

ISSN 1330-0520  
UDK 591.9:597.583.1(497.5:262.3)

FIRST RECORD OF POMPANO FINGERLING,  
*TRACHINOTUS OVATUS* (LINNAEUS, 1758)  
(PISCES: CARANGIDAE), IN THE EASTERN  
MIDDLE ADRIATIC

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Dulčić, J., Pallaoro, A. & Kraljević, M.: First Record of Pompano Fingerling, *Trachinotus ovatus* (Linnaeus, 1758) (Pisces: Carangidae), in the Eastern Middle Adriatic, Nat. Croat., Vol. 6, No 1, 61-65, 1997, Zagreb

Pompano, *Trachinotus ovatus* (Linnaeus, 1758), is rare species in the Adriatic Sea. Its fingerling was caught for the first time in vicinity of small island settlement Bol and sandy beach Zlatni rât, island Brač (eastern middle Adriatic). The main morphometric and meristic data of one specimen are given. This record shows us that this species, mostly occur in the southern Adriatic, probably also spawn in the eastern middle Adriatic.

**Key-words:** *Trachinotus ovatus*, first record, eastern middle Adriatic

Dulčić, J., Pallaoro, A. & Kraljević, M.: Prvi nalaz mlađi strijele modrulje, *Trachinotus ovatus* (Linnaeus, 1758), u istočnom srednjem Jadranu, Nat. Croat., Vol. 6, No 1, 61-65, 1997, Zagreb

Strijela modrulja, *Trachinotus ovatus*, je rijetka vrsta u Jadranskom moru. Po prvi puta je ulovljen primjerak mlađi ove vrste u istočnom Jadranu i to u blizini pješčane plaže Zlatni rât na otoku Braču. U radu su iznesene tjelesne i merističke značajke te jedinke. Nalaz predstavnika ove vrste, inače nešto brojnije u južnom Jadranu, ukazuje na mogućnost njezina mriješćenja i u srednjem Jadranu.

**Ključne riječi:** *Trachinotus ovatus*, prvi nalaz, istočni srednji Jadran

## INTRODUCTION

Pompano, *Trachinotus ovatus* (Linnaeus, 1758), occurs in the eastern Atlantic northward to Gulf of Biscay and in the Mediterranean. It is also common along African coast, including offshore islands, to southern Angola (SMITH-VANIZ 1986). It is rare in the Adriatic Sea and it mostly occurs in the southern Adriatic (BIBI 1968,

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JARDAS 1996). Some adults stages were collected in the ichthyological collections of the Croatian Zoological Museum-Zagreb (PAVLETIĆ 1965), Natural History Museum-Split (ONOFRI, 1983), Ichthyological collection of the Institute of Oceanography and Fisheries-Split (PALLAORO & JARDAS, 1996) and Natural History Museum of the Biological Institute-Dubrovnik (MUŠIN 1989).

There is no published information on biology and ecology of *T. ovatus* in the Eastern Adriatic. The aim of this paper is to present some first record of fingerling of pompano in the Eastern Adriatic and its biometric and meristic characteristics.

## MATERIAL AND METHODS

One pompano fingerling studied was caught by beach seine (4 mm mesh-size stretched) on sandy bottom near sandy beach »Zlatni rât« in the vicinity of small

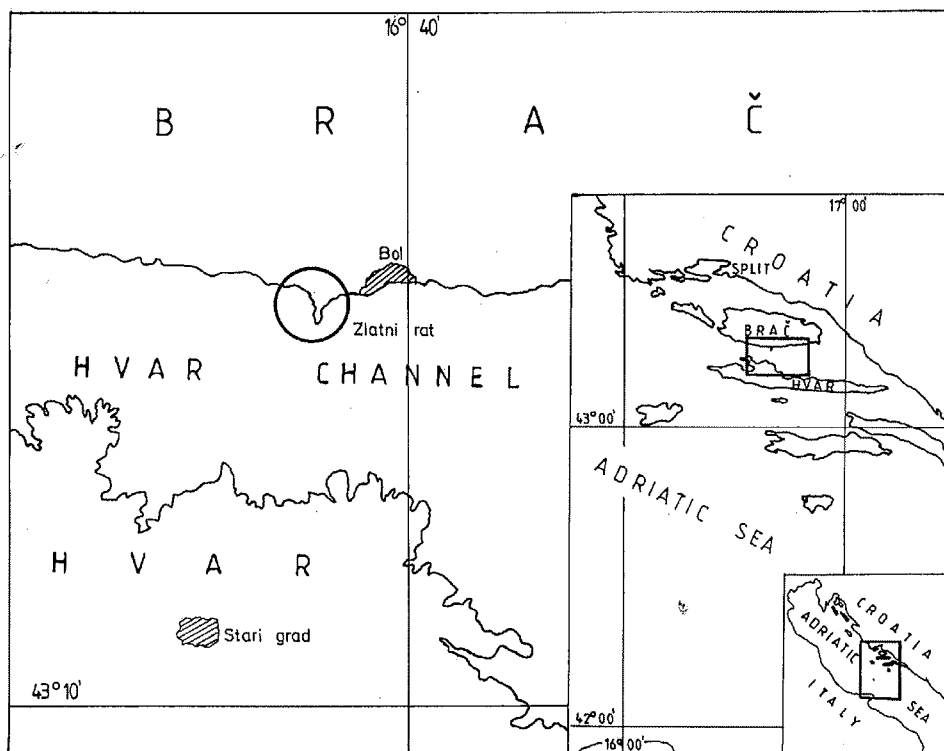


Fig. 1. Site where fingerling of *Trachinotus ovatus* was found  
(beach »Zlatni rât« – island Brač)

Slika 1. Područje gdje je nađen primjerak mlađi strijele modrulje *Trachinotus ovatus*  
(plaža Zlatni rât – otok Brač).

island settlement Bol (island Brač) in December 1994 (Fig. 1). The specimen was accurately identified according to the taxonomic key provided by ŠOLJAN (1975) (Fig. 2). The present specimen is deposited at the Ichthyological Collection of the Institute of Oceanography and Fisheries-Split.

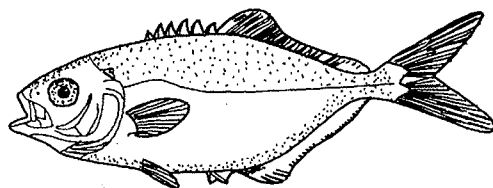


Fig. 2. Fingerling of *Trachinotus ovatus*.

Slika 2. Primjerak mladi strijele modrulje *Trachinotus ovatus*.

Fingerling was preserved in 4% formalin immediately after capture. In the laboratory, the total and standard length were measured to the nearest 0.1 mm; fish weighed to the nearest 0.01 g. The biometric measurements were taken in mm. The meristics characteristics considered were dorsal, anal, pectoral and caudal fin rays. Reduction in length caused by preservation depends on the initial lengths of the specimen and duration of storage. Preservation in formalin causes an average 5% loss in total length of larvae and fingerlings (MC GURK 1984).

## RESULTS AND DISCUSSION

Table I shows the measurements (in mm) and meristic counts of the specimen studied. Its measurements and meristic counts fit those recorded by BINI (1968) and SMITH-VANIZ (1986).

Fingerling of the pompano has small teeth in both jaws, consisting of a narrow band anteriorly, tapering posteriorly. Bases of soft dorsal and anal fins approxi-

Table I. Morphometric (in mm) and meristic data of pompano fingerling caught in the eastern middle Adriatic.

|                    |      |                        |      |                    |          |
|--------------------|------|------------------------|------|--------------------|----------|
| Total length       | 73.8 | Anal fin, length       | 21.5 | Interorbital width | 4.1      |
| Standard length    | 58.1 | Pectoral fin, length   | 7.8  | Preorbital length  | 3.6      |
| Fork length        | 63.9 | Ventral fin, length    | 5.1  | Dorsal fin rays    | VI+I+24  |
| Predorsal length   | 21.6 | Caudal fin, length     | 17.6 | Anal fin rays      | II+I+23  |
| Preanal length     | 29.8 | Body depth (max)       | 21.2 | Pectoral fin rays  | 17       |
| Preventral length  | 20.7 | Body depth (main)      | 4.6  | Ventral fin rays   | I+15     |
| Prepectoral length | 17.2 | Head length            | 15.5 | Caudal fin rays    | IV+17+IV |
| Dorsal fin, length | 30.9 | Ocular diameter (hor.) | 3.9  |                    |          |

mately equal in length; pectoral fins are longer than pelvic fins. Spinous dorsal fin has 6 spines. There are no caudal peduncle grooves. Lateral line slightly arched above pectoral fins and straight thereafter. There are no scutes. Colour of specimen is dark green above, silvery below. There are 4 dark vertically elongate blotches on sides; distal half of dorsal and anal fin lobes and tips of caudal fin are black.

Studies on larval and juvenile stages of fish are of particular importance to population dynamics, especially to recruitment and biological models incorporating environmental parameters (HOUDE 1986, MYERS & CADIGAN 1993). There are no previous records of fingerlings of pompano in the eastern Adriatic, even though several studies and investigations on juveniles were done between 1980 and 1995 in the eastern Adriatic. One specimen was caught near sandy beach »Zlatni rât« – island Brač what coincides with fact that adults and juveniles, usually occur in schools in the surf zone and clear water along sandy beaches (SMITH-VANIZ 1986). It is interesting that SMITH-VANIZ (1986) noticed there are no records of pompano in the Middle Adriatic sea, while BINI (1986) and JARDAS (1996) mentioned that this species is rare and occurs only in the southern Adriatic. Although it rarely appears in the southern Adriatic region this record in the middle part in December indicates that pompano could be spawning in this region as well. This could especially be true if we considered the fact that pompano spawn during summer (SMITH-VANIZ 1986, JARDAS 1996). It should be emphasized that eastern Adriatic in 1994 is characterized by frequent first records of some larvae and juveniles, for example, larva of a mesopelagic species *Trachipterus trachipterus* (DULČIĆ 1996) and fingerling of the grey triggerfish *Balistes carolinensis* (DULČIĆ et al.). This could be connected with some special climatological and oceanographical conditions in 1994 and input of intermedian waters (50–100 m) in the middle Adriatic which influenced the increasing of salinity and temperature (MARASOVIĆ et al. 1995). PALLAORO (1988) also stated that Adriatic ingressions caused more rare species (*Centrocanthus cirrus*, *Aulopus filamentosus*, *Pseudocharanx dentex*, *Synodus saurus*, *Centrolophus niger*) to appear in the middle Adriatic region in period 1986–1987. An unusual abundance of such rarely found fish species and their representatives compared to non-ingression periods gives indication of their interdependence. The moving of some south-Adriatic thermophil ( *Balistes carolinensis* ) and bathiphyl ( *Lepidopus caudatus* ) species to a greater extent towards North has been also ascertained in 1986/87, which is also a possible result of effect of the ingression (PALLAORO 1988). The status of the pompano needs to be evaluated on a continuous basis because it is becoming increasingly apparent that uncommon species, and particularly those on the edge of their distribution, can be essential indicators of environmental change.

Received June 30, 1996

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