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First record of fossil *Jujubinus curinii* Bogi et Campani, 2006 (Gastropoda Trochidae) in north-eastern Sicily (Italy)

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ABSTRACT The discovery of a fossil specimen of *Jujubinus curinii* Bogi et Campani, 2006 (Gastropoda Trochidae) is reported from the geologic stage of "Milazziano" (Tyrrhenian, Pleistocene) located at Capo Milazzo, North-Eastern Sicily. The specimen has been found during a study on the *Jujubinus* Monterosato, 1884 material stored in the Monterosato's collection at the Museo Civico di Zoologia of Rome, Italy.

KEY WORDS Gastropoda; Trochidae; *Jujubinus curinii*; fossil; Sicily; Italy.

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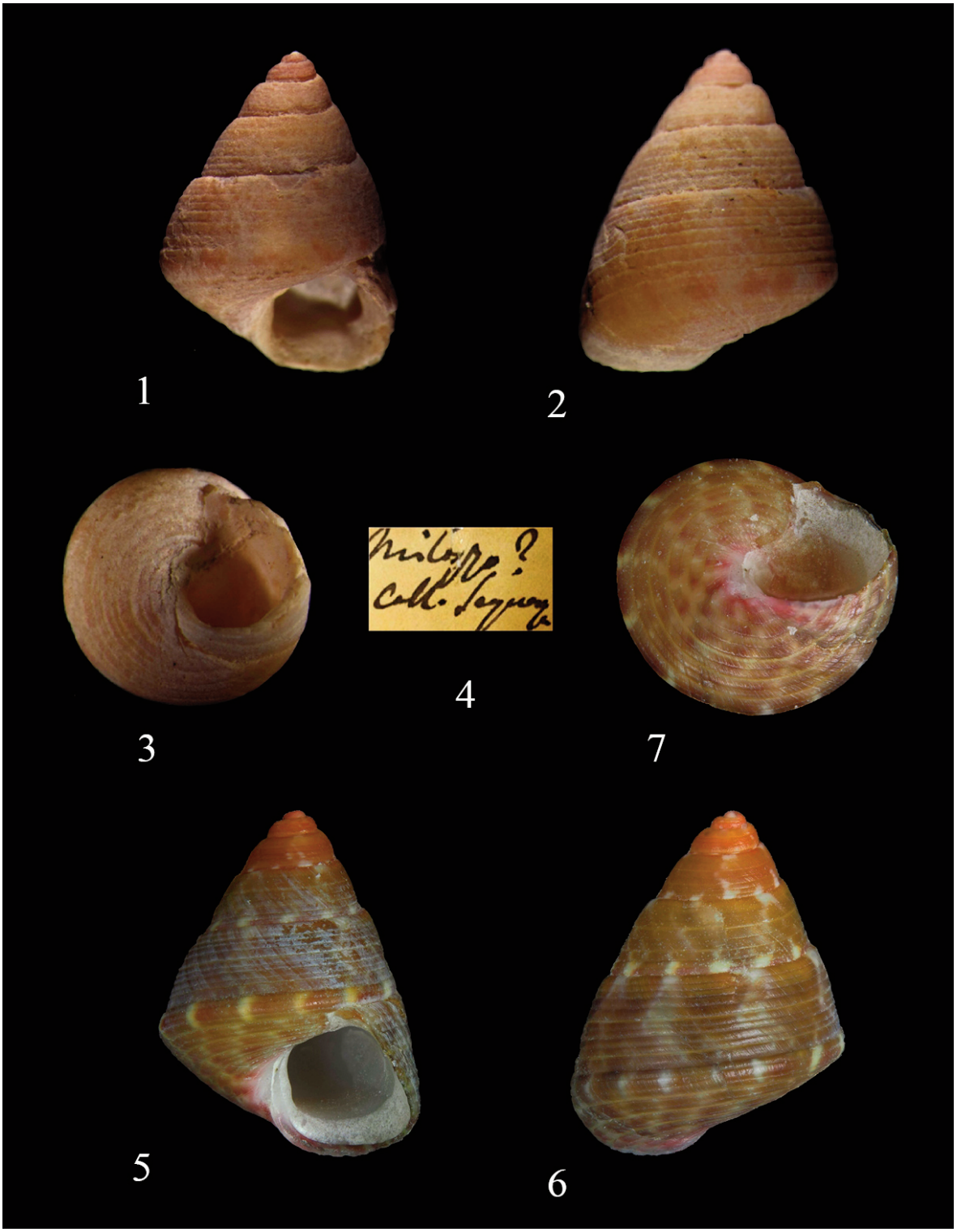
INTRODUCTION

Nowadays, the genus *Jujubinus* Monterosato, 1884 (Gastropoda Trochidae) is represented in the eastern European Ocean and the Mediterranean Sea by 18 species according to CLEMAM (Gofas & Le Renard, 2017). Most of them live in the intertidal zone down to about 80 meters, and are constantly associated with photophilic algal vegetation and/or marine phanerogams (Mariottini et al., 2013).

The *Jujubinus* shell usually displays a slender trochiform shape, with a marked sculpture consisting of 4 to 8 spiral threads variable in size, often beaded, an evident basal cord, and with tiny prosocline lamellae within thread interspaces (Monterosato, 1884). The taxon *Jujubinus curinii* Bogi et Campani, 2006 has a peculiar shell morphology, consisting in a completely smooth sculpture lacking the typical interspaced prosocline lamellae and with a reduced basal cord (Bogi & Campani, 2006). These characters have been observed on other recently described species of the *J. curinii* complex, which have increased the number of the so-called "smooth" *Jujubinus* (Smriglio et al., 2014; Smriglio et al., 2015). Nowadays, this group of species sharing those two diagnostic features is composed of four members: *J. curinii*; *J. eleonorae* Smriglio, Di Giulio et Mariottini, 2014; *J. trilloi* Smriglio, Di Giulio et Mariottini, 2014; and *J. alboranensis* Smriglio, Mariottini et Oliverio, 2015. With the present short note, we report for the first time a fossil specimen of this taxon, which we have found during a study on the *Jujubinus* material stored in the Monterosato collection at the Museo Civico di Zoologia of Rome (Italy).

MATERIAL AND METHODS

During an investigation on the *Jujubinus* ma-



Figures 1–4. *Jujubinus curinii* Bogi et Campani, 2006. Fossil specimen, H: 5.3 mm, D: 4.4 mm. Plan "Milazziano" of Capo Milazzo. Frontal, dorsal and basal views (Figs. 1–3). Monterosato's original label, Monterosato collection (MCZR-11670) (Fig. 4). Figures 5–7. *Jujubinus curinii*. Recent specimen, H: 4.2 mm, D: 2.8 mm. Scilla, Reggio Calabria, Italy, 42 m depth. Frontal, dorsal and basal views. CS-PM collection.

terial present in the Monterosato's collection at the Museo Civico di Zoologia di Roma (MCZR), we could separate a specimen of *J. curinii* from a lot of five *J. exasperatus* (Pennant, 1777) (drawer E/12; MCZR-11670).

ABBREVIATIONS. CS-PM = private collection Carlo Smriglio-Paolo Mariottini, Rome, Italy; D = diameter; H = height; MCZR = Museo Civico di Zoologia di Roma, Rome, Italy.

RESULTS

Systematics

Phylum MOLLUSCA Cuvier, 1797
Classis GASTROPODA Cuvier, 1795
Subclassis VETIGASTROPODA Salvini-Plawen, 1980
Superfamilia TROCHOIDEA Rafinesque, 1815
Familia TROCHIDAE Rafinesque, 1815
Genus *Jujubinus* Monterosato, 1884

Jujubinus curinii Bogi et Campani, 2006
(Figs. 1–4, 5–7).

The *J. curinii* species complex comprises four "smooth" members: *J. alboranensis*, *J. curinii*, *J. eleonorae*, and *J. trilloi* Smriglio (Bogi & Campani, 2006; Smriglio et al., 2014; Smriglio et al., 2015). Unfortunately, no molecular analyses are available to shed light on the phylogenetic relationship of this group with the other members of the genus *Jujubinus* s.s. We had the chance to come across a very well conserved and still coloured fossil specimen, stored in the Monterosato's collection at the MCZR, which was easily identified as *J. curinii* (Figs. 1–4, 5–7) and separated from a lot of five *J. exasperatus*. The Monterosato's handwritten label indicates that the material was sent to him by Giuseppe Seguenza, from a questionable locality (Milazzo with a question mark). In spite of that, the collecting locality can be fairly trustworthy, since it refers to the well characterized Pleistocene Milazziano section of the Milazzo Peninsula (Messina Province, Sicily) deposits (Ruggieri & Greco, 1965; Ruggieri, 1967; Micali & Villari, 1991), and investigated in the past by Seguenza (1903, 1908). We would like to recall that the Pleistocene Milazziano is a controversial geological period between the Sicilian and Tyrrhenian Termination I (upper Pleistocene/Holocene boundary dated at 11,500 yr BP according to Cita et al., 2005) chronostratigraphic stages, typically represented in marine facies by the Milazzo's fossil bench, and with temperate fauna composed almost exclusively of molluscs and corals (Ruggieri & Greco, 1965; Cita et al., 2005). This report for the first time assigns a temporal placement of *J. curinii*, dating back in a range from 130,000 to 11,500 yr BP (Cita et al., 2005).

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