

A new species of *Mitromica* (Gastropoda: Costellariidae) from Nicaragua

Emilio ROLÁN

Museo de Historia Natural,
Campus Universitario Sur,
15782 Santiago de Compostela, Spain

Raúl FERNÁNDEZ-GARCÉS

Centro de Estudios Ambientales de Cienfuegos (CEAC),
División de Gestión Ambiental (DGA),
calle 17, esquina Ave. 46, Cienfuegos, Cuba

Harry G. LEE

4132 Ortega Forest Drive, Jacksonville,
FL 32210, USA

KEYWORDS. Gastropoda, Cancellariidae, *Mitromica*, Nicaragua, new species.

ABSTRACT. A new species of *Mitromica* is described from Miskitos Cay, Nicaragua, making comparison with those more close.

INTRODUCTION

In January 1997, a research trip to study the marine biodiversity of the Miskitos Cays, Nicaragua, was organized by the Universidad Autónoma of Madrid. In the examination of the material collected during this expedition shells of a costellariid species considered new to science was encountered. It is described in the present work.

The gastropod family Costellariidae is represented in the Caribbean, and various species are figured in Abbott (1974), Petuch (1987) and Vokes & Vokes (1984). The genus *Mitromica* Berry, 1958 and the related *Thala* were critically studied by Rosenberg & Salisbury (2003).

Abbreviations

BMNH: The Natural History Museum, London

MNHN: Muséum national d'Histoire naturelle, Paris

MHNS: Museo de Historia Natural, University of Santiago de Compostela

MNCN: Museo Nacional de Ciencias Naturales, Madrid

SYSTEMATICS

Family COSTELLARIIDAE MacDonal, 1860

Genus *Mitromica* Berry, 1958

Mitromica gallegoi spec. nov.

Figs 1-5

Type material. Holotype (Figs 1-3) in the MNCN (15.05/53.570). Paratypes in the following collections: MNHN(1, Fig. 4), BMNH (1), IES (1), MHNS (2).

Type locality. Witties Cay, Miskitos Cays, Nicaragua, 30 m.

Description. Shell (Figs 1-4) solid, elongate, white, with a reticulate surface. Protoconch (Fig. 5) prominent, smooth, polished, with a narrow nucleus of only one whorl about 550-600 μ m in diameter. Teleoconch with about 5 rapid expanding whorls bearing spiral cords, 3 on the first two whorls, 4-5 on the next, 6 on the penultimate and between 14-17 on the body whorl: 5-7 above the suture and about 9-10 below. Axial sculpture about 7 orthocone ribs on early whorls and 20-22 on the body whorl. Ribs are stronger than cords. Aperture elongate, columella vertical in its central portion, where 4 folds are evident.

Dimensions: the holotype measures 7.4 mm. The paratypes are slightly smaller.

Distribution. Only known from the type locality. Probably endemic to the area.

Remarks. Comparison of the new species must be made with members of the Mitroidea occurring in the region and possessing elongate shells with reticulate sculpture:

Nodicostellaria kremerae Petuch, 1987 was collected in the Venezuela Gulf, is larger (18 mm), slightly shouldered, and the colour is not white but irregular tan.

Nodicostellaria lixa (Petuch, 1979) was described from the Abrolhos Archipelago, the holotype measures 12 mm, the sculpture is finer, the shell not so elongate, and the colour is white, becoming pink on the anterior-central portion of the body whorl.

Turricostellata leonardhilli Petuch, 1987, is larger (18 mm), the shell is as distinctly reticulate, and the colour is not white but yellow or orange on the anterior-central body whorl. It was collected in Colombia and Venezuela.

Mitra antillensis Dall, 1889 is a very large shell (up to 75 mm) being collected in deep water (up to 600 m).

Vexillum styria Dall, 1889 is small, about 12 mm, but has 10 whorls, 5 folds on the columella and 10 whorls. The protoconch is pointed and multispiral.

Mitra straminea A. Adams, 1854 (= *multilirata* A. Adams, 1853) is larger (20-28 mm), the colour is not white (but with brown stripes), with 14-18 spiral cords, and the aperture is half of the shell height.

Mitromica williamsae Rosenberg & Salisbury, 2003 has a similar size, the protoconch has 1.7-1.8 whorls, being smaller in width (0.43-0.48 mm). This species has more axial ribs (26-37 on last whorl) and more spiral cords (24-29 on last whorl).

Mitromica calliaqua Rosenberg & Salisbury, 2003 has a brown shell, the ribs on the last whorl are 25-31, and the spiral cords number 17-22. The protoconch is 0.43 mm (it is not thus characterized in the original description but deduced from the figure).

Mitromica dicksoni Rosenberg & Salisbury, 2003 is yellowish tan in colour, scarcely larger (the holotype and paratype represented in the original description measure about 7.3-7.7 but they have broken apex and expected to get 8 or more mm); the body whorls are more globose, with a greater number of axial ribs (33-

36) and cords (in the figure of the holotype can be counted towards the base about 25). The ribs and cords are of similar size.

Mitromica esperanza (Leal & Moore, 1993) is smaller, yellowish to brown in colour, with more numerous ribs and cords.

Mitromica foveata (G.B. Sowerby II, 1874) is proportionally wider and smaller, very variable in colour, and with the ribs and cords proportionately wider.

Etymology. After Pedro Pablo Gallego, Dean of the Faculty of Biology, University of Vigo.

REFERENCES

- Abbott, R. T. 1974. *American Seashells*. Van Nostrand Reinhold Company, New York. 663 pp., 24 pls.
- Petuch, E. J. 1987. *New Caribbean Mollusca Faunas*. CERF, Charlottesville, Virginia. 154 pp.
- Rosenberg, G. & Salisbury, R. 2003. On *Mitromica* and *Thala* (Gastropoda: Costellariidae) with descriptions of new species from the Western Atlantic and the Indo-Pacific. *Notulae Naturae*, 478: 1-30.
- Vokes, H. E. & Vokes, E. H. 1984 "1983". Distribution of shallow-water marine Mollusca, Yucatan Peninsula, Mexico. *Mesoamerican Ecology Institute, Monograph 1*: 1-183, 50 pls.

Figures 1-5. *Mitromica gallegoi* spec. nov.

1-3. Holotype, 7.4 mm, Witties Cay, Nicaragua (MNCN);

4. Paratype, 7.0 mm, type locality (MNHN);

5. Protoconch of the holotype.

