

# The genus *Chrysallida* Carpenter, 1856 on the Turkish coasts

(Gastropoda: Heterostropha)

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**Abstract.** The examination of benthic material collected from different depths and habitats along the Turkish Levantine, Aegean, and Black Sea coasts between the years 1996 and 2010 revealed 19 species of *Chrysallida* Carpenter, 1856. Among them, *Chrysallida palazzii* Micali, 1984 is new to the Levantine Sea and Turkish mollusc fauna, *C. terebellum* (Philippi, 1844) is new to the Turkish Levantine, Aegean and Black Sea coasts, *C. dollfusi* (Kobelt, 1903) is new to the Turkish Levantine coast, 7 species [*C. decussata* (Montagu, 1803), *C. flexuosa* (Monterosato, 1874), *C. incerta* (Milaschewitsch, 1916), *C. indistincta* (Montagu, 1808), *C. intermixta* (Monterosato, 1884), *C. jeffreysiana* (Monterosato, 1874), and *C. suturalis* (Philippi, 1844)] are new reports for the Turkish Aegean coast, and *C. fenestrata* (Jeffreys, 1848) is new for the Turkish coast of the Black Sea. Two species [*C. maiiae* (Hornung & Mermod, 1924) and *C. micronana* Öztürk & Aartsen, 2006] are alien species that entered the Mediterranean in last three decades. The identified species, apart from *C. obtusa* (Brown, 1827) and *C. flexuosa*, were found to be distributed at depth ranges from 0 to 100 m. The last two species were from deeper waters. *C. obtusa* was found to have a wide depth range from 5 m to 875 m, whereas *C. flexuosa* was significant as the deepest species, found at 875 m. Some ecological characteristics and taxonomic remarks, with distribution features of the identified species along the Turkish coasts, are also provided.

**Key words.** *Chrysallida*, Mollusca, new records, Levantine Sea, Aegean Sea, Black Sea, Turkey.

## Introduction

The species of the genus *Chrysallida* Carpenter, 1856 are characterised by rissoid shells with intorted protoconch whorls, with or without a tooth on the columella, and with axial and spiral ribs of about equal strength (AARTSEN et al. 2000). They are small pyramidellid molluscs, which are known to be ectoparasites feeding on the body fluids of invertebrates, such as polychaetes, molluscs and echinoderms (ROBERTSON & MAU-LASTOVICKA 1979), although the degree to which pyramidellids are host-specific is still not fully resolved. Species of this genus differ from the other pyramidellids by having a smooth or ribbed protoconch of type C or B (PEÑAS & ROLÁN 1998). The Mediterranean species have a smooth protoconch, except for *Chrysallida moolenbeeki* Amati, 1987, which has a ribbed protoconch, although in the eastern Atlantic there is an increased number of species with sculptured protoconch (PEÑAS & ROLÁN 1998).

In the Mediterranean and eastern Atlantic, and especially in the last three decades, many papers have dealt with pyramidellid species and have made a considerable contribution to knowledge of their taxonomic, ecological and distribution features. AARTSEN (1977) dealt with the distribution of *Chrysallida* along the European coasts; he reported 27 species, for which he also gave an identification key. He also included in his study the species without