

**A NEW MEDITERRANEAN SPECIES OF *MANGELIA* RISSO, 1826
(GASTROPODA: CONOIDEA: MANGELIIDAE),
DESCRIBED FROM THE MALTESE ISLANDS**

Charles CACHIA¹

ABSTRACT

Mangelia mifsudi n. sp. is described from shells collected from Maltese littoral and circalittoral waters.

Keywords: Mangeliidae, *Mangelia*, new species, Maltese Islands, Mediterranean

SINTEŻI

[Speċi Mediterranja ġdida ta' *Mangelia* Risso, 1826 (Gastropoda, Conoidea, Mangeliidae), deskritta mill-Gżejjer Maltin.] *Mangelia mifsudi* n. sp. hija deskritta minn kampjuni miġburin mill-ibħra littorali u ċirkalittorali Maltin.

Kliem muftieħ: Mangeliidae, *Mangelia*, speċi ġdida, il-Gżejjer Maltin, Mediterran

INTRODUCTION

According to MolluscaBase (<https://www.molluscabase.org/>; last accessed 28 Oct. 2024) the genus *Mangelia* Risso, 1826, of the neogastropod family Mangeliidae Fischer, 1883, consists of 125 species. Of these, 16 recent species are accepted for the Mediterranean, as listed in the checklist of the Società Italiana di Malacologia (<https://www.societaitalianadimalacologia.it/>; last accessed 28 Oct. 2024 see also GRUPPO MALACOLOGICO LIVORNESE & GRUPPO MALACOLOGICO ROMAGNOLO, 2005; SCAPEROTTA et al., 2014; ÖZTÜRK, 2021; SPADA et al., 2022; and GIANNUZZI-SAVELLI et al., 2023). CACHIA et al. (2001: 51) list 15 species for Maltese waters, this list rises to 18 in CACHIA et al. (2019: 111); this difference results from synonymizations, new descriptions, and transfers of former '*Mangelia*' species to *Bela* Leach, 1847, *Pseudomangelia* Sabelli & Spada, 2023, *Pyrgocythara* Woodring, 1928, *Smithiella* Monterosato, 1890, and *Villiersiella* Monterosato, 1890.

In this contribution, a new species is described from material collected from Maltese waters.

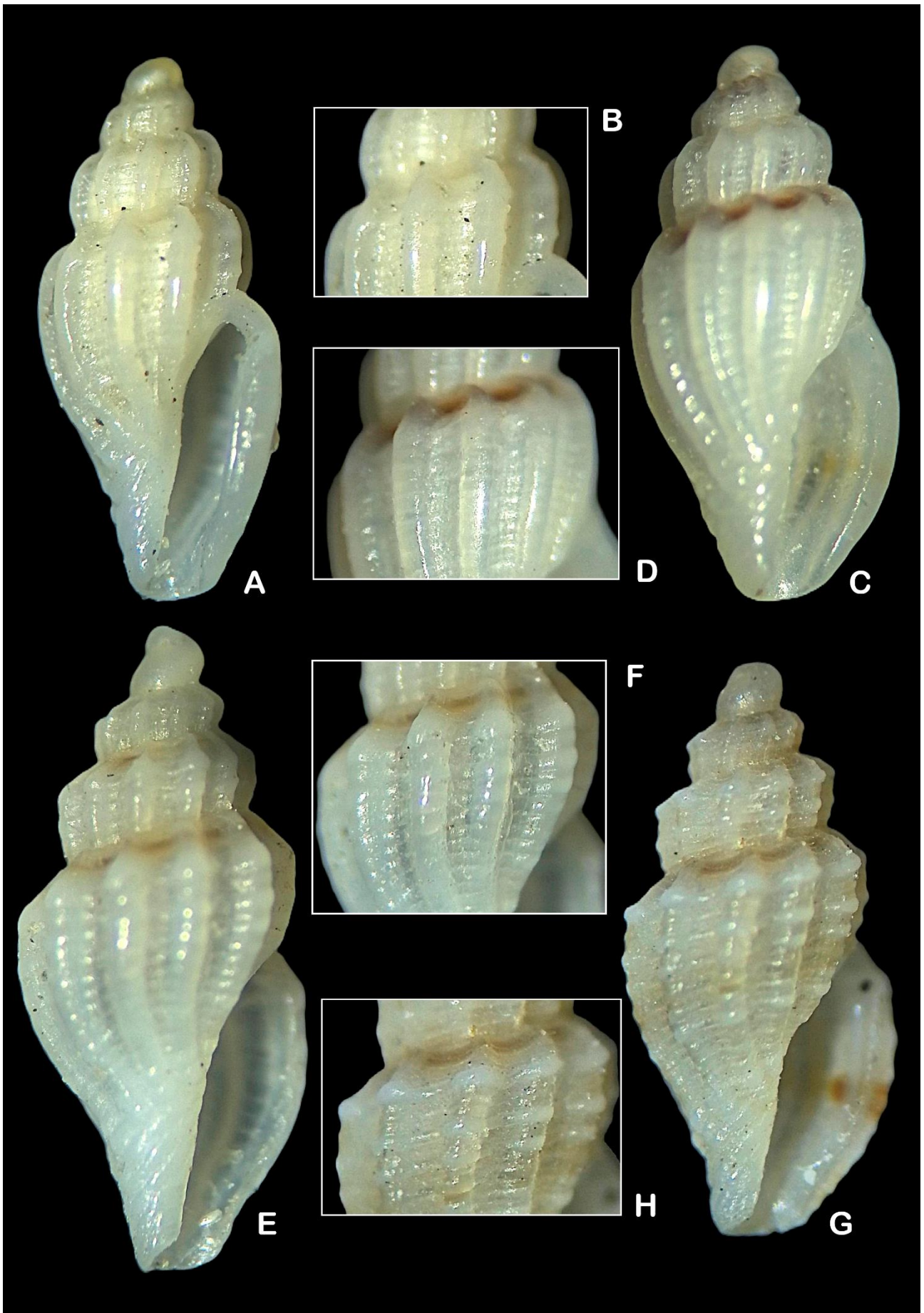
MATERIALS AND METHODS

Only a few fresh, empty shells of the new species could be obtained. These were isolated from bioclastic detritus collected from Maltese waters at depths of 5 to 60 m.

SYSTEMATICS

Class Gastropoda Cuvier, 1795
Order Neogastropoda Wenz, 1938
Superfamily Conoidea Fleming, 1822

¹ 1, Alley 1, St. Catherine Street, Qormi, QRM 2211, Malta; meditconch491@gmail.com.
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Pl. 1 Figs. A–H: Mediterranean species of *Mangelia* Risso, 1826. **A–D:** *Mangelia mifsudi* n. sp. **A, B:** Holotype of *Mangelia mifsudi* n. sp., from detritus taken at c. 5 m depth, Salina Bay, Malta, Aug. 2005, C. CACHIA leg. (National

Museum of Natural History, Mdina, Malta, NMNH-MOL-4602), with detail of the body whorl. **C, D:** Paratype 1 of *Mangelia mifsudi* n. sp., from 3–5 m depth, Salina Bay, Malta, Sep. 1980, C. CACHIA leg. (coll. C. CACHIA, no. 562/1), with detail of the body whorl. **E–H:** *Mangelia thapsiae* (Oberling, 1970). **E, F:** *Mangelia thapsiae* (Oberling, 1970), from detritus taken at c. 5 m depth, Salina Bay, Malta, Aug. 2005, C. CACHIA leg. (coll. C. CACHIA), with detail of the body whorl. **G, H:** *Mangelia thapsiae* (Oberling, 1970) [*Mangiliella angelinae* Cecalupo & Quadri, 1996 morphotype], from Macronissos, Cyprus, Mar. 1996 (coll. C. CACHIA), with detail of the body whorl.

Family Mangeliidae Fischer, 1883

Genus *Mangelia* Risso, 1826

***Mangelia mifsudi* n. sp. (Pl. 1 Figs. A–D)**

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Type material (material studied):

MALTA • **holotype:** 1 shell; Salina Bay; in detritus taken at c. 5 m depth; Aug. 2005; C. CACHIA leg.; National Museum of Natural History, Mdina, Malta, NMNH-MOL-4602 (3 mm × 1.75 mm).

MALTA • **paratypes:** 5 shells (3 adult + 2 subadult); Salina Bay; at 3–5 m depth; Sep. 1980; C. CACHIA leg.; coll. C. CACHIA, no. 562/1–5 • 1 shell; Rdum id-Delli; at 60 m depth; C. MIFSUD leg.; coll. C. CACHIA, no. 562/6 • 2 shells; Birżebbuġa; beached; C. CACHIA leg.; coll. C. CACHIA, no. 562/7–8 • 2 shells; Birżebbuġa; beached; C. CACHIA leg.; coll. C. MIFSUD, M1746a.

Type locality: Salina Bay, Malta.

Etymology: The new species is dedicated to Constantine MIFSUD (Rabat, Malta), long term friend and colleague of the author.

Distribution: Hitherto only known from localities off the Maltese coast.

Description: Shell fusiform, rather solid, 3 to 4 mm in height. White to cream in colour; in one specimen, a thin subsutural brown stripe, and another rather faint intermittent one on the middle of the body whorl, appear. Protoconch paucispiral, white, and smooth. Axial sculpture composed of orthocone to slightly opisthocone smooth ribs, 11 on the body whorl, which are equal to the interspaces in thickness. Spiral sculpture composed of flattened spiral chords of equal thickness, separated by rather linear interspaces, and present only between the axial ribs. Teleoconch whorls 4 to 5, regularly convex, without any hint of angulation. Aperture slightly more than half the total shell height. Siphonal canal short. Inner apertural lip smooth.

DISCUSSION

The subfamily Mangeliinae Fischer, 1887 was discussed by VAN AARTSEN & FEHR-DE WAL (1978) with the establishment of four new species. They grouped the European species of *Mangelia* under two genera: *Mangelia* and *Mangiliella* Bucquoy, Dautzenberg & Dollfus, 1883, distinguished mainly by (1) the type of protoconch, i.e. respectively multispiral and paucispiral, (2) the type of spiral sculpture present on the shell. From the *Mangiliella* group (now accepted as *Mangelia*, see BOUCHET, 1990), *Mangiliella fieldeni* van Aartsen & Fehr-de Wal, 1978, now recognized as *Mangelia thapsiae* (Oberling, 1970) (**Pl. 1 Figs. E–H**), has a spiral sculpture of ‘few relatively strong spiral bands’ (VAN AARTSEN & FEHR-DE WAL, 1978: 109). This type of spiral sculpture in fact occurs only in *Mangelia thapsiae*, easily distinguishing this species from all other Mediterranean *Mangelia* species.

Mangelia mifsudi n. sp. also belongs to this group. However, it differs from *M. thapsiae* by the following important and reliable characteristics: (a) teleoconch whorls that are regularly convex in *M. mifsudi*, but that present a clear, often sharp, angulation at the adapical third of the whorls in *M. thapsiae* (b) spiral cords that are present only between the ribs in *M. mifsudi*, but that cross over the ribs in *M. thapsiae*, where they can be quite prominent (as in *Mangiliella angelinae* Cecalupo & Quadri, 1996, considered a junior subjective synonym of *M. thapsiae*) (**Pl. 1 Figs. G, H**) (c) shells

of *M. mifsudi* that are consistently smaller than those of *M. thapsiae* at the same number of whorls (d) a protoconch that in *M. mifsudi* is less prominent and slightly smaller, and in *M. thapsiae* more prominent and slightly bigger, and in *M. mifsudi* joining the teleoconch whorls without any change in sculpture, whereas this transition in *M. thapsiae* is marked by a few thin axial striae.

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