

A new species of *Murchisonella* (Heterobranchia, Murchisonellidae) from Cuba

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Abstract. A new species of the genus *Murchisonella* is described and compared with the other species known from the Caribbean.

Resumen. Se describe una nueva especie del género *Murchisonella* comparándola con la otra especie ya conocida del Caribe.

INTRODUCTION

Recently a world-wide revision of the genus *Murchisonella* (Peñas & Rolán, in press) showed that only one species is known from the Caribbean waters: *Murchisonella spectrum* Mörch, 1875 with the synonyms *Aclis bermudensis* Dall & Bartsch, 1911 and *Bernudaclis tampaensis* Bartsch, 1947. This species is well known and presented in many publications (for example, Redfern, 2001: 151, pl.67). In the collection of samples taken by the second author (RFG) from several localities in Cuba some shells of an unknown species of this genus were found. The preservation of these shells indicates they may have originated from quaternary deposits.

Abbreviations

MCZ: Museum of Comparative Zoology, Harvard University, Cambridge, U.S.A.

MHNS: Museo de Historia Natural, Santiago de Compostela, Spain.

MNCN: Museo Nacional de Ciencias Naturales, Madrid, Spain.

MNHN: Muséum National d'Histoire Naturelle, Paris, France.

IES: Instituto de Ecología y Sistemática, Havana, Cuba.

USNM: National Museum of Natural History, Washington, D.C., U.S.A.

CFG: collection of R. Fernández-Garcés.
s: empty shell.

SYSTEMATICS

Family MURCHISONELLIDAE Casey, 1904

Genus *Murchisonella* Mörch, 1875

Type species: *Aclis* (*Murchisonella*) *spectrum* Mörch, 1875, by monotypy.

Murchisonella ultima spec. nov.

Figs 1-4

Type material. Holotype (Fig. 1) in MNCN (15.05/60062, s). Paratypes: MNHN (IM-2012-28, 1 s, Fig. 2); MHNS (100576, 3 s); CFR (3 s); all from the type locality. Other paratypes: IES (1 s) CFG (1 s) from Calicito, Cienfuegos Bay, 22°07.970'N, 80°29.824'W, 12 m, Cuba; MCZ (1 s) from Los Pinitos, Cienfuegos Bay, 22°07.886'N, 80°27.313'W, 8-10 m, Cuba; CFG (5 s) Cienfuegos Bay, Cuba.

Type locality. North of Cuba, mouth of the Sagua River, Villa Clara Province, 22°57'36"N, 80°00'47"W, in sediments 4.5 m depth.

Etymology. The species name derives from the Latin *ultimus*, -a, -um, alluding to be the last species found after a large revision of this group (in press).

Description. Shell (Figs 1-3) small, subcylindrical, whitish and fragile. Protoconch (Fig. 4) typical for the genus, smooth, at one level, with a diameter of about 200 μm , small nucleus (diameter about 20 μm) and a clear separation from the teleoconch. Teleoconch with about 4 ½- 5 whorls, slightly convex, whorl height slowly increasing, from the start having about 9 spiral grooves that are regularly distributed over the whorl and are crossed by numerous and irregular axial folds. From the second whorl the folds on the upper part of the whorls (between the 4 upper grooves) are clearly opistocyrte (curved backward), while those of the lower part are prosocyrte (curved forward). These folds are narrow and numerous (about 130 by whorl). There is no clear separation between the upper and lower parts of the whorls except for the switch in microsculpture curvature. Aperture rounded; columella slightly curved lacking any fold or tooth.

Dimensions: The holotype is 1.25 mm high. The other shells have a similar size.

Distribution. Only known from the type material, from the north and south coasts of Cuba.

Remarks. The only known congeneric species in the Caribbean (*M. spectrum*) is larger (up to 3 mm), with a more conic profile, an evident step separating the upper and lower parts of the whorls, less and wider spiral grooves, and less developed axial sculpture.

We wanted to make a comparison with *Henrya morrisoni* Bartsch, 1947 (Murchisonellidae) which has a similar size, but the holotype of that species in the USNM (sample 573636) has been lost (pers. comm. Ellen Strong and Yolanda Villacampa). In the description of this species Bartsch (1947) mentions that its whorls are “strongly rounded” and the “suture

strongly constricted”, which differentiates it from our new species. Shells of 1.4 mm high have 5.4 whorls. The specimen of *H. morrisoni* illustrated in Redfern (2001: plate 67) has strongly convex whorls and constricted suture and therefore probably is *Henrya henryi*. In the original description of *H. morrisoni* there is no mention of spiral grooves as are present in the species here described. The two other species of this Caribbean genus described by Bartsch (1947) are *H. henryi* and *H. goldmani*. Both are larger (the types measure 2.1 mm high with 6.3 whorls (*H. henryi*) and 2.0 mm high with 6 whorls (*H. goldmani*) and the whorls are strongly convex.

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Figures. 1-7. *Murchisonella ultima* spec. nov.

1. Holotype, 1.25 mm, Sagua (MNCN); 2. paratype, 1.2 mm, Sagua (MNHN); 3. paratype, 1.3 mm, Calicito, Cienfuegos Bay (IES); 4. apex and protoconch; 5-7. microsculpture and detail.

