

Occurrence of a Sawback Angelshark (*Squatina aculeata* Cuvier, 1829) off the Eastern Mediterranean Coast of Turkey

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Abstract: A specimen of *Squatina aculeata* (sawback angelshark) was caught in a trawl on 15 May 1997 in Iskenderun Bay at about 120-200 m depth and recorded for the first time from the eastern Mediterranean coast of Turkey. Thus, a new species of fish was recently added to the chondrichthyes fish fauna in the eastern Mediterranean Sea off Turkey.

Key Words: *Squatina aculeata*, sawback angelshark, Eastern Mediterranean Turkish waters.

Türkiye'nin Doğu Akdeniz Kıyılarında Dikenli Keler (*Squatina aculeata* Cuvier, 1829) Türünün Bulunuşuna İlişkin İlk Kayıt

Özet: Iskenderun Körfezi'nde 15 Mayıs 1997 tarihinde yapılan trol avcılığında yaklaşık 120-200 m derinlikte bir adet *Squatina aculeata* (Dikenli keler) bireyi yakalanmış ve doğu Akdeniz kıyılarımızdan ilk defa kaydedilmiştir. Böylece Türkiye'nin Doğu Akdeniz balık faunasına yeni bir kırkardaklı balık türü eklenmiştir.

Anahtar Sözcükler: *Squatina aculeata*, Dikenli Keler, Doğu Akdeniz Türk Suları.

Introduction

Squatinidae is a family of marine fishes commonly called angelsharks. This family consists of one genus, and in this genus there are 12 species (1, 2). Three of them were recorded in the Eastern Levant Sea (3) (*Squatina squatina*, *S. oculata* and *S. aculeata*), the first two of which have been recorded in Turkish territorial waters (4-6). Golani (3) has simply listed the *S. aculeata* Cuvier, 1829 (sawback angelshark) among the fishes distributed in the Eastern Levant Sea comprising Turkish waters, but with no reference being cited and no explanation of the date, location, morphometric measurements etc. This study was carried out for the determination of *S. aculeata* living on the coasts of the eastern Turkish Mediterranean sea.

Materials and Methods

A specimen of this species was captured by a trawl (120-200 m depth) in Iskenderun Bay (36°20'N, 36°00'E) on 15 May 1997. The specimen was identified as *S. aculeata* by the diagnostic characteristics described by Roux (7) and also confirmed by personal

communication with Mater (8). The morphometric measurements were taken to the nearest 0.1 mm. Moreover, the specimen was kept in the laboratories of the Faculty of Fisheries, Mustafa Kemal University.

Results

All morphometric measurements of the specimen and a picture of it are given in the Table and Figures 1 and 2, respectively. The sawback angelshark is seldom caught in the Mediterranean Sea and so only one specimen was caught.

Discussion

S. aculeata can be separated from its congeners by the posterior tip of the pelvic fin reaching at least the midpoint of the first dorsal fin and by the short thick spines on the midline of the back (3). Fischer *et al.* (9) reported records from the western shores of Egypt and Greece. There has been no remarkable record off the Turkish coast for *S. aculeata*. Hence this study provides the first record of *S. aculeata* in Iskenderun Bay.

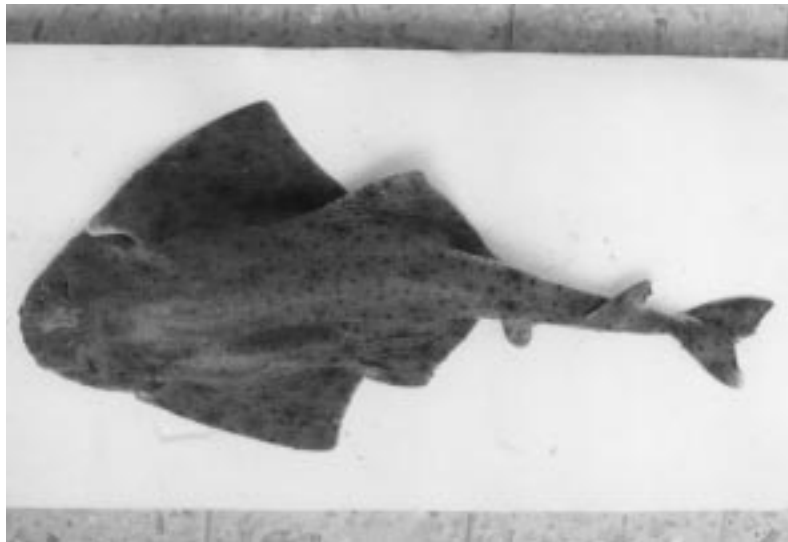


Figure 1. The picture of *S. aculeata*.

Table. Morphometric measurements of *S. aculeata* D₁: First dorsal fin, D₂: Second dorsal fin. Sex of the specimen is male.

Measurements		Unit
Total weight (TW)	3690	g
Total length (TL)	798.9	mm
Eye height (EH)	13	mm
Eye width (EW)	17.7	mm
Body depth (ED)	60.4	mm
Standard length (SL)	684	mm
Dorsal fin base length (DFBL)	37.4	mm
Caudal peduncle depth (CPD)	17.9	mm
Snout to dorsal length (SDL)	481.4	mm
Pectoral fin length (PFL)	274.5	mm
The distance between D ₁ and D ₂ (DB D ₁ -D ₂)	56.4	mm

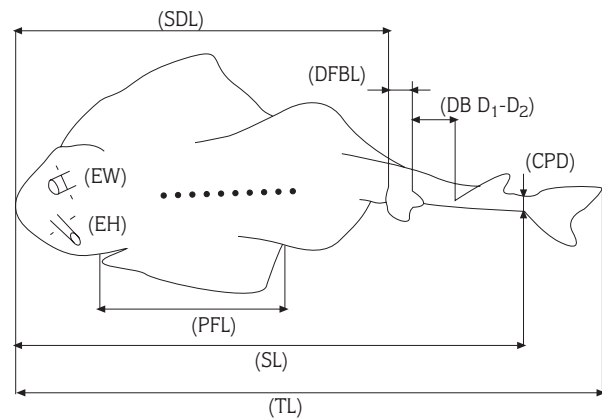


Figure 2. The morphometric measurements

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References

- Compagno, L.J.V.: Sharks of the world. An annotated and illustrated catalogue of shark species known to date. Part I. Hexanchiformes. FAO Fish. Synop. (125), 1984: 4: 1-249.
- Shirai, S.: Phylogenetic relationships of the angel sharks, with comments on elasmobranch phylogeny (Chondrichthyes, Squatinidae). Copeia 1992; 2: 505-518.
- Golani, D.: The marine ichthyofauna of the eastern levant-history, inventory and characterization. Israel J. Zool., 1996; 42: 15-55.
- 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.
- Anonymous.: Marmara, Ege ve Akdenizde Demersal Balıkçılık Kaynakları Survey Raporu. TKB, Tarımsal Üretim ve Gelişme Genel Müdürlüğü, Ankara 579 s, 1993.
- Başusta, N., Erdem, Ü., Çevik, C.: İskenderun Körfezi Kıkırdaklı Balıklar Üzerine Taksonomik Bir Çalışma. Celal Bayar Üniversitesi, Fen-Edebiyat Fakültesi Dergisi, Fen Bilimleri Serisi (Biyoloji) S 63-69. Manisa, 1998.

7. Roux, C.: Les Anges de mer (Squatinae) de L' Atlantique et de la Mediterranee. Bull. Off. Natl. Peches Tunisie, 1977; 1 (2): 159-167.
8. Mater, S.: Personal Communication. Ege University, Fisheries Faculty, Izmir, Turkey, 1997.
9. Fischer, W., Schneider, M., Bauchot, M.-L.: Fiches FAO d'identification des espèces pour les besoins de la pêche. (Révision 1). Méditerranée et mer Noire. Zone de pêche 37. Vol. II. Vertébrés. Publication Préparée par la FAO et la Com. des Communautés Européennes (Projet GCP/INT/422/EEC) financée conjointement par ces deux organisations. FAO, Rome, pp.761-1530, 1987.