



<http://dx.doi.org/10.11646/zootaxa.3683.1.6>

<http://zoobank.org/urn:lsid:zoobank.org:pub:6E836BFE-8AAC-43B5-AD3C-44EF15967436>

### **A new species of *Platyla* (Mollusca: Gastropoda: Aciculidae) fills a biogeographic gap in the Mediterranean**

CRISTIAN R. ALTABA

*Dpt. Philosophy & Social Work, Universitat de les Illes Balears, 07122 Palma, Balearic Islands (Spain).*

*Laboratori de Natura, Museu de Ciències Naturals de Barcelona, Pg. Picasso s/n, 08003 Barcelona, Catalonia (Spain)*

*E-mail: cristianr.altaba@uib.cat*

The family Aciculidae Woodward, 1854 is endemic to the southwestern Palaearctic and includes tiny operculate land snails living in the soil or underground, and seldom encountered. The genus *Platyla* Moquin-Tandon, 1856 is restricted to Europe west of the Great and Pannonian Steppes, occurring on islands only in the Ionian Sea off Greece, along the Dalmatian coast of Croatia, and in the Tyrrhenian Sea on Sicily, Sardinia and Elba (Boeters *et al.* 1989; Cianfanelli *et al.* 2000; Bodon & Cianfanelli 2008; Subai 2009). Its absence from the Balearic archipelago remained as a puzzling gap, given its palaeogeographic relationship with surrounding land masses. Herein I describe a very rare new species of *Platyla* from the island of Mallorca, which is most similar to congeners living in Sicily, around the Adriatic and in the Pyrenees, supporting the hypothesis of Neogene vicariance through microplate dispersal in the western Mediterranean.

Intensive search of non-marine Mollusca throughout the Balearics during the last four decades yielded only a single site inhabited by Aciculidae. The first specimen (an empty shell) was found in the rugged head of a temporary stream in the Special Area of Conservation "la Victòria". After thoroughly searching the area, four more shells were collected among debris at the stream's mouth. Several species in this family are likewise known from very few, or even single specimens, attesting to their rarity, troglomorphic habitats and sparse distribution. Shells were carefully cleaned with distilled water and amylase, with the aid of a fine brush and dissecting tweezers. They were examined and photographed with a Nikon D100 camera mounted on an Olympus SZ40 scope. Composite full-focused images were obtained with Helicon software and mounted with GIMP, and enlarged photographs were used as template for drawing from natural with precise dimensions. Specimens are deposited at the Museu de Ciències Naturals de Barcelona (MZB) and the author's scientific collection (CRA). The classification of plant communities follows Llorens *et al.* (2007).

#### ***Platyla jordai* sp. nov.**

Figures 1, 2.

**Holotype.** MZB 2013-0005 (fig. 1), fresh, 3.2 mm shell height (SH), collected among water-borne debris close to the seashore mouth of the temporary stream Torrent de s'Aladernar, on the NW side of La Victòria peninsula on the northern coast of Mallorca (39° 52' 12.93" N, 3° 9' 25.67" E; UTM 31T EE 3845 3637), 14 February 2013.

**Paratypes.** Three older shells collected with holotype, 3.2 to 3.3 mm SH (Paratype 1 MZB 2013-1926; paratypes 2 and 3 CRA-13803). One shell, also rather old, 3.5 mm SH, found under palmetto (*Chamaerops humilis*) shrubs at 280 m altitude, in the steep canyon walls at the uppermost reach of the dry seasonal mountain brook tributary to the left of Torrent de s'Aladernar, on the N side of Talaia d'Alcúdia, the area's highest peak (39° 52' 2.39" N, 3° 10' 9.87" E; UTM 31T EE 4642 1310), 29 May 2009 (paratype 4, CRA-13711, fig. 2)

**Diagnosis.** A slender, pale yellowish brown except for the nearly ivory white aperture, medium-sized (for the genus) *Platyla* species with about six progressively flattened whorls, a deep suture underlined by a narrow but conspicuously raised and delimited keel, strong parietal callus with inconspicuous angular denticle, and a strongly raised, posteriorly concave cervical crest taller than the reflected, ortho- to opisthocline peristome.

**Description.** Shell narrow conical with wide blunt apex, pale yellowish brown, semitranslucent, 3.2–3.5 mm high, 1.2–1.3 mm wide. Spire with  $5\frac{1}{2}$ – $6\frac{1}{4}$  whorls, initially well inflated but progressively flattened, especially in middle part. Last whorl slightly less than half shell height (46–48%) and noticeably flattened laterally, giving appearance of a blunt angle as it joins more strongly curved area around closed umbilicus. Shell surface smooth, with general waxy shine due