

Short Note

First record of Baillon's wrasse *Symphodus bailloni* (Labridae) in the Eastern Mediterranean Sea coast of Syria

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Abstract

On 29 May 2022, two specimens of Baillon's wrasse, *Symphodus bailloni* (Valenciennes, 1839) were captured from the coast of Syria (eastern Mediterranean Sea). Sampled two specimens of *S. bailloni* were measured at 117 and 120 mm in TL and weighed 25.7 and 23.2 g. These findings are the first records of this species in the Levant Basin, and the easternmost extension range of the species in the Mediterranean Sea. *Symphodus bailloni* is not a herculean or Lessepsian migrant but should be considered as a permanent resident of the Mediterranean basin despite the fact not largely distributed.

Keywords: Labridae, *Symphodus bailloni*, first records, distribution, extension range; Levant Basin.

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Introduction

Genus *Symphodus* Rafinesque, 1810 following Parenti and Randall (2018), has 10 species, of which four species of them viz, grey wrasse, *S. cinereus* (Bonnaterre, 1788), axillary wrasse, *S. mediterraneus* (Linnaeus, 1758), five-spotted wrasse, *S. roissali* (Risso, 1810) and peacock wrasse, *S. tinca* (Linnaeus, 1758) have been recorded in the Syrian marine waters (Saad 2005; Ali 2018). These species inhabit areas with plentiful weeds or around rocks at depths of 1-50 m (Pollard 2010). Routine monitoring regularly conducted throughout the Syrian coast for two decades (Saad 2005; Ali 2018), with the assistance of experienced fishermen and divers, allowed us to collect two specimens of Baillon's wrasse, *S. bailloni* (Valenciennes, 1839), which are described in the present paper with comments on their distribution in the Eastern Mediterranean Sea coast of Syria.

Material and Methods

Two specimens of *S. bailloni* were caught on 29 May 2022, off Banias city, 35°7'17.0.5" N and 35°54'14.73" E (Fig. 1). The specimens were caught by a diver using a spearfish that caused spear holes just below the middle of the dorsal fin and behind the head in the first specimen (Fig. 2A) and at the anterior part of the dorsal fin until the base of the pelvic fin in the second specimen (Fig. 2B). Their morphometric measurements were measured to the nearest millimeter and weighed to the nearest gram (Table 1). The specimens were preserved in 10% buffered formalin and deposited in the Ichthyological Collection of the Marine Sciences Laboratory, Faculty of Agriculture, Tishreen University (References No: MSL 9/2022 and No MSL 10/2022). Identification of specimens was made according to Whitehead et al. (1986), Eschmeyer et al. (2016) and Froese and Pauly (2017).

Results and Discussion

The specimen of MSL 9/2022 had TL of 117 mm and 25.7 g, and MSL 10/2022, 120 mm TL and weighed 23.2 g. Both specimens were identified as *S. bailloni* based on the combination of main morphological characters such as body with ovate shape, laterally flattened, head pointed, head length equal to or shorter than

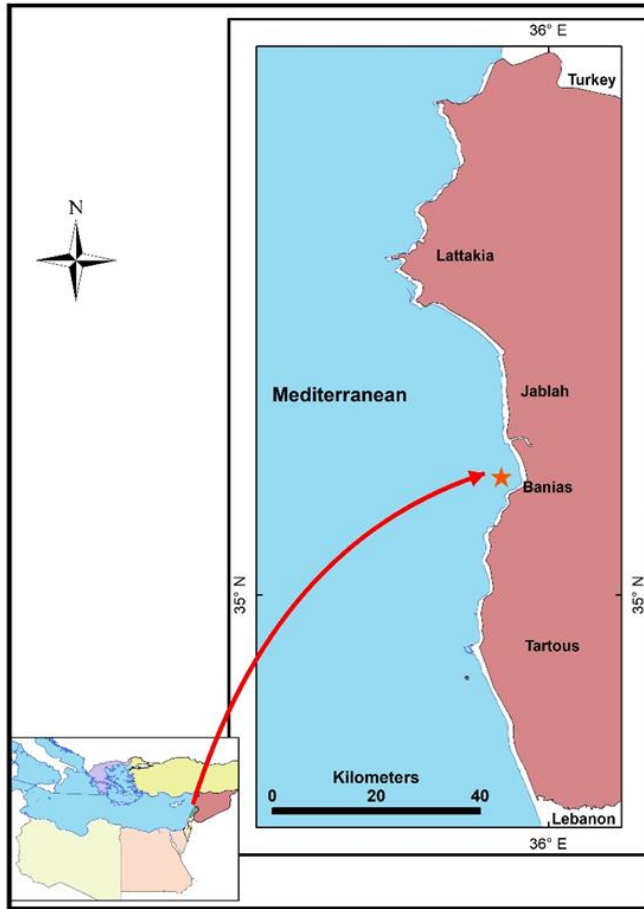


Figure 1. Map of the Syrian coast indicating the capture site of both specimens of *Symphodus bailloni* (red star).

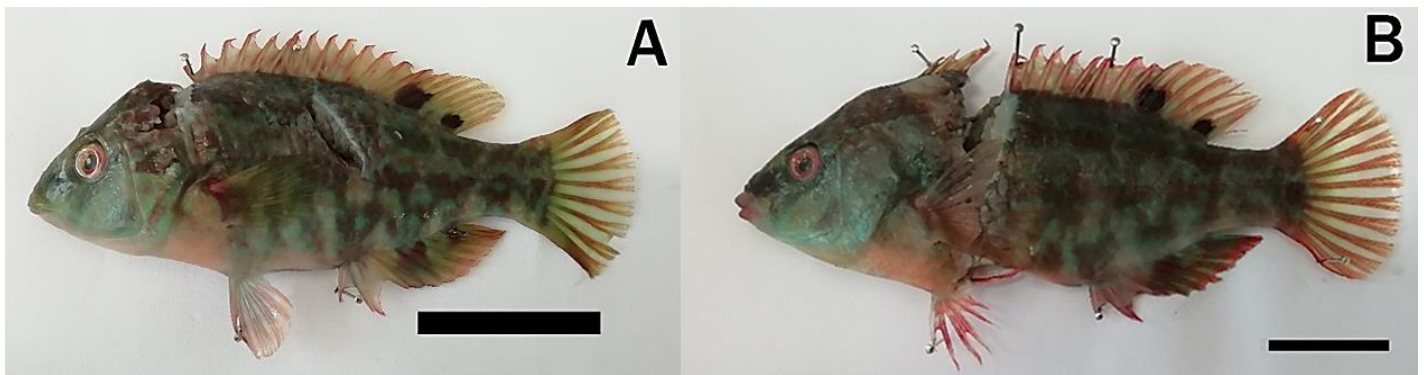


Figure 2. *Symphodus bailloni*. **A.** Specimen reference No: MSL 9/2022, scale bar = 20 mm. **B.** Specimen reference No: MSL 10/2022 (scale bar = 20 mm).

body depth, snout protrusible with numerous cephalic pores, lips with five folds, upper lip highly developed, jutting well forward from the lower lip, pre-orbital shorter than post orbital, and 12 gill rakers on the first branchial arch (Fig. 3) The colour of the body is greenish reddish, with longitudinal dark-brown stripes on the middle upper part of the flanks; no dark spot on the caudal peduncle; two dark spots on the dorsal fin, the first, more important, at the beginning of the soft part of the fin; the second less important, at the end of the soft part of the same fin; head with brown-green orange stripes (Fig. 4). General morphology, morphometric measurements, meristic counts, and colour of these specimens are in agreement with Quignard and Pras (1986), Dunn and Brown (2003), and Göktürk et al. (2012).

Table 1. Morphometric measurements with percentages of total length (% TL) and meristic counts of *Symphodus bailloni* collected off the Syrian coast.

Specimens	MSL 9/2022		MSL 10/2022	
Morphometric measurements	mm	% TL	mm	% TL
Total length	117	100	120	100
Standard length	93	79.5	96	80.0
Body depth	40	34.1	38	31.6
Head length	36	30.7	34	28.3
Eye diameter	6	5.1	6	5.0
Dorsal fin base length	50	42.7	52	43.3
Anal fin base length	25	21.3	25	20.8
Pectoral fin base length	9	7.6	9	7.5
Pelvic fin base length	7	5.9	6	5.0
Caudal fin base length	23	19.6	23	19.1
Anal fin height length	14	11.9	14	11.6
Pectoral fin length	18	15.3	18	15.0
Pelvic fin height length	15	12.8	15	12.5
Pre-dorsal length	31	26.4	29	24.2
Pre-pectoral length	31	26.4	31	25.8
Pre-pelvic length	37	31.6	36	30.0
Pre-anal length	60	51.2	61	50.8
Counts				
Dorsal fin spines	XV		XV	
Dorsal fin soft rays	9		9	
Anal fin spines	III		III	
Anal fin soft rays	9		9	
Pectoral fin spines	-		-	
Pectoral fin soft rays	13		13	
Pelvic fin spines	I		I	
Pelvic fin soft rays	5		5	

Symphodus bailloni is reported along the eastern Atlantic from the North Sea to Portugal south and the Straits of Gibraltar. The species is also known in Morocco and Mauritania (Quignard and Pras 1986). *Symphodus bailloni* occurs in the Mediterranean Sea, off the coast of Spain, and in the waters surrounding the Balearic Islands (Quignard and Pras 1986). Additionally, the species is only recorded off the Turkish coast of the Black Sea as reported by Göktürk et al. (2012), where it was caught in abundance and considered a resident population established. Migrations from the Black Sea to the Syrian coasts remain a viable hypothesis that cannot be completely ruled out, though more evidence is required. *Symphodus bailloni* is not recorded off the Mediterranean coast of Egypt (El Sayed et al. 2017) and the present findings constitute the first records of *S. bailloni* in the Levant Basin, where previous papers did not report the species (Golani 2005; Bariche and Fricke 2020). They are also the easternmost extension of the species in the Mediterranean Sea.

The origin of *S. bailloni* in the Mediterranean Sea remains difficult to elucidate. However, a Herculean migration (*sensu* Quignard and Tomasini 2000) or a Lessepsian migration (*sensu* Por 1971) cannot be considered. A recent revision of the exotic fishes in the Mediterranean Sea does not include *S. bailloni* (see Golani et al. 2021).

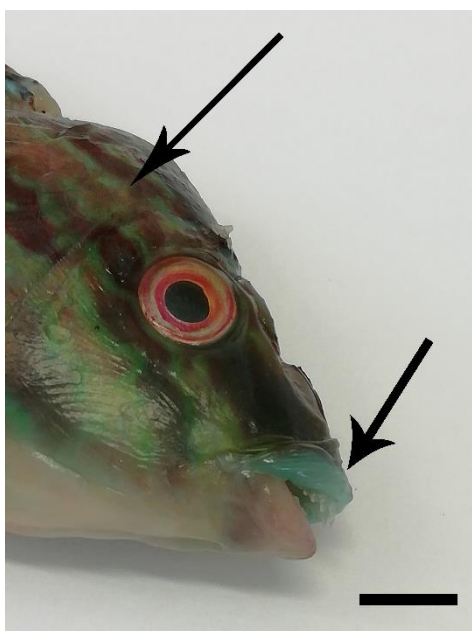


Figure 3. Head of *Symphodus bailloni*, 1. The upper lip is highly developed, and 2. Stripes (Scale bar = 5 mm).

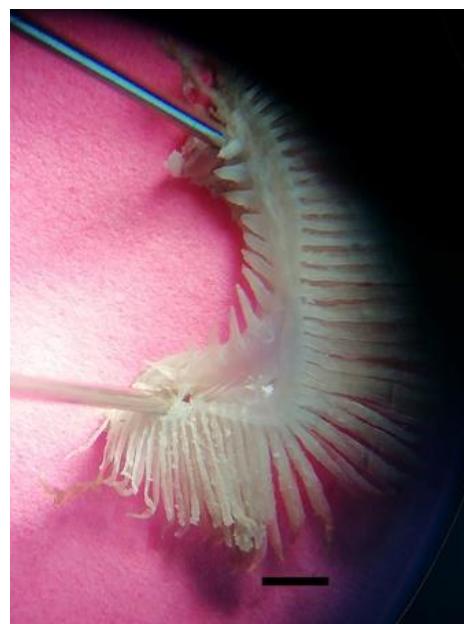


Figure 4. *Symphodus bailloni*, Gillrakers on the first gill arch (Scale bar = 2 mm).

In conclusion, in this study, it was reported that two specimens of *S. bailloni* were found on the Eastern Mediterranean Sea coast of Syria. This report appears to be the first record of this species on the coast of the Eastern Mediterranean Sea.

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