

New record of the Blue-spotted Cornetfish, *Fistularia commersonii* Rüppell, 1838 (Syngnathiformes Fistularidae), in the South-Western Mediterranean Sea

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ABSTRACT

The recent caught of a male specimen of Blue-spotted Cornetfish, *Fistularia commersonii* Rüppell, 1838 (Syngnathiformes Fistularidae), near the coast of Portoscuso, Sardinia, Italy (South-Western Mediterranean Sea, 39°12.17' N / 8°22.44' E) is described. Morphometric and meristic data are reported.

KEY WORDS

Fistularia commersonii; Lessepsian species; South-Western Mediterranean Sea; Sardinia.

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INTRODUCTION

The Blue-spotted Cornetfish, *Fistularia commersonii* Rüppell, 1838 (Syngnathiformes Fistularidae), is today considered the fastest non indigenous species of the Mediterranean Sea (Azzurro et al., 2013). The Blue-spotted Cornetfish is an Indo-Pacific species with a circum-tropical distribution, being associated with reefs or with shallow sandy bottoms at depths extending down to 132 m (Deidun & Germanà, 2011). *F. commersonii* was described for the first time in the Mediterranean Sea by Golani in 2000 from the coasts of Israel. Following this finding, *F. commersonii* has spread rapidly its geographical distribution all over the Mediterranean, across the oriental (Bilecenoglu et al., 2002; Gokoglu et al., 2002; Corsini et al., 2002; Karachle et al., 2004), central (Azzurro et al., 2004; Fiorentino et al., 2004; Micarelli et al., 2004; Ben-Souissi et al., 2004) and western parts of the basin (Garibaldi & Orsi Relini, 2008; Kara & Oudjane, 2008; Bodilis et al., 2011). In 2007 it was reported off the Southern coasts of Spain (Sanchez-Tocino et al., 2007), which is the farthest a

Lessepsian species has ever been recorded from its entry point (CIESM, 2009).

MATERIALS AND METHODS

An adult male specimen of Blue-spotted Cornetfish (*Fistularia commersonii*), was caught in a trammel net at a depth of around 10 m, half a mile from the coast of Portoscuso, Sardinia, Italy (South-Western Mediterranean Sea, 39°12.17' N / 8°22.44' E) in November 2012 (Figs. 1, 2). Such specimen unidentified by the fisherman has been handed by him to the Veterinary Doctors of the Local Health Unit n. 7 of Carbonia who identified it to species. Subsequently, the species was placed in sterile bags (kept in ice boxes at 3°C) during the transport and was immediately frozen at -20°C upon arrival at the laboratory of the Department of Veterinary Medicine in Sassari and was once photographed, weighed and measured. Morphometric and meristic characters were recorded according to the methods described by Strauss & Bond (1990).

RESULTS

The distinctive characters of this species were represented by a total length of 92 cm and by a total weight of 170 grams. All the morphometric and meristic data are reported in Table 1. The body was extremely elongated with tubular shape slightly flattened in dorsal-ventral direction. The skin was naked without bony plaques along the midline of the back. Typically greenish grey to olive in colour, with two rows of blue round spots and a pair of blue stripes along the back. The belly was silvery-white, the fins were transparent at base and with orange crest. The head was very long (approximately 1/3 of its total length) with star shaped jagged crests on the dorsal part and big and round eyes. It had a narrow long tubular snout with two lateral jagged crests and a small oblique mouth at the end. Dorsal and anal fins both triangular with a similar appearance, a combined total of 14 rays and in opposite positions towards the caudal fin. The caudal fin was forked with the two very elongated and filamented middle rays forming a long whip-like tail filament protruding from its center. Along the sides there were two lines of jagged crests, more visible in the tract from the dorsal fin to the caudal one.

DISCUSSION

A new finding of an adult Blue-spotted Cornetfish (*F. commersonii*) specimen in the Italian waters confirm the widening of its original distribution

VARIABLE	VALUE
Sex	Male
Total weight	170 grams
Total length	92 cm
Head length	30 cm
Height	max 3cm - min 5mm
Dorsal fin length	3.6 cm
Dorsal fin rays number	14
Anal fin length	3 cm
Anal fin rays number	14
Caudal fin length	10 cm

Table 1. Morphometric and meristic data of the *Fistularia commersonii* specimen.

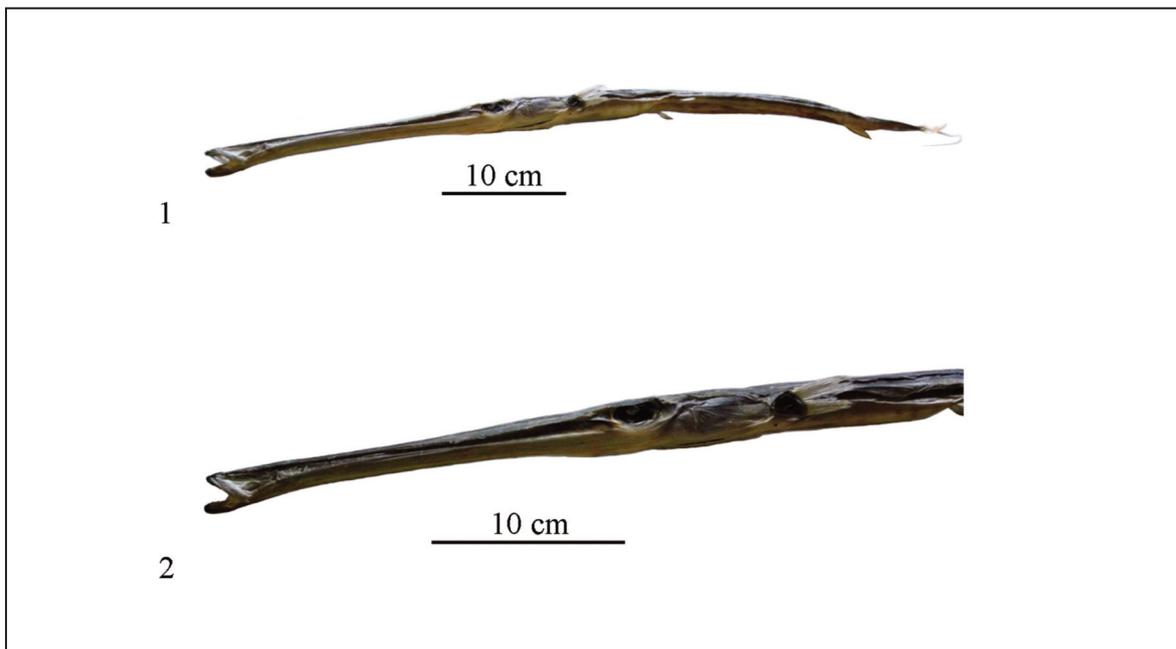


Figure 1. The male specimen of *Fistularia commersonii* recovered near the coasts of Portoscuso Sardinia, Italy.
 Figure 2. *Fistularia commersonii*, detail.

area from the Indo-Pacific to the Mediterranean. *F. commersonii* was first recorded in 2002 off the coasts of Sicily (Fiorentino et al., 2004; Azzurro et al., 2004). In the following years established populations along the central Tyrrhenian coasts and it was caught from the coasts of Campania (Pipitone et al., 2004) and soon after off the coasts of Latium, Tuscany and Liguria (Micarelli et al., 2006; Ligas et al., 2007; Occhipinti-Ambrogi & Galli, 2008; Psomadakis et al., 2009). The first record of *F. commersonii* in the Adriatic Sea was described by Dulcic et al. in 2008 off the coastal waters of Apulia. This is the most recent record of Blue-spotted Cornetfish in the South-Western coasts of Sardinia (Italy): previous studies (Pais et al., 2007; Sanna et al., 2011) described the record of specimens of Blue-spotted Cornetfish in the coasts of Sardinia since 2005. This new finding confirms that *F. commersonii* is the fastest and furthest spreading alien fish in the Mediterranean Sea (Golani et al., 2007) and that the Sardinian waters represent a model of optimum habitat for the study of the biology and ecology of the *F. commersonii* populations in the Mediterranean Sea.

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