

Contributions to triviid systematics (Mollusca: Gastropoda), 12. A new *Trivia* species from the Italian Pliocene

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A new triviid species from the Italian early Late-Pliocene, *Trivia mienisi*, is described as new and is compared with similar *Trivia* species.

KEY WORDS: Gastropoda, Triviidae, Piacenzian, Pliocene, Italy, new taxon.

Introduction

In 2003, Fehse & Landau reviewed the trivoid gastropods of the Early Pliocene from the Estepona area (southern Spain). Within this study the types of all known Pliocene triviids were shown, many of them for the first time. In preparation of a revision of the recent European Triviidae it was possible to examine the large collection of the Hebrew University (Jerusalem, Israel). The University accommodates the collection of the late Giorgio Silvio Coen, an Italian Malacologist. Coen (1949) has described many "new varieties" and two "new species" of cowries based on specimens within his collection. According to Schilder (1964:103) many of the new names are of no scientific value for several individual reasons (compare Mienis, 1979). Among the recent material, many fossil specimens from the Italian Pliocene were found. Several specimens lacked a dorsal sulcus, which we found remarkable. It emerged that they are distinguished from all other known species and, therefore, we described them as a new taxon.

Abbreviations —

HUJ Hebrew University, Jerusalem, Israel
L length of shell
W width of shell
H height of shell
LT total number of labral denticles
CT total number of columellar ribs along the parietal lip
RR number of dorsal ribs (compare Fehse & Landau, 2003)

Systematic palaeontology

Superfamily Trivioidea Troschel, 1863

Family Triviidae Troschel, 1863

Subfamily Triviinae Troschel, 1863

Genus *Trivia* Broderip, 1837

Type species — *Cypraea europaea* Montagu, 1808, by monotypy.

Trivia mienisi n. sp.

Figures 1-3.

Types — Holotype and paratypes are HUJ 9720-1 to HUJ 9720-13

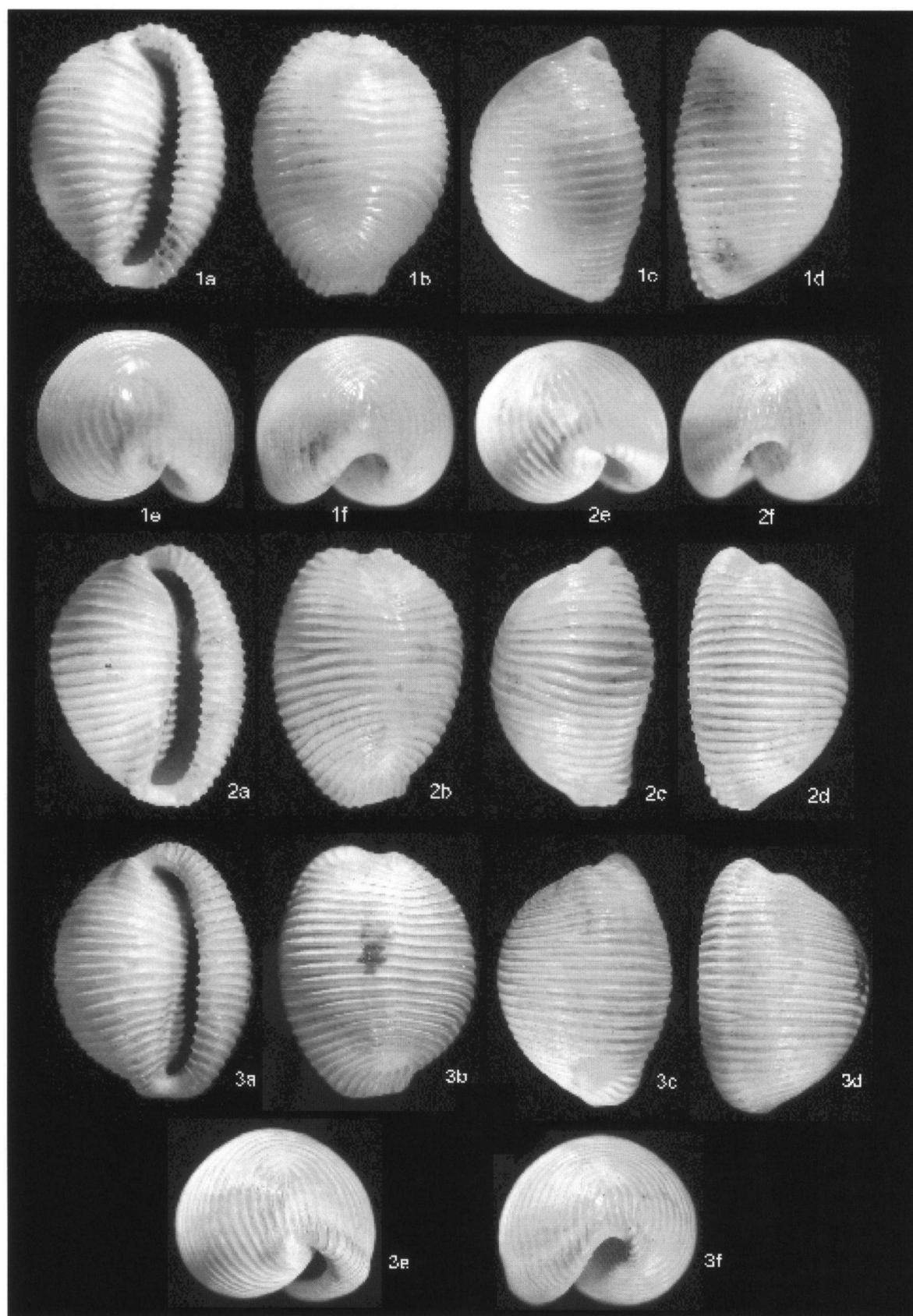
Type locality and horizon — Piacenzian, Pliocene, Ficarazzi province, Italy.

Derivation of name — Named in honour of Henk Mienis, collection manager of the Hebrew University (Jerusalem, Israel), who made the material available for study.

Distribution — Known only from Ficarazzi, Italy.

Material studied — 13 specimens from the type locality (HUJ Colln).

Measurements — Maximum length and width up to 12.7 mm and 9.9 mm, respectively, but on average 11.8 mm and 9.1 mm, respectively; L/W ratio 1.31.



Figures 1-3. *Trivia mienisi* n. sp. from the Piacenzian, Pliocene of Ficarazzi (Italy) (photos J. Grego).
1 a-f – HUI 9720-1 (holotype); original size = 12.6 mm.
2 a-f – HUI 9720-2 (paratype); original size = 12.4 mm.
3 a-f – HUI 9720-3 (paratype); original size = 12.0 mm.

Holotype: L = 12.6 mm, W = 9.4 mm, H = 8.0 mm, LT 20, CT 20, RR 36

Paratype 1: L = 12.4 mm, W = 9.2 mm, H = 7.5 mm, LT 21, CT 18, RR 32

Paratype 2: L = 12.0 mm, W = 9.4 mm, H = 8.1 mm, LT 22, CT 18, RR 30

Description — The shell is medium-sized, light-weight, solid and inflatedly ovate. The spire is slightly elevated, covered by callus, faintly visible beneath two vertical riblets extending upwards from the posteriorly terminal. The body whorl is inflated and ovate, about 95% of total height, with both terminals slightly produced posteriorly. The terminal tips are blunt. The dorsum is evenly roundly elevated, without even a dorsal depression. The dorsum is completely covered by 30-36 strong, irregular ribs with interstices of the double width of the ribs. Some of the dorsal riblets terminate anywhere on the shell, others become fused. The ventrum is convex with straight terminals. The aperture is semicircularly curved, narrow, barely wider at fossular section. The labrum is roundly callused, narrow, slightly curved, keeled towards its inner margin. The outer labral margin roundly callused with a small shoulder. On its inner margin the labrum bears 20-22 fine, somewhat irregular denticles with interstices of variable width. The siphonal and anal canal are shallowly indented. Both are bordered adapically and abapically by callused and rounded ventral side-walls. The columella and fossula are less developed. The columella is straight, narrow, tapering steeply inwards. The parietal lip is not developed, bearing 18-20 fine ribs, continued as finer folds onto the columella and fossula. The fossula is slightly concave and not clearly delimited from the rest of the columella. The inner fossular edge is slightly protruded and denticulated.

Range of variation — The posterior terminal tip is sometimes slightly indented.

Discussion — *Trivia mienisi* n. sp. differs from *Trivia coccinelloides* (Sowerby, 1823), *Trivia candidula* (Gaskoin, 1836) and from *Trivia acuminata* Schilder, 1932, by the less produced terminals, narrower labrum and the less developed, narrower columella and fossula. The columella is not concave in *T. mienisi* and a parietal lip is lacking. Similarly, the recent *Trivia arctica* (Pulteney, 1799) and the Pleistocene to recent *Trivia hispania* Cate, 1979, are distinguished from the new species. Both recent species possess also a dorsal hump that make them different from the fossil taxon.

Trivia sphaericulata (Lamarck, 1810) is clearly distinct from the new species by its globose shell, that is also usually larger. In a similar way differs *Trivia perobsoleta* Sacco, 1894, from *T. mienisi* but *T. perobsoleta* is especially characterized by the obscured ribbing.

The shell in *Trivia frigida* Schilder, 1932, is more inflated, the columella, fossula, anal canal and terminals are less developed, the dorsum is more erect and the number of dorsal ribs is lower (26-30 in *T. frigida* vs. 30-36 in *T. mienisi*).

Trivia mienisi differs from the Pleistocene to recent *Trivia monacha* (Da Costa, 1778) by the less developed, narrower columella, fossula and labrum, more elevated spire and there is neither a dorsal depression nor callosity on the mid-dorsum usually seen in *T. monacha*.

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References

- Fehse, D. & Landau, B. 2003. Contributions to triviid systematics (Mollusca, Gastropoda), 6. Early Pliocene Triviidae from the western Mediterranean. *Cainozoic Research* 2: 87-107.
- Mienis, H.K. 1979. On the authorship of *Trivia adriatica*. *Unione Malacologica Italiana, Bollettino Malacologico* 15, 37-40.
- Schilder, F.A. 1964. The Cowries Established by Coen in 1949. *The Veliger* 7, 103-107.