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Aquatic Invasions Records

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

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Abstract

The slender ponyfish *Equulites elongatus* was recorded for the first time in the Mediterranean near Tel-Aviv, Israel on 27 May 2011. This Indo-Pacific species evidently reached the Mediterranean by crossing the Suez Canal.

Key words: *Equulites elongatus*, Leiognathidae, Indo-Pacific, first record, Mediterranean, Lessepsian migration, distribution

Introduction

The opening of the Suez Canal in 1869 connected the Red Sea with the Mediterranean, resulting in an almost unidirectional migration of Red Sea organisms into the Mediterranean ("Lessepsian migration") (Golani, 2010). Among fish, 81 Lessepsian species have been confirmed and recorded in the Mediterranean (Salameh et al. 2011).

Methods

On 27 May 2011 a 72.8 mm SL specimen of *Equulites elongatus* (Günther, 1874) was collected from a nocturnal catch of the commercial trawler F/V Bilu, using a 44 mm mesh size cod-end net, at the depth of ca. 35 m at the vicinity of Tel-Aviv. The specimen was deposited in the Hebrew University Fish Collection and received the catalog number HUJ 20072. Counts and measurements followed Hubbs and Lagler (1947); the classification follows Eschmeyer and Fricke (2011).

Results and discussion

Description of the Mediterranean specimen (Figure 1)

Body elongated and moderately compressed; depth at dorsal fin origin 3.7 in SL. Head 3.6 in SL. Upper profile of head very slightly convex while the ventral profile from below the eye slightly concave. Mouth highly protrusible. Snout pointed. Large eye, 3.0 times in head length and 1.6 in head depth. Two gill rakers on the upper arch and 14 on the lower arch (including the raker on the angle). Nostrils very close to each other; anterior is a very small hole while the posterior is larger and ellipsoid, both located at the level of the upper quarter of the orbital and slightly closer to it than the distance to the upper jaw tip. A pair of bony ridges on the head and above the eye and a median ridge continuing to the edge of the snout. 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 (9th–10th rays missing due to mechanical injury), first spine very small

Figure 1. *Equulites elongatus*, HUJ 20072, 72.8 mm (SL), 27 May 2011, Tel-Aviv, Israel. Photograph by D. Golani.

and the second spine is the largest. Caudal fin forked. Pectoral fin with 12 rays. Pelvic fin small with a single spine and five rays, its origin is slightly beyond the pectoral fin origin. Small flap at the edge of the operculum at level of the upper pectoral base preoperculum, its edge is smooth. Small elongated extension on left flap only. Most of the body, including cheek and breast, covered with scales, many of which had been shed, leaving only indications of scale pockets.

Color: upper body dark grey with irregular dark spots. Lower part of body and belly silver-grey. Eyes silver-grey with black pupil.

Discussion

This species was first described by Günther (1874) as *Equula elongata*. Later, it was placed by many authors in the genus *Leiognathus* (see James 1984; Woodland et al. 2001, Sparks and Dunlap 2004). Based on molecular studies and the shape and arrangement of the light-organ system, Sparks et al. (2005) concluded that *Leiognathus* is not a monomorphic taxon and therefore established two new genera: *Photoplectoralis* and *Photoplagios*; *L. elongatus* was placed in the later genus (see also: Sparks 2006; Chakabarty and Sparks 2008). Later, Kimura et al. (2008) showed that *Photoplagios* Sparks, Dunlap and Smith, 2005 is a junior synonym of *Equulites* Fowler, 1904.

Equulites elongatus has a wide Indo-Pacific distribution from the Red Sea and the east coast of Africa to southern Japan and Australia (Woodland et al. 2001); in fact, Woodland et al. (2001) is the only mention of *E. elongatus* in the Red Sea. However, there are five lots of this species (HUJ 16149, 16155, 16358, 16360 and 16409) from Eritrea, Southern Red Sea in the Hebrew University Fish Collection. This species travels in schools inhabiting shallow waters near the substrate to depths of 30 m and feeds mainly on small benthic invertebrates and, to a lesser extent, algae.

Equulites elongatus is the second ponyfish to invade the Mediterranean. Prior to *E. elongatus*, *Equulites (=Leiognathus) klunzingeri* (Steindachner, 1898) was first recorded from Syria (Gruvel, 1931) and established a very large population, often being caught by commercial trawlers in huge numbers (Golani et al. 2002).

Equulites elongatus can be easily distinguished from all its co-familials in the Red Sea by its elongated and slender body and its depth which is more than 3.3 times the standard length (SL), while other related species have a noticeably deeper body, less than three times the SL.

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