

First record of the nudibranch *Marionia blainvillea* (Risso, 1818) (Gastropoda: Heterobranchia) for Montenegro

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One specimen belonging to the nudibranch Marionia blainvillea (Risso, 1818) was found crawling on the gorgonian Leptogorgia sarmentosa (Esper, 1789) at Sv. Nedjelja, Boka Kotorska Bay, Montenegro. This is the first record of the species for Montenegrin waters and the third for the Adriatic Sea.

Key words: *Marionia blainvillea*, seaslug, coralligenous assemblage, Boka Kotorska, Montenegro

INTRODUCTION

Recently, an updated checklist of the Adriatic opisthobranch fauna was published (ZENETOS *et al.*, 2016), which represents the most comprehensive overview of sea slug fauna in the Adriatic Sea with a total of 223 species recorded. However, after that review, several new records of Adriatic sea slugs were published (e.g. FURFARO *et al.*, 2016; GEROVASILEIOU *et al.*, 2017; TRKOV *et al.*, 2017).

The knowledge of marine molluscs in Montenegro is far from being complete and the published literature is still very scarce. Recently, an annotated review of molluscs species recorded for Montenegro was written by PETOVIĆ *et al.* (2017). Among 354 molluscs listed, 198 are gastropods with 49 of them being opisthobranchs.

During a SCUBA inventory sampling in the area of Sv. Nedjelja in Boka Kotorska Bay, a nudibranch *Marionia blainvillea* (Risso, 1818)

was found. The aim of this contribution is to present data on the finding of this species, which was previously not reported nor in the checklist of Montenegrin molluscs (PETOVIĆ *et al.* 2017), neither in the review of Adriatic opisthobranchs by ZENETOS *et al.* (2016).

MATERIAL AND METHODS

During a SCUBA survey of Mediterranean stony coral colonies (*Cladocora caespitosa* Linnaeus 1767) at the locality of Sv. Nedjelja (42°27'28.92"N, 18°40'31.64"E); close to Herceg Novi, Boka Kotorska (Fig. 1), at 24th August 2017, a small nudibranch was found creeping on the gorgonian *Leptogorgia sarmentosa* (Esper, 1789) at 26 m depth in the coralligenous bio-coenosis (Fig. 2A). The specimen was collected and stored at the laboratory of the Institute of Marine Biology in Kotor, where it was photographed by stereomicroscope Nikon SMZ800

and analysed for species identification. (BALLESTEROS *et al.*, 2012-2018).

RESULTS AND DISCUSSION

The recorded specimen was a juvenile with a semi-transparent pale yellowish body, rectangular in shape (Fig. 2B). The back and flanks are covered by bumps, outlined with pale line that create a network over the body. The specimen alive measured 5 mm in length. The oral veil was bilobed and with many digit-like projections. Generally, on the flanks of the notum from 10 to 12 ramified appendixes of unequal size were present.

Up to date the species was recorded in the Mediterranean Sea, mainly in its western portion such as the Gulf of Naples (SCHMEKEL & PORTMANN, 1982) central Tyrrhenian Sea (FURFARO & MARIOTTINI 2016), North-East Sardinia (TRAINITO & DONEDDU, 2015) and the Spanish Mediterranean coast and Balearic Islands (BALLESTEROS *et al.*, 2012-2018). Outside the Mediterranean waters it was reported for Madeira, Canary Islands, Azores, Angola and recently for the Monte Hermoso (Argentina) (CERVERA *et al.*, 2004; BALLESTEROS *et al.*, 2012-2018).

The Tritoniidae is a very specialized family with species showing a strong relationship with gorgonians and soft corals, on which they feed, mate and live (FURFARO *et al.*, 2017). Because of that it is curious that *M. blainvillea* was recorded

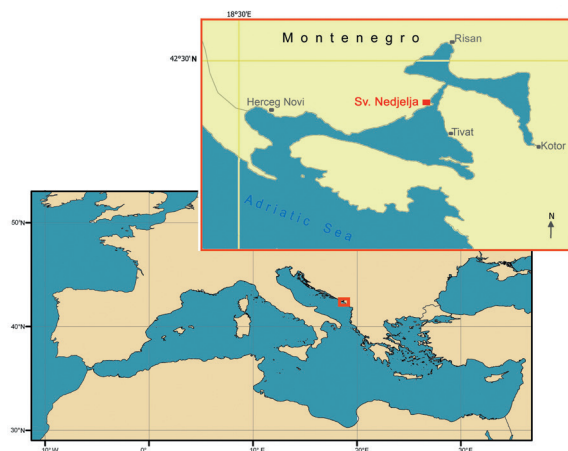


Fig. 1. Location of the site Sv. Nedjelja (Boka Kotorska Bay) where the specimen of *M. blainvillea* was found.

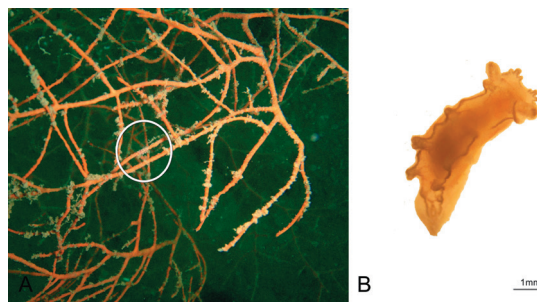


Fig. 2. A) White circle indicates the *M. blainvillea* specimen on the gorgonian *L. sarmentosa*, B) *M. blainvillea* individual

as one among the dominant opisthobranch in the samples (> 30%) of the non-commercial fraction of the trawling fishery in waters off Catalan coast in front of Blanes where bottom types are sand and mud (only one trawling area has sand and stones) (DOMÈNECH *et al.*, 2006). In the Boka Kotorska Bay the specimen was found on the gorgonian *Leptogorgia sarmentosa* Esper, 1789, which was reported as their food together with a variety of other octocoral prey (BARLETTA & MELONE, 1976; BARLETTA, 1981; MCDONALD & NYBAKKEN, 1999). In the inner part of the Boka Kotorska Bay there are few locations, about 2% of the Kotor-Risan bay (RAC/SPA - UNEP/MAP, 2013), characterized by coral-ligenous assemblages where the dominant species are *Cladocora caespitosa* (Linnaeus, 1767), *Savalia savaglia* (Bertoloni, 1819), *Leptogorgia sarmentosa* (Esper, 1789), *Parazoanthus axinellae* (Schmidt, 1862), *Axinella cannabina* (Esper, 1794) The Sv. Nedjelja site, on the end of Verige strait, is one of only two other, rather small similar assemblages in the outer part of the Boka Kotorska Bay (Tivat-Herceg Novi Bay).

The finding of *M. blainvillea* represents the first record of this species in the Montenegrin part of the Adriatic Sea and the third record of this species in the Adriatic Sea. Previously, this species was recorded by J. Prkić in Kosirina at the Murter Island (Croatia) in the Middle Adriatic Sea and at Rimini (Italy) in the North Adriatic Sea (BALLESTEROS *et al.*, 2012-2018). Since juveniles are rather well camouflaged on the gorgonians, as pointed out for the related species *Tritonia nilsodhneri* (Marcus Ev., 1983), which was recently discovered in Boka Kotorska Bay

(FURFARO *et al.*, 2017), it could be supposed that *M. blainvillea* is much more common in the Adriatic Sea than what is known. Adult specimens are, on the other hand, generally found hidden under the stones. These habits, but also the relatively small availability of appropriate habitat of the *M. blainvillea* are probably the main reasons why the species was previously not mentioned in the recently published review of the Adriatic opisthobranch fauna by ZENETOS *et al.* (2016).

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Prvi nalaz puža golaća *Marionia blainvillea* (Risso, 1818) (Gastropoda: Heterobranchia) u Crnoj Gori

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SAŽETAK

Jedan primjerak puža golaća *Marionia blainvillea* (Risso, 1818) nađen je da puzi na gorgoniji *Leptogorgia sarmentosa* (Esper, 1789) na lokaciji Sv. Nedjelja, Bokokotorski zaliv, Crna Gora. Ovo je prvi nalaz te vrste za Crnu Goru i treći za Jadransko more.

Ključne riječi: *Marionia blainvillea*, puž golać, koraligenska zajednica, Boka Kotorska, Crna Gora