

Rapid Communication**First record of the flat needlefish *Ablennes hians* (Valenciennes, 1846) in the Mediterranean Sea (Osteichthyes, Beloniformes, Belonidae)**

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OPEN ACCESS**Abstract**

The flat needlefish *Ablennes hians* was recorded for the first time from the Mediterranean. One specimen was captured on 23 September 2018, near the city of Netanya, Israel, ca. 20 km north of Tel-Aviv, and can be considered likely to be a Lessepsian migrant that entered the Mediterranean via the Suez Canal.

Key words: Israel, Lessepsian migration, invasion, Red Sea**Introduction**

The Mediterranean Sea is susceptible to the introduction of new species (Golani and Appelbaum-Golani 2010; Coll et al. 2010). Non-indigenous fishes enter the Mediterranean in several ways. Most new fish species are from the Red Sea and entered the Mediterranean through the Suez Canal, being reported as “Lessepsian migrants”. Other species have entered from the Atlantic Ocean, naturally expanding their distribution via Gibraltar, or have been introduced as aquarium escapees or from ballast water (Zenetos et al. 2012).

Methods and results

On 23 September 2018 a large flat needlefish (Figure 1) was captured ca. 5 km south of the city of Netanya, Israel about 300 m off shore at depths of 20–30 m. The specimen was caught by trammel net and photographed while fresh but was not preserved.

The fishermen reported observing several specimens of the same species, some of which escaped by skittering with most of their body erect, leaping out of the water.

The specimen was identified as *Ablennes hians* (Valenciennes, 1846) and constitutes the first record in the Mediterranean Sea (Collette and Parin 1986).



Figure 1. *Ablennes hians* caught in the Mediterranean coastal waters of Israel. Photograph: G. Sassover.

Short description of the Mediterranean specimen (from the photograph)

Very elongated and compressed body. Both jaws are long and pointed, (70.1% of head length) with many needle-like teeth. Large eye. Dorsal and anal fins in posterior position, opposite each other, the anterior of both having high falcate lobes. Pectoral fin falcate as well. Caudal fin forked.

Color: Dorsal surface blue, gradually becoming light blue on the flanks and white on the ventral surface. Pelvic fins white, other fins dark. Six vertical blue bars on the posterior part of the body. The first half of the jaws has a pinkish tone.

Discussion

The family of Belontiidae consists of 47 species in ten genera, inhabiting marine and freshwater environments throughout the world (Nelson et al. 2016). The genus *Ablennes* has a single species, *Ablennes hians*, with worldwide, tropical and subtropical distribution on both sides of the Atlantic Ocean and the Indo-Pacific, including the Red Sea (Collette 1999; Golani and Fricke 2018).

Ablennes hians is a pelagic fish, living singly or in large schools (Cervigón et al. 1992) mainly offshore but occasionally found in coastal waters. It feeds mainly on pelagic fishes (Murphy et al. 1997). Its maximum size is close to 150 cm TL or nearly 100 cm of body length (from the operculum margin to the origin of the caudal fin).

Ablennes hians can be easily distinguished from all its co-familial species by having a laterally compressed body, clear falcate lobes on the anterior

parts of the dorsal and anal fins, and dark vertical bars on its sides (Collette and Parin 1970).

Due to its circumglobal distribution, the origin of the specimen is not certain, but most likely from the Red Sea (Lessepsian migrant) since species that occur in the Atlantic Ocean are usually spread throughout the Mediterranean, unlike this species.

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