

A New Fish Record from Turkish Seas: the Blackfin Sorcerer *Nettastoma melanurum* Rafinesque, 1810 (Nettastomidae)

Nuri BAŞUSTA, Cemal TURAN, Mevlüt GÜRLEK
Mustafa Kemal University, Faculty of Fisheries, Antakya, Hatay - TURKEY

Received: 06.06.2001

Abstract: Two and five specimens of the blackfin sorcerer, *Nettastoma melanurum*, were trawled on 25 and 30 April 2001 respectively at Samandağ, Hatay (36°10'N, 35°20'E; 36°05'N, 35°40'E) at about 80-200 m depth. It is recorded for the first time from the eastern Mediterranean coast of Turkey. Thus, a new species and family have been added to the fish fauna in Turkish seas.

Key Words: *Nettastoma melanurum*, Blackfin sorcerer, Nettastomidae, First record, Turkish seas

Türkiye Denizleri İçin Yeni Bir Balık Türü: Gagalı Yılan Balığı *Nettastoma melanurum* Rafinesque, 1810 (Nettastomidae)

Özet: Samandağ (Hatay) kıyılarında (36°10'N, 35°20'E; 36°05'N, 35°40'E) yaklaşık 80-200 m derinlikte troll avcılığı ile 25 ve 30 Nisan 2001'de 2 ve 5 adet *Nettastoma melanurum* (Gagalı yılan balığı) bireyi yakalanmış ve Doğu Akdeniz kıyılarından ilk defa kaydedilmiştir. Böylece Türkiye'nin balık faunasına yeni bir balık türü ve familyası eklenmiştir.

Anahtar Sözcükler: *Nettastoma melanurum*, Gagalı yılan balığı, Nettastomidae, İlk Kayıt, Türkiye Denizleri

Introduction

The blackfin sorcerer, *Nettastoma melanurum* Rafinesque, 1810, belongs to the family Nettastomatidae. This family consists of six genera (1). Saldanha (1) gave some information together with the general characteristics of Nettastomidae and the distribution and species characteristics of this family for the Mediterranean Sea and north east Atlantic. *N. melanurum* is widely distributed from the western Mediterranean and eastern Atlantic northward to Portugal. Golani (2) has simply listed *N. melanurum* among the fishes distributed in the eastern Levant Sea comprising Turkish waters, but with no reference being cited and no explanation of date, location, morphometric measurements, meristic counts etc.

Materials and Methods

Two and five specimens of the species were caught by a commercial trawl off Samandağ (Hatay) on 25 and 30 April 2001, at a depth of 80-200 m. The specimens were fixed and stored in 5% formaline solution. They were

deposited in the Zoology Department of Ege University and received the catalog numbers ZDEU-PM 301 and ZDEU-PM 401. The species identification key for the family Nettastomidae given by Saldanha (1) is as follows:

Identification Key to Genus and Species

- 1a. Snout with a long fleshy projection at tip.....*Venefica proboscidae*
- 1b. Snout without a fleshy projection at tip..... 2
- 2a. Posterior nostril an oval hole, level with upper rim of eye; no plato-pterygoid teeth*Nettastoma melanurum*
- 2b. Posterior nostril a cleft under a cutaneous fold, level with lower rim of eye; plato-pterygoid teeth generally absent.....*Facciolella oxyrhyncha*
- 2c. Posterior nostril comma-shaped near anterior rim of eye; plato-pterygoid teeth present*Saurechelys cancrivora*

Results

Materials examined: ZDEU-PM 301, 2 spec., 409-568 mm TL, 25.IV.2001, Samandağ, trawl 80-200 m; ZDEU-PM 401, 5 spec., 282.5-542.0 mm TL, 30.IV.2001, Samandağ, trawl 80-200 m.

All morphometric measurements and meristic counts of the specimens are given in the Table, and its pictures are given in Figures 1 and 2. The specimens were identified as *N. melanurum* using the diagnostic characteristics described by Saldanha (1) and confirmed by the Zoology Department of Ege University. According to Saldanha (1), this species can be distinguished by a combination of the following characters: body is very elongate, scaleless cylindrical anteriorly, compressed posteriorly and tapering to a point; anus before midpoint of body. Head long; anterior nostril tubular, at base of

prominent snout tip; posterior nostril is an oval hole at level of upper eye margin. Jaws are elongate, the upper with prominent tip and longer than lower; rictus is below posterior eye margin. Teeth are in bands on jaws and vomer, their size diminishing slightly from inner rows to outer ones; there are no plato-pterygoid teeth; plates of upper and lower pharyngeal teeth of same shape and size. Gill openings are crescentic, lateral. Dorsal, anal and caudal fin are confluent, well developed; dorsal fin origin is over gill opening. Lateral line is with prominent 43-45 preanal pores; 7-9 before gill openings; 3 supratemporal pores. Color (of fresh specimen): body has yellowish-brown dorsal side, pale whitish-yellow ventral side; posterior part of dorsal and anal fins are with a black margin; head is reddish dorsally; mouth is yellow; upper jaws is dark; peritoneum is black.

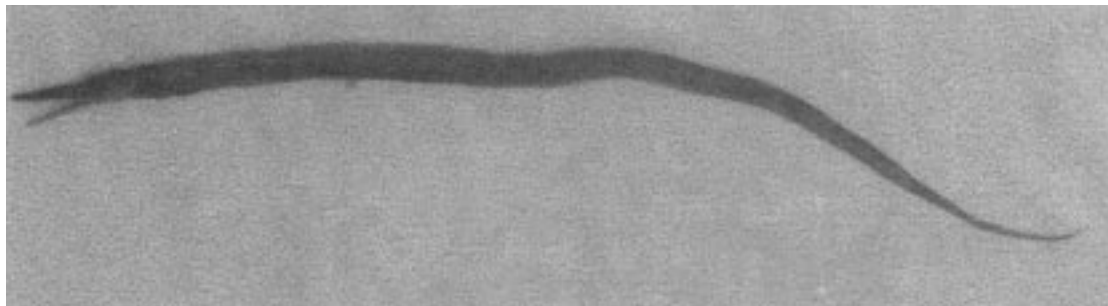
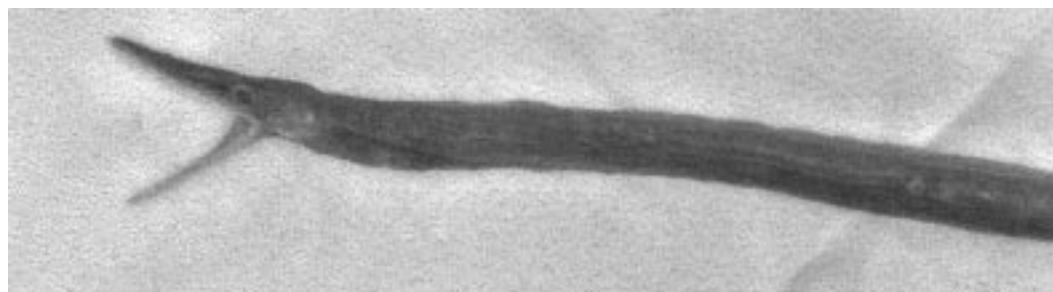


Fig. 1. a) *N. melanurum* from off the coast of Samandağ (Hatay), Turkey (TL = 41.9 mm).



b) Lower and Upper Jaws of *N. melanurum*.

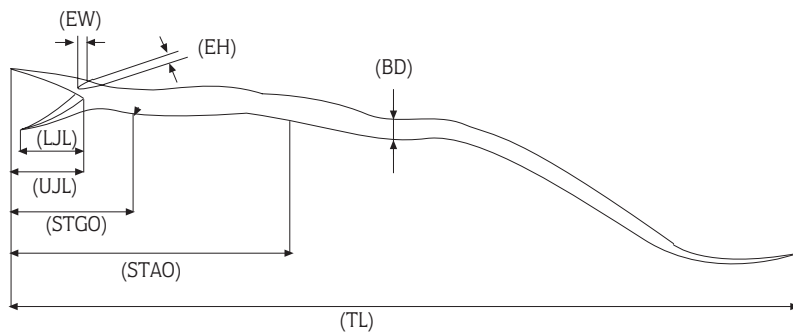


Fig. 2. The morphometric measurements.

Table 1. Morphometric measurements and meristic counts of *N. melanurum* Off the coast of Samandağ (Hatay), Turkey.

Measurements	Fish Specimens							Unit
	1	2	3	4	5	6	7	
Total weight (TW)	24.17	107.44	10.37	48.69	45.30	80.39	12.41	g
Total length (TL)	409.0	568.0	282.5	488.0	440.0	542.0	337.0	mm
Body depth (BD)	13.1	26.0	11.5	16.0	17.0	21.0	10.0	mm
Snout tip to gill opening (STGO)	55.0	83.0	43.0	64.0	62.0	70.0	45.0	mm
Snout tip to anus opening (STAO)	161.0	226.0	117.0	176.0	181.0	216.0	126.0	mm
Eye width (EW)	6.0	7.8	5.0	6.5	6.2	6.9	5.0	mm
Eye height (EH)	4.0	6.5	3.2	4.5	4.2	5.1	3.3	mm
Upper jaw length (UJL)	33.0	45.0	26.0	37.0	35.0	42.0	27.0	mm
Lower jaw length (LJL)	30.0	41.5	23.0	34.0	32.0	37.0	25.0	mm

Meristic counts	Fish Specimens							Unit
	1	2	3	4	5	6	7	
Preanal pores	45	46	43	45	45	46	44	number
Supratemporal pores	3	3	3	3	3	3	3	number

Discussion

All counts and measurements agree with Saldanha's (1) descriptions of *N. melanurum*. This species has been reported from Algeria, Tunisia, Morocco, Spain, Portugal, France and Italy by Saldanha (1) and from Greece by Hureau (3) in the Mediterranean Sea. This species has not been recorded in Turkish seas (4- 6). Thus, *N. melanurum* and the family Nettastomidae have been recorded for the first time on the eastern coasts of

Turkish territorial waters in the Mediterranean Sea, in spite of its presence in the species list given by Golani (2). The seven specimens presented herein show the successful establishment of the species in the Mediterranean Sea.

Acknowledgement

Many thanks to M. Bilecenoğlu of the Zoology Department, Ege University, for the catalog number.

References

- Saldanha, L.: Nettastomatidae, Fishes of the north-eastern Atlantic and the Mediterranean. In P.J.P. Whitehead, M.-L. Bauchot, J.-C. Hureau, J. Nielsen and E. Tortonese (eds.) UNESCO, Paris. Vol. 2, p. 562-566, 1986.
- Golani, D.: The marine ichthyofauna of the eastern Levant: History, inventory and characterization. Israel J. Zool., 1996; 42: 15-55.
- Hureau, J.-C.: La base de données GICIM: Gestion informatisée des collections ichthyologiques du Muséum. In Atlas Préliminaire des Poissons d'Eaux Douce de France. Conseil Supérieur de la Pêche, Ministère de l'Environnement, CEMAGREF et Muséum National d'Histoire Naturelle, Paris, p. 225-227, 1991.
- Anonymous.: Marmara, Ege ve Akdenizde demersal balıkçılık kaynakları survey raporu. TKB, Tarımsal Üretim ve Gelişme Genel Müdürlüğü, Ankara 579 s, 1993.
- Gücü, A.C., Bingel, F.: Trawlable species assemblages on the continental shelf of the Northeastern Levant Sea (Mediterranean) with an emphasis on the Lessepsian migration. Acta Adriatica, 1994; 35 (1/2): 83-100.
- Mater, S., Kaya, M., M. Bilecenoğlu, (Eds.): Check-list of marine fishes of Turkey-Part-II (Classis Osteichthyes), 2000. <http://bornova.ege.edu.tr/~mbilecen/bony_list.html>.10.05.2001.