

Abstract

The examination of chitons (Polyplacophora) associated with sandy bioclastic sediments collected in the southwestern Adriatic Sea (Mediterranean Basin) revealed the presence of three previously undescribed species: *Leptochiton elisabettae* **sp. nov.**, *L. gatae* **sp. nov.**, and *Ischnochiton falkori* **sp. nov.** The latter two species preserve dried soft parts, allowing preliminary anatomical observations, particularly of the girdle. In addition, the studied sediments yielded valves of rare and recently described taxa (*Leptochiton antondhorni*, *L. salicensis* and *Ischnochiton sigwartae*), enabling refinement of their shell morphological characters. Notably, some species identified in these submerged deposits known only from disarticulated valves (*L. salicensis* and *I. sigwartae*) had been previously recorded exclusively from onshore Pleistocene deposits of Italy. Their presence in the Recent Mediterranean fauna remains unconfirmed and has so far been interpreted as representing palimpsest late Pleistocene fossils within this basin. The Polyplacophoran fauna of the Mediterranean basin presently comprises approximately 50 species, including a few taxa known only from putative last-glacial fossil records. It is foreseeable that this number will increase further, owing to more in-depth investigation of previously poorly explored habitats, not only in deep-sea environments, and to the increasingly widespread use of molecular techniques.

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