

Rapid Communication

First record of the Indo-Pacific slender ponyfish *Equulites elongatus* (Günther, 1874) (Perciformes: Leiognathidae) from Turkey

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Abstract

Eight specimens of the slender ponyfish *Equulites elongatus* were collected, by otter trawl, between 6 December 2014 and 18 April 2015 from Turkish waters, off Mersin. This constitutes the second record of this species in the Mediterranean Sea and is about 530 km distant from the site of first record (Tel Aviv, Israel).

Key words: *Equulites elongatus*, Leiognathidae, Indo-Pacific, first record, Turkey, alien species, Lessepsian migration

Introduction

Ponyfishes (Leiognathidae) are small to medium-sized bottom-living fishes (James 1984). The body is oblong or round and laterally compressed, covered with small cycloid scales. The head is naked, with bony ridges on the upper surface and a well developed nuchal crest or spine, mouth is small and strongly protractile. The body color is silvery with characteristic markings on body and fins. Ponyfishes are widely distributed in the shallow coastal regions in the Indo-West Pacific, from surface down to 170 m. They are known to form dense schools and are easily caught with bottom trawls, as well as with various artisanal gears (James 1984). Ponyfishes can constitute the major part of the catch (Masrikat 2012; Yedukondola Rao et al. 2013).

Two species of ponyfishes, *Equulites klunzingeri* (Steindachner, 1898) and *Equulites elongatus* (Günther, 1874) have been reported from the Eastern Mediterranean, and are suggested to have entered through the Suez Canal (Golani et al. 2013). *Equulites klunzingeri* is widely distributed in the Levant Basin, but the presence of *Equulites elongatus* is based on a single specimen (Golani et al. 2011) from the vicinity of Tel Aviv, Israel.

Eight specimens of slender ponyfish *Equulites elongatus* were collected for the first time from the Turkish coast (vicinity of Mersin). This constitutes the second record of this species from the Mediterranean, which is ~530 km from Tel Aviv, and successive records from the same location indicate that the species may be becoming established.

Methods

On December 2014 two specimens of *Equulites elongatus* was collected by otter trawl off the coast of Mersin, Turkey (Station 1; Figure 1). On April 2015, six more specimens were caught at the same region in two trawling stations, Station 1 and Station 2. Two of the specimens were deposited in the Istanbul University, Science Faculty, Hydrobiology Museum, Istanbul (Specimen #1 IUSHM 2015-1163 and Specimen #6 IUSHM 2015-1164) and the others are kept in the author's private collection (DNA1614-1619). The classification follows Eschmeyer and Fricke (2011) and counts and measurements follow Golani et al. (2011).

Figure 1. Map of the trawl stations, dashed line shows the transects. Transect 1: start 36.116485N, 33.530869E; end 36.116563N, 33.554931E; total distance 2134 m; average depth 90 m. Transect 2: start 36.122187N, 33.560845E; end 36.122492N, 33.540806E; total distance 2070 m; average depth 45 m.

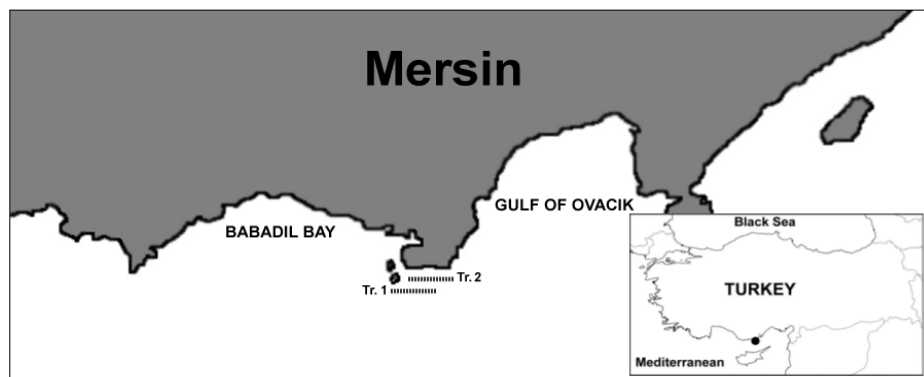


Table 1. Morphometric characteristics of the specimens. SL: standard length; PD: predorsal length; HD: head length; EYE: eye diameter (all measurements are in mm).

Specimen #	SL	PD	HD	EYE
Specimen 1 (IUSHM 2015-1163)	71.9	29.1	20.3	6.7
Specimen 2 (DNA1614)	47.8	18.0	13.1	5.1
Specimen 3 (DNA1615)	62.3	21.3	15.8	10.6
Specimen 4 (DNA1616)	63.8	22.9	16.4	10.9
Specimen 5 (DNA1617)	43.2	15.5	12.6	4.3
Specimen 6 (IUSHM 2015-1164)	69.3	30.4	18.7	11.3
Specimen 7 (DNA1618)	72.4	30.6	18.4	11.8
Specimen 8 (DNA1619)	68.8	25.7	17.7	11.7

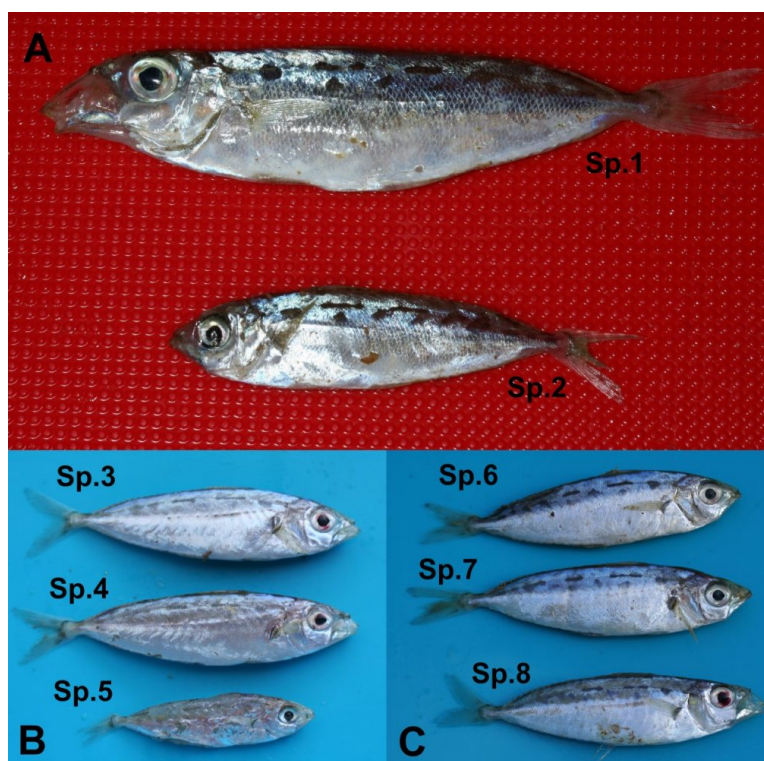


Figure 2. The *Equulites elongatus* specimens (Sp.1-Sp.8) captured during the surveys. Specimens collected (A) in December 2014 at Station 1; (B) in April 2015 at Station 1; (C) in April 2015 at Station 2.

Results and discussion

Description of the specimens

The eight specimens captured during this study were between 43 and 72 mm standard length (Table 1) and the other key morphometric measurements and description fit those provided by Golani et al. (2011). Body elongated, mouth highly protrusible, snout pointed. Single dorsal fin with 8 spines and 16 rays. First spine small, next three spines larger, rest decreasing sharply in size. Dorsal rays near equal in length. Anal fin with 3 spines and 14 rays, first spine very small forked. Pectoral fin with 16 rays. Pelvic fin small with a single spine and five rays, its origin is slightly beyond the pectoral fin origin. Color: upper body dark grey with irregular dark spots. Lower part of body and belly silver-grey. Eyes silver-grey with black pupil.

Discussion

The morphologies of the specimens fit the description given by Golani et al. (2011) except the pectoral fins, which were described as having 12 fin rays instead of 16, suggesting a variable characteristic. *Equulites elongatus* can be distinguished from *Equulites klunzingeri* by possessing a less deep and more elongated body.

Equulites elongatus is widely distributed in the Indo - West Pacific. It has been recorded from many countries, including: Hong Kong (Ni and Kwok 1999); the Philippines (Conlu 1986); Indonesia (Wiadnya et al. 2014); Malaysia (Mohsin et al. 1993); Australia (Gloerfelt-Tarp and Kailola 1984); Fiji (Seeto and Baldwin 2010); Thailand (Monkolprasit et al. 1997); India (Kapoor et al. 2002); Oman (Jayabalan et al. 2010); the Seychelles (James 1984); Mozambique (Fischer et al. 1990); and Somalia (Sommer et al. 1996). It has also captured in the Red Sea (Golani et al. 2011; Bogorodsky et al. 2014) and most likely was introduced to Eastern Mediterranean via Suez Canal (Golani et al. 2013).

Equulites elongatus is known to form schools and prefers shallow waters near the bottom to depths of 30 m (Golani et al. 2011). However, the average depths of the Station 1 and Station 2 transects were 90 m and 45 m, respectively, indicating that this species can inhabit deeper waters. *Equulites elongatus* is the second alien ponyfish observed in the Mediterranean. *Equulites klunzingeri* was first recorded in Syria in 1931 (Gruvel 1931) and become very common in the Eastern Mediterranean in a short time (Golani et al. 2013). It forms large schools and often is caught by commercial trawlers in huge numbers

(Gücü and Bingel 1994). Closely related species have similar biological characteristics and may establish similar invasive populations (Azzurro et al. 2014). So, a population expansion in the near future can also be expected for *Equulites elongatus*. The record of eight individuals nearly three and a half years after its first report from the Mediterranean suggests an establishment of the population. However, only a total of nine individuals are yet reported from the Mediterranean. This may be explained by the elongated and slender body of the species (unlike its confamilials), which makes it hard to retain the species by otter trawls with cod ends using the mesh sizes typically used in Turkish waters.

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