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## ON THE RECORD OF THE ROYAL FLAGFIN, *AULOPUS FILAMENTOSUS* (PISCES: AULOPIDAE), FROM THE ADRIATIC SEA

Jakov DULČIĆ

Institute of Oceanography and Fisheries, HR-21000 Split, P.O. BOX 500, Croatia  
E-mail: dulcic@izor.hr

### ABSTRACT

The royal flagfin *Aulopus filamentosus* (a single specimen, ♀: 23.7 cm total length) was caught in the southern Adriatic on 28th January 2006. This is the second confirmed record on the species, with all morphometric and meristic data, for the eastern Adriatic.

**Key words:** Aulopidae, *Aulopus filamentosus*, rarity, eastern Adriatic

## SEGNALAZIONE DI MERLUZZO IMPERIALE, *AULOPUS FILAMENTOSUS* (PISCES: AULOPIDAE), IN ADRIATICO

### SINTESI

Il merluzzo imperiale *Aulopus filamentosus* (un solo esemplare, ♀: 23,7 cm di lunghezza totale) è stato catturato nell'Adriatico meridionale il 28 gennaio 2006. Si tratta della seconda segnalazione confermata di tale specie, con tutti i dati morfometrici e meristici, per l'Adriatico orientale.

**Parole chiave:** Aulopidae, *Aulopus filamentosus*, rarità, Adriatico orientale

## INTRODUCTION

The royal flagfin *Aulopus filamentosus* (Bloch, 1792) is subtropical demersal species living at depths ranging from 500 to 1000 m. It occurs in the eastern Atlantic (Canary Islands south to Cape Verde and Senegal), western central Atlantic (Gulf of Mexico and Caribbean) and Mediterranean (without Adriatic and Black Seas) (Sulak, 1990). It is reported very abundant along north-western coast of Africa and off Madeira and the Canaries (Sulak, 1990). In spite of Sulak's report on the absence of royal flagfin in the Adriatic, Jardas (1985, 1996) noted its great rarity. Data on biology and ecology of the royal flagfin are very scarce.

## MATERIAL AND METHODS

On 28 January 2006, a 23.7 cm total length (TL) specimen (mature ♀, still releasing eggs) of *Aulopus filamentosus* (Fig. 1) was captured by trawl at 150 m depth near Molunat Bay (southern Adriatic, Croatian coast) (Fig. 2). The specimen was identified according to Šoljan (1975). The specimen was preserved in 5% buffered formalin solution and deposited in the Ichthyological Collection of the Institute of Oceanography and Fisheries, Split; catalogue number IOR 48 – 3. This is the second confirmed record on the species for the eastern Adriatic.

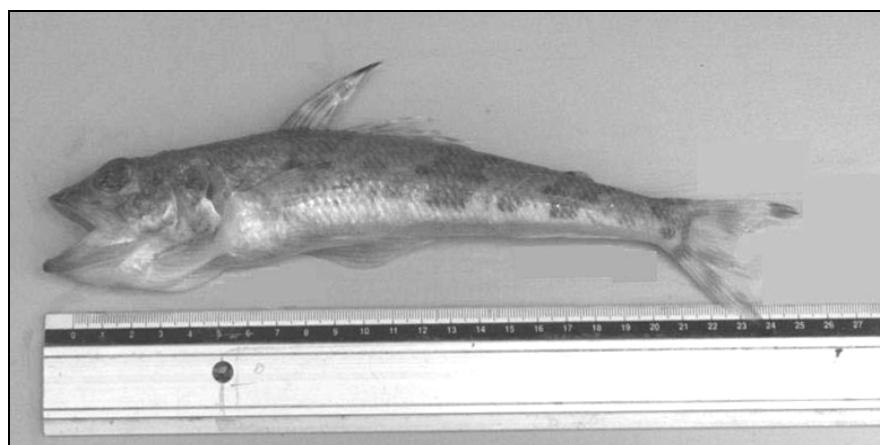
## RESULTS AND DISCUSSION

Body is slightly compressed, head large and robust. Eyes large and elliptical. Upper jaw reaching to eye centre, expanded posteriorly. Jaw teeth simple, short and depressible (except outer row), as also within mouth. Pseudobranch well developed. Dorsal fin high and its base is shorter than distance between dorsal and caudal

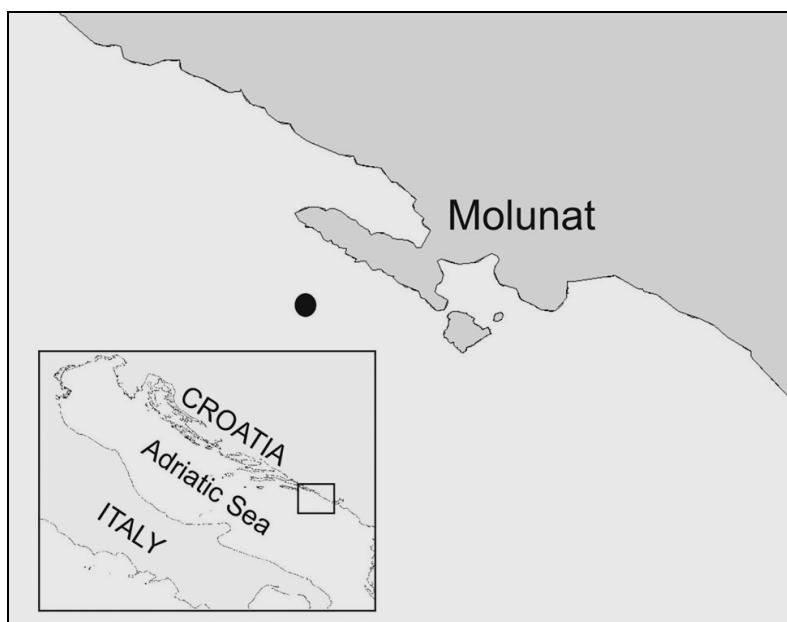
fins. Pelvic fins inserted a little before origin of dorsal fin. Scales present, lateral line along midline of body. Dorsal fin set far forward and caudal fin deeply forked. Body colour is brownish-green with darker markings on flanks.

Body measurements are as follows: total length TL=23.7 cm, standard length 20.5 cm (86.6% TL), fork length 21.6 (91% TL), pre-anal length 15.0 cm (63.4% TL), pre-dorsal length 7.7 cm (32.5% TL), pre-pectoral length 5.9 cm (24.7% TL), pre-pelvic length 7.0 cm (29.5%), body depth 3.3 cm (13.9% TL), head length HL=5.4 cm (22.6% TL), eye diameter 1.4 cm (26.5% HL), pre-orbital length 1.3 cm (25.0% HL). Meristic characters are: dorsal fin rays 16, pectoral fin rays 12, pelvic fin rays 9, and anal fin rays 11. These data are the first for this species from the Adriatic Sea. All measurements are in agreement with data by Sulak (1990).

*A. filamentosus* is a poorly known demersal fish as far as the Adriatic Sea is concerned. Faber (1883) was the first who put this species on the list of Adriatic fish species on the basis of the record from the Boka Kotorska Bay (southern Adriatic) but without any data on the date of capture and any measurements (Pallaoro, 1988). On the basis of this list and record, other authors (Kolombatović, 1895; Ninni, 1912; Šoljan, 1975; Jardas, 1985) simply cited Faber's list of fishes. Pallaoro & Jardas (1996) registered two specimens of this species in the Ichthyological Collection of the Institute of Oceanography and Fisheries: a) single specimen (first confirmed record) caught on 3 October 1987 in Jabuka Pit (near islet Jabuka) (but without any data on measurements, type of fishing gear and donator of specimen), and b) single specimen without any other data (not confirmed record). The rarity of this species in the Adriatic could be related with its depth distribution (between 500 and 1000 m, even though it could be found in shallower waters) and availability to fishing gears. It could be



**Fig. 1: Specimen of *Aulopus filamentosus*, cat. No. IOR 48 – 3, 23.7 cm TL, captured in the southern Adriatic.**  
**Sl. 1: Primerek vrste *Aulopus filamentosus*, kat. št. IOR 48 – 3, 23,7 cm TL, ujete v južnem Jadranu.**



**Fig. 2: Map showing the location where the specimen was captured.**  
**Sl. 2: Zemljevid z označeno lokaliteto, na kateri je bil ujet obravnavani primerek.**

pointed out that term 'rarity' is a subjective and elastic term varying with place and, moreover, it is subject to change with our increasing knowledge of the fauna. Pallaoro (1988) stated that the Adriatic ingressions

caused more rare species to occur in the central Adriatic region in the 1986–87 period, and among others he connected the occurrence of the royal flagfin on 3 October 1987 in Jabuka Pit with these phenomena.

## O POJAVLJANJU VRSTE *AULOPUS FILAMENTOSUS* (PISCES: AULOPIDAE) V JADRANSKEM MORJU

Jakov DULČIĆ

Institute of Oceanography and Fisheries, HR-21000 Split, P.O. BOX 500, Croatia  
E-mail: dulcic@izor.hr

### POVZETEK

Dne 28. januarja 2006 je bil v južnem Jadranu ujet osebek vrste *Aulopus filamentosus* (en sam primerek, ♀: celotna dolžina 23,7 cm), kar je drugi potrjeni zapis o tej vrsti z vsemi morfometričnimi in merističnimi podatki za vzhodni Jadran. Redkost te vrste v Jadranu bi lahko povezali z njenim globinsko razširjenostjo in ribiško opremo, ki je na voljo ribičem, saj ta vrsta sicer živi v globinah med 500 in 1000 m. Poleg tega bi lahko poudarili, da je termin "redkost" subjektiven in raztegljiv glede na območje pojavljanja, pa tudi glede na naše vse boljše poznavanje morske favne.

**Ključne besede:** Aulopidae, *Aulopus filamentosus*, redkost, vzhodni Jadran

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