従来知られていた分布域はインド洋およびオーストラリア北部～フィリピンであり，産出記録の北限が大きく更新された。