

Findings of bathypelagic fish species hitherto unknown in the Adriatic

(Preliminary Communication)

by Jožica Karlovac

Institute of Oceanography and Fisheries, Split

Several bathypelagic fish species, whose occurrence has hitherto not been recorded in the Adriatic, were found among the catches taken during both the Fishery Biological Expedition »Hvar« (1948—1949) and the cruises of M. V. »Hvar« and »Predvodnik« (1948—1950). Those catches were taken by means of a ring-trawl, a trawl for bathypelagic collecting, and a fisher-trawl respectively.

Four species from the *Scopelidae* family, genus *Myctophum* were found, i.e.:

Myctophum rissoi (Cocco)

Stations of the »Hvar« Expedition, Nos. 102, 116, 118, 121, 123, 136, 152, 155, 158. A fisher-trawl was applied at the station 136 in a depth measuring from 333 to 258 metres, while samples on all the remaining stations were collected by means of a ring-trawl probably fishing at a depth between 53 metres and the surface.

Nineteen specimens in postlarval stage were caught by means of a ring-trawl during the months of May and June 1948. Their lengths measured between 3.44 and 7.74 mm.

An adult specimen, 45 mm long excl. C. was caught by means of a fisher-trawl in December 1948.

Myctophum coccoi (Cocco)

Station No. 152 of the »Hvar« Expedition. A ring-trawl applied between some 53 and 0 metres.

Two specimens in postlarval stage, whose length amounted to 4.82 and 6.28 mm respectively were caught on June 14th 1948.

Lampanyctus elongatus (COSTA)

Stations Nos. 30, 49, 63, 70, 72, and 81 of the »Hvar« Expedition. A ring-trawl applied between some 53 and 0 metres.

Seven specimens in postlarval stage were caught during the months of March and April 1948. Their lengths were between 11.51 and 23.86 mm.

Lampanyctus alatus, GOODE et BEAN

Stations of the »Hvar« Expedition, Nos. 20, 63, 70, 114, 118, 134, 152, 153, 155, 159, 161, 163. A ring-trawl applied between some 53 and 0 m.

Stations III and V of the M.V. »Hvar« cruises in 1948, 1949, and 1950. A ring-trawl (depth of the sample about 700 m) and a trawl for bathypelagic collecting (depth of the sample about 500 m).

Twenty-one specimens in postlarval stage were caught in the surface layers by means of a ring-trawl in March, April, May and June 1948 and two such individuals of this species were captured in a deepsea tow (depth 700 m) in October 1948. The lengths of the postlarvae ran between 3.23 and 7.95 mm. Three adult specimens whose lengths measured 16.78, 20.21, and 42.14 mm respectively excl. C. were caught in deepsea tows by means of a ring-trawl in September 1949 (depth of the sample about 680 m) and a trawl for bathypelagic collecting in May 1950 (depth of the sample about 500 m).

This latter individual (measuring 49.88 mm in length incl. C.) represents the biggest specimen of this species that has so far been found in the Mediterranean.

There was one finding belonging to the *Odontostomidae* family which did not yield any previous capture in the Adriatic.

Odontostomus hyalinus, COCCO

Southwest of Dubrovnik (42° 15' N 17° 40' E).

By means of a trawl for bathypelagic collecting.

Depth of the sample about 700 m.¹⁾

A specimen of this species, in adult stage, of a length measuring 45 mm, was found in October 1948. GOODE and BEAN²⁾ have it that this species is known in the Mediterranean only, although being very rare there. The specimen examined by them fully agrees with the description given by GÜNTHER, RISSO, and VALENCIENNE, differing from the type given by CANESTRINI, in whose description the dorsal fin is quoted as being by a half shorter than the anal one (D 14, A 28), which fact induced GOODE and BEAN to suppose that it should belong to another specific form. D 12, A 34 is the formula quoted by them.

CARUS³⁾ gives the formula D 12(14), A 28(34-35), P 9(10-12), V 8(9).

Here is the amount of rays counted in the fins of our specimen: D 12, A 34, P 12, V 8.

1) My heartfelt thanks are due to Dr. T. GAMULIN who separated ichthyoplankton from his sample and kindly ceded it to me.

2) GOODE, G. B. and BEAN, T. H. Oceanic Ichthyology, p. 121, 122, pl. XXXVIII, Washington, 1895.

3) CARUS, V. J., Prodromus Faunae Mediterraneae, Vol. II, p. 566, Stuttgart, 1889—1893.

Finding Places of Bathypelagic Fish Species Hitherto Unknown in the Adriatic

Station No.	Date	Locality		Depth of Sample m	Gear	Collected Species
		N	E			
20	10. III. 1948	43° 28'	14° 13'	53-0	Ring-Trawl	<i>Lampanyctus alatus</i> , postl.
30	13. III. 1948	43° 45.5'	15° 13.5'	53-0	Ring-Trawl	<i>Lampanyctus elongatus</i> , postl.
49	26. III. 1948	42° 51.5'	14° 51'	53-0	Ring-Trawl	<i>Lampanyctus alatus</i> , postl.
63	14. IV. 1948	43° 27.5'	15° 54'	53-0	Ring-Trawl	<i>Lampanyctus elongatus</i> , postl. <i>Lampanyctus alatus</i> , postl.
70	3. IV. 1948	43° 03'	15° 40'	53-0	Ring-Trawl	<i>Lampanyctus alatus</i> , postl.
72	13. IV. 1948	43° 22.5'	16° 03.5'	53-0	Ring-Trawl	<i>Lampanyctus alatus</i> , postl.
81	9. IV. 1948	43° 18.5'	16° 13'	53-0	Ring-Trawl	<i>Lampanyctus alatus</i> , postl.
102	9. V. 1948	42° 20'	16° 13'	53-0	Ring-Trawl	<i>Myctophum rissoi</i> , postl.
114	7. V. 1948	42° 32.5'	16° 39'	53-0	Ring-Trawl	<i>Lampanyctus alatus</i> , postl.
116	15. V. 1948	42° 22'	16° 50'	53-0	Ring-Trawl	<i>Myctophum rissoi</i> , postl.
118	15. V. 1948	42° 38.5'	16° 47'	53-0	Ring-Trawl	<i>Myctophum rissoi</i> , postl. <i>Lampanyctus alatus</i> , postl.
121	8. V. 1948	42° 37.5'	17° 07'	53-0	Ring-Trawl	<i>Myctophum rissoi</i> , postl.
123	17. V. 1948	42° 41'	17° 17'	53-0	Ring-Trawl	<i>Myctophum rissoi</i> , postl.
134	26. V. 1948	42° 25'	18° 16'	53-0	Ring-Trawl	<i>Lampanyctus alatus</i> , postl.
136	11. XII. 1948	42° 09.5'	18° 22'	333-258	Trawl	<i>Myctophum rissoi</i> , adult.
152	14. VI. 1948	41° 21'	18° 49.5'	53-0	Ring-Trawl	<i>Myctophum rissoi</i> , postl. <i>Lampanyctus alatus</i> , postl. <i>Myctophum coccoi</i> , postl.
153	11. VI. 1948	41° 21.5'	19° 06'	53-0	Ring-Trawl	<i>Lampanyctus alatus</i> , postl.
155	13. VI. 1948	41° 07'	18° 50.5'	53-0	Ring-Trawl	<i>Myctophum rissoi</i> , postl. <i>Lampanyctus alatus</i> , postl.
158	12. VI. 1948	40° 54'	18° 52.5'	53-0	Ring-Trawl	<i>Myctophum rissoi</i> , postl.
159	10. VI. 1948	40° 55.5'	19° 03'	53-0	Ring-Trawl	<i>Lampanyctus alatus</i> , postl.
161	10. VI. 1948	40° 43.5'	19° 03'	53-0	Ring-Trawl	<i>Lampanyctus alatus</i> , postl.
163	3. VI. 1948	40° 28.5'	19° 09'	53-0	Ring-Trawl	<i>Lampanyctus alatus</i> , postl.
	13. X. 1948	42° 15'	17° 40'	about 700	Trawl for Bathypelagic Collecting	<i>Odontostomus hyalinus</i> , adult.
III	13. X. 1948	42° 15'	17° 40'	about 700	Ring-Trawl	<i>Lampanyctus alatus</i> , postl.
V	20. IX. 1949			about 680	Ring-Trawl	<i>Lampanyctus alatus</i> , adult.
	25. V. 1950	42° 18.5'	17° 55'	about 500	Trawl for Bathypelagic Collecting	<i>Lampanyctus alatus</i> , adult.

Received for publication August 28, 1952.

Kratak sadržaj

Daje se preliminarno izvješće o nastupanju pet vrsta batipelaških riba novih za Jadran.