Dizoniopsis coppolae (Aradas, 1870) (Gastropoda, Cerithiopsidae) in the Bay of Biscay

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MOTS CLEFS. Cerithiopsidae, *Dizoniopsis coppolae*, distribution, Golfe de Gascogne, Espagne.

ABSTRACT. *Dizoniopsis coppolae* (Aradas, 1870) is illustrated from the Bay of Biscay. Previous reports of Cerithiopsidae in that area and confusion of names for that species are discussed.

RESUMÉ. *Dizoniopsis coppolae* (Aradas, 1870) provenant du Golfe de Gascogne est illustré. Des mentions anciennes de Cerithiopsidae dans la région et la confusion de noms pour cette espèce sont discutées.

INTRODUCTION

*Dizoniopsis coppolae (*Aradas, 1870) is a gastropod of the family Cerithiopsidae. It is mainly found in littoral and infralittoral areas in Europe. This species is predominantly of Mediterranean occurrence, present on both sides of the Strait of Gibraltar and more frequently in the eastern Mediterranean basin (Gofas et al., 2011: 161). Moreover, its distribution extends to the south part of Atlantic Spain, in

Algarve up to Sagres (Portugal) and along the northern coasts of Atlantic Morocco (Asilah) (Bouchet et al., 2010: 53). Although the northern coast of the Iberian Peninsula lacks recent, reliable faunal records supported by illustrations (Gofas et al. 2017: 11), one occurrence of this species was reported to date in Meñacoz (Basque coast) (Gofas et al. 2017: suppl. l. 351) (Fig. 1).

The genus *Dizoniopsis* is defined by the presence of two rows of rounded tubercules on each teleoconch whorl as described by Sacco (1895: 67). *Dizoniopsis coppolae* (Fig. 2 A–I) is characterised by the following features: shell solid, up to about 5 mm in length, protoconch of about two whorls, the first whorl is smooth and the second with axial flexuous riblets, followed by 10–12 whorls covered by two spiral cords, crossed by axial ribs forming elongated nodes at their intersection, last whorls with three additional moderately sculptured cords, the first one in extension of the suture and the last two on the siphonal canal, teleoconch light brown, grading to paler towards its apical part, nodes brighter, additional cords and internodular space brown coloured. A thorough description of *D. coppolae* is given in Bouchet et al. (2010: 52–53) in their revision of extant *Dizoniopsis* in the Mediterranean Sea.

Abbreviations

NHMW: Naturhistorisches Museum Wien collection, Vienna, Austria.
USNM: Smithsonian Institution, National Museum of Natural History, NW Washington DC, U.S.A.

Material examined

Shell grit (05.08.1991), Laredo (Cantabria, Spain), 2 specimens, beached, 3.4 x 1.4 mm (Fig. 2 A–B) and 3.7 x 1.7 mm (Fig. 2 C–D).
Shell grit (22.05.1999), Getaria (Basque coast, Spain), 1 specimen, beached, 3.0 x 1.7 mm (Fig. 2 E–F).
Shell grit (18.07.2007), Cannizzaro, Sicily (Italy), 1 empty Mediterranean specimen for comparison, 35 m, 3.8 x 1.3 mm. (Fig. 2 G–I).

DISCUSSION

When screening the literature in search of Cerithiopsidae with two rows of tubercles per whorl present in the Bay of Biscay, different names appear.

Dautzenberg (1894, Fig. 1) mentions the presence of *Cerithiopsis bilineata* Hoernes, 1848, under stones in Guéthary (Basque Country, France, Fig. 1). As discussed by Bouchet et al. (2010), the name *Dizoniopsis bilineata* must be exclusively reserved for a Neogene fossil [Miocene from Austria (Sacco 1895) and lower Pliocene from NW France (Van Dingenen et al., 2016) (Fig. 2 J)]. The mention of Dautzenberg relates thus to *D. coppolae* species quite similar to the fossil one.

Jeffreys (1867: 267) describes *Cerithiopsis tubercularis* monstr. *clarkii*, a shell from Guernsey (English Channel) with lower and middle whorls having two rows of tubercles but the earlier ones with the usual number of rows (three). This is clearly visible on the holotype (USNM 62141) illustrated by Warén (1983: pl 4, fig. 12). Jeffreys himself (1867) considered that shell as a

monstrosity of *Cerithiopsis tubercularis* (Montagu, 1803). Rolán Mosquera (1983: 181) illustrates a shell (Ria de Vigo, Galicia, Fig. 1) with two rows of tubercles which does not offer enough comparative possibilities with the type of Jeffreys. This seems to be a *Dizoniopsis*. The picture does not allow to clearly see the base of the shell nor the number of basal cords on it but it is not excluded that we are there in the presence of *D. coppolae.*

Borja (1987: 216), quotes *Dizoniopsis clarki* (*Cerithiopsis*) in Meñacoz (Basque country, northern coast of Spain) as rare or scarce on medio littoral hard substrate. Borja & Muxika (2001: 75) in an updated list of the molluscs of the Basque coast reported *Dizoniopsis coppolae* (Aradas, 1870) (= *D. clarki* Forbes & Hanley, 1858) from the same locality (Meñacoz, Fig. 1) and with the same environmental comments (evidently talking about the same specimen). Based on this last publication, Gofas et al. (2017: supplementary material, on line) cited *D. coppolae* in the national checklist of marine Mollusca in Spanish waters.

Although many different names have been used and all quotes not illustrated (Rolán Mosquera 1983 excepted), it seems obvious that most, if not all of them, refer to the extant *Dizoniopsis coppolae*.

CONCLUSION

Dizoniopsis coppolae is reported from the Bay of Biscay: in Spain, at least in Cantabria (Laredo) and in the Basque country (Meñacoz and Getaria) but also in France in the department of Pyrénées-Atlantiques (Guéthary). Its presence in Galicia (Ria de Vigo, Spain) still requires confirmation.

More search should be done to retrieve *D. coppolae* along Portugal Atlantic coasts in order to fill the gap between the northern Atlantic coasts of Spain and Algarve.

The illustrations presented here are the first to validate the presence of the species in the Bay of Biscay since its first record in 1894.

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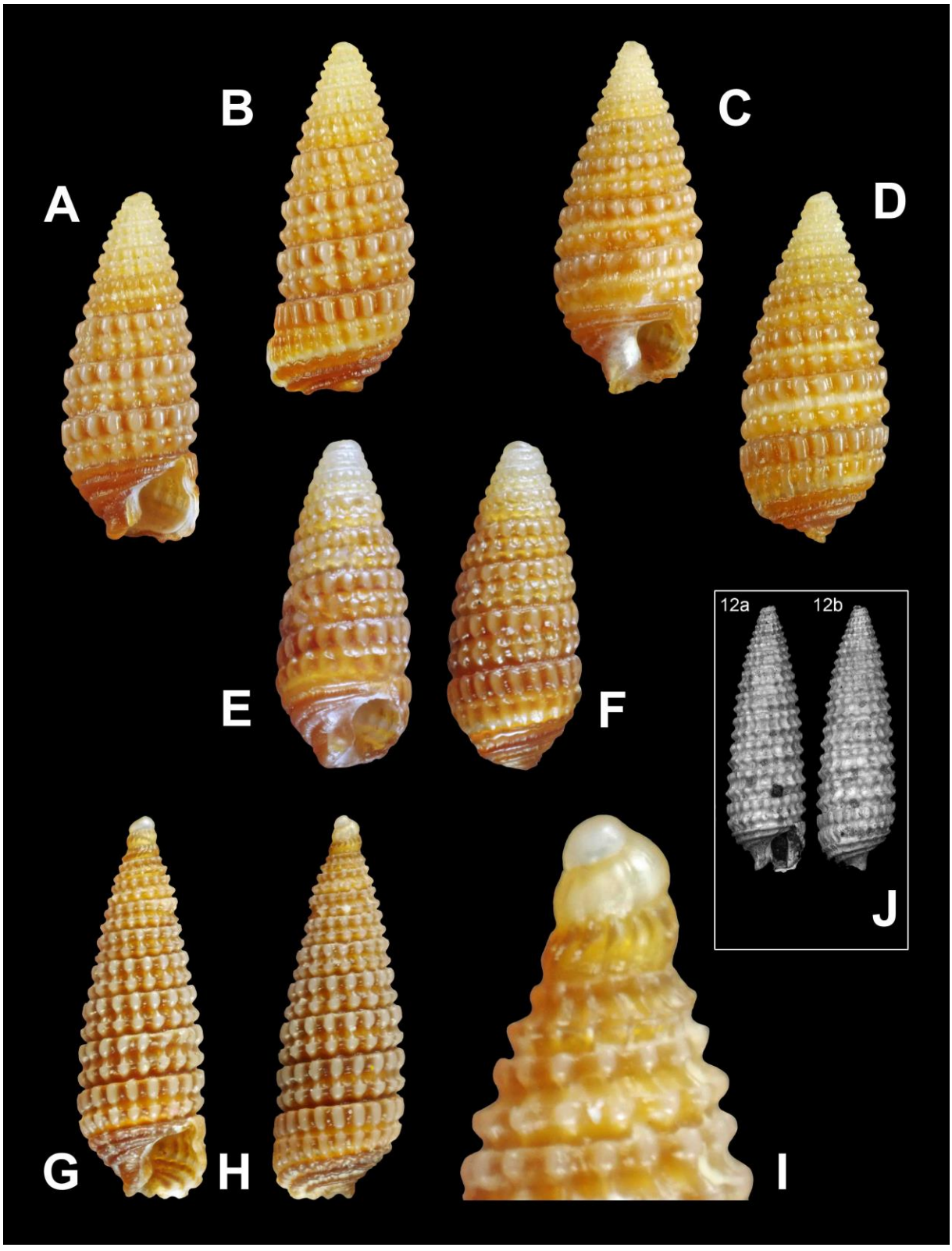
LEGENDS.

Figure 1. Occurences of *Dizoniopsis coppolae* (Aradas, 1870) around the Iberian Peninsula.

Figure 2. A–I. *Dizoniopsis coppolae* (Aradas, 1870). A–D. Laredo (Cantabria, Spain). A–B. 3.4 x 1.4 mm; C–D. 3.7 x 1.7 mm; E–F. Getaria (Basque Country, Spain), 3.0 x 1.7 mm; G–I. Cannizzaro, Sicily (Italy), G–H. 3.8 x 1.3 mm, I. Protoconch enlarged. **J.** *Dizoniopsis* cf. *bilineata* (Hoernes, 1848), NHMW 2015/0133/0219, Le Pigeon Blanc, Le Landreau, Nantes area, Loire-Atlantique, France, 5.4 mm, adapted from Van Dingenen et al., 2016, pl. 14, fig. 12 a–b.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