

NOTE

New Record of Two Species of Suborder Ceratioidei on Flemish Cap, Northwest Atlantic

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Abstract

Two specimens of the Suborder Ceratioidei are described, a female of *Himantolophus maui* Bertelsen and Krefft, 1988, and a female of *Caulophryne jordani* Goode and Bean, 1896. Both were found on Flemish Cap bank east of Newfoundland, NAFO Div. 3M, in February 1992. Both represent the second most northerly records in the Northwest Atlantic and the first time they have been reported on this bank.

Key words: anglerfishers, Flemish Cap, research surveys, taxonomy

Introduction

Flemish Cap bank is separated from the Newfoundland Grand Bank to the west by a deep channel which is over 1 000 m deep (Templeman, 1976) (Fig. 1). The Labrador Current borders Flemish Cap bank to the west and east after having divided into two flows to the Northwest of the bank (Smith *et al.*, 1937). The North Atlantic Current flows along the south-eastern edge of the Grand Bank and moves past the Flemish Cap. These currents give the Flemish Cap a series of oceanographic, and thus zoological, peculiarities, which cause commercial species frequently found on the Newfoundland Grand Bank, such as haddock, yellowtail flounder and capelin, to be rare on the Flemish Cap bank (Scott and Scott, 1988; Frank *et al.*, 1994).

In February 1992 a cod tagging survey was carried out on Flemish Cap, financed by the European Union under the agreements of scientific co-operation between the EU and Canada. In this survey, two females of Suborder Ceratioidei were caught on Flemish Cap bank with trawl gear.

Results

Location of catches and description of specimens

Species

Himantolophus maui, Bertelsen and Krefft, 1988. *H. compressus* (Maul, 1961), *H. compressus* (Osorio, 1912).

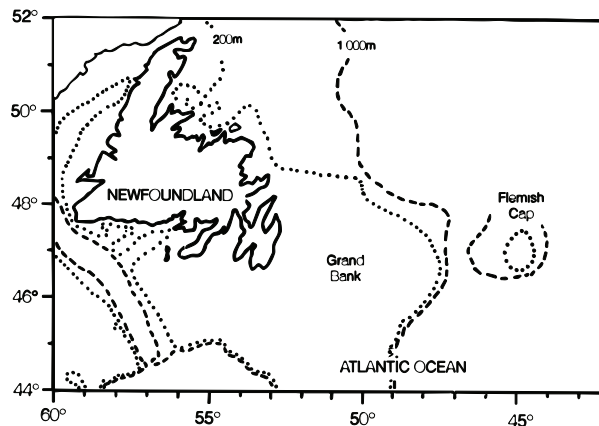


Fig. 1. Map of study area.

Location

The female specimen was found at 46°30'N, 46°02'W, trawling at a depth of 409 m.

Description

Fish uniformly black with all finrays black (Fig. 2). The number of finrays were: dorsal 5, pectoral 15, anal 4 and caudal 9. The illicium presented a bifurcated distal appendage, each main branch was simple, faintly pigmented in its proximal half; two small posterior esca appendages were pigmented only at the distal end. Dermal spines were present on each side of the body (left 26, right 28) and at least 3 were found on each pectoral lobe. They were also present on the illicium stem. It had well

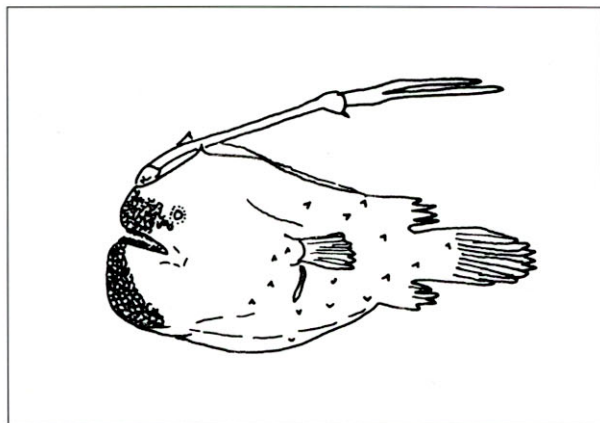


Fig. 2. Specimen drawing of *Himantolophus maui* Bertelsen and Krefft, 1988.

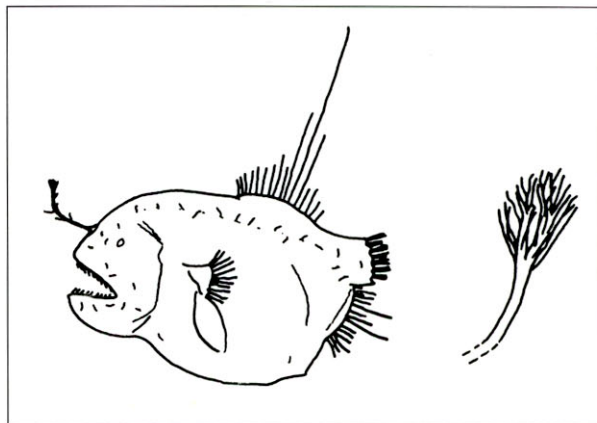


Fig. 3. Specimen drawing of *Caulophryne jordani* Goode and Bean 1896, with the esca in detail.

developed papillae on snout and chin. The specimen was in a perfect state of preservation.

Illicial measurements (as percent of standard length):

Standard Length (mm)	105
Length of illicium	58.0
Length of distal appendages, (total)	36.4
Length of distal appendages, (base)	9.7
Length of posterior esca appendage	7.2
Length of longest appendages of illicial stem	5
No. of appendages of illicial stem	3

Comments

This species appears in the UNESCO publication (Bertelsen, 1996) as *Himantolophus compressus* (Osorio, 1912). However, in the revision by Maul (1961) and in the latest revision of the genus, Bertelsen and Krefft (1988), it is considered a synonym of the species *H. maui*.

Distribution

This species is not recorded in the Canadian coastal Atlantic by Scott and Scott (1988), although it does appear in Bertelsen and Krefft (1988).

This specimen represents the second most northerly catch in the Northwest Atlantic, as there is a record further north: 47°N, 59°W (Bertelsen and Krefft, 1988).

Species

Caulophryne jordani Goode and Bean 1896

Location

The female specimen was found at 47°58'N, 45°51'W, trawling at a depth of 701 m.

Description

Body globular (Fig. 3). Eyes small and subcutaneous appearing throughout a translucent area of tegument and gills situated under pectoral fin base. Standard length (SL) was 176 mm. The numbers of fin rays were: dorsal 16, pectoral 17, anal 15 and caudal 8; the longest rays of dorsal and anal fin were greater than 60% SL, the longest ray of dorsal fin was broken, the length of fin's broken ray was 170 mm. Illicium tipped with filaments (14), with no esca bulb nor photophore. The length of the illicium was 21.6% of SL. The upper jaw had at least 30 teeth and lower jaw at least 16. Translucent filaments were present in the following areas: Illicium, head, lateral line, caudal fin base, and very scarce on the ventral area. Colour was uniformly dark brown. The sample was in a fair state of preservation.

Comments

The sample collected is over 67 mm and it is the biggest noted in the researched bibliography being 67 mm longer than the largest one (Pietsch, 1979).

Distribution

This is a species of wide distribution, and present in the three major oceans, the Atlantic, Pacific and Indian. Seven specimens have been recorded in the North Atlantic (Pietsch, 1979; Scott and Scott, 1988). The catch of this specimen is the second most northerly in the literature consulted.

Both specimens are in the collection of the Oceanográfico de Santander, Instituto Español de Oceanografía, Aptdo, 39080 Santande, Spain.

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EDITORIAL NOTE:

The following figure taken from *Atlantic Fishes of Canada* by W. B. Scott and M. G. Scotty, 1988, *Bull. Can. Bull. Fish. Aquat. Sci.*, **219**: 731 p. shows a representative picture of *Himantolophus groenlandicus* Reinhardt, 1837.

