First record of the Brassy Chub *Kyphosus vaigiensis* (Pisces: Kyphosidae) from the Mediterranean coast of Libya

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In the present paper we report the first record of the Brassy Chub *Kyphosus vaigiensis* (Quoy and Giamard, 1825) from the Mediterranean coast of Libya. It is assumed that this species arrived into the Mediterranean from the Red Sea via the Suez Canal. We stress the need of taxonomic study on the genus *Kyphosus* in the Mediterranean.

**Key words:** *Kyphosus vaigiensis*; Mediterranean; Libya; invasive

**INTRODUCTION**

The Mediterranean Sea, being an enclosed sea located between Europe and North Africa, has become a hot spot for non-native fish species. A recent publication (GOLANI et al., 2021) enumerated 188 non-indigenous fish species in the Mediterranean; this is an addition of 107 species to the list published less than two decades ago (GOLANI et al., 2002).

New fish enter the Mediterranean in three manners: a) Atlantic species expand their distribution via Gibraltar, b) Red Sea species cross the Suez Canal (Lessepsian migrants) and c) species reach the Mediterranean via direct human activity such as aquaculture and aquarium escapees.

In the present paper, we report the first record of the Brassy Chub *Kyphosus vaigiensis* (Quoy and Giamard, 1825) from the coast of Libya. This record contributes additional evidence of the spread of this species in the Mediterranean.

**MATERIAL AND METHODS**

On August 2021 two specimens were collected by trammel net at ca. 20 m at location 32°42’17.32”N 21°01’10.20”E (Fig. 1). The specimens were photographed (Fig. 2) but were not saved. All counts and measurements follow HUBBS & LAGLER (1947).

Fig. 1 Map of the site, indicated by a red star, where *Kyphosus vaigiensis* was captured (Talamitha region, Libya).
RESULTS

Short description (Based on captured specimen – Fig. 2)


DISCUSSION

The family of Kyphosidae, Sea Chubs, consists of 17 species in three genera. According to Nelson et al. (2016) the genus Kyphosus consists of 15 species, while Knudsen & Clements (2013) enumerated only eleven species in this genus. The morphology of most of the Kyphosus species is quite similar, thus having a complicated taxonomy with numerous synonyms and misidentifications. As a result, several names of the genus Kyphosus appear in literature as occurring in the Mediterranean, such as K. bosquii (Lacepède, 1802) (Sakai, 2016; Orsi-Relini, 2017) which according to Knudsen & Clements (2013) is a synonym of the Indo-Pacific K. biggibus Lacepède, 1801 and the Mediterranean records are most likely misidentifications. Tortonese (1986) and Francour & Mouine (2008) reported K. spectator (Linnaeus, 1766) and later Ligas et al., (2011) and Kiparissis et al., (2012) reported K. saltatrix (Linnaeus, 1758); both are synonyms of K. sectatrix (Linnaeus, 1758) (Knudsen & Clements, 2013). Another Atlantic species, K. incisor (Cuvier, 1831), was recorded from the Mediterranean by Orsi-Relini (2017), but according to Knudsen & Clements (2013), it is a synonym of K. viagiensis.

The species K. vaigiensis has a world-wide distribution and it has been reported throughout the Mediterranean (Al Mabruk et al., 2021). The origin of K. vaigiensis in the Mediterranean is not clear. It was first recorded from the Mediterranean from Almuñécar, Granada, Spain as K. incisor in 1998 (Azzurro et al., 2013); thus suggesting a range expansion from the Atlantic Ocean. However, most of the specimens have been recorded from the Levant, including Israel (Goren et al., 2016) and central Mediterranean as K. vaigiensis (see AL MABRUK et al., 2021 and Groud et al., 2021 from Algeria), thus suggesting that it crossed the Suez Canal as a Lessepsian migrant. As a result of the taxonomic complex, it is not clear how many records of this species have been reported from the Mediterranean. Groud et al., (2021) mentions ten records of Kyphosus spp., however only half of them were identified as K. vaigiensis.

REFERENCES


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Prvi zapis o nalazu *Kyphosus vaigiensis* (Ribe: Kyphosidae) na sredozemnoj obali Libije

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**SAŽETAK**

Prvi zapis o nalazu vrste *Kyphosus vaigiensis* (Ribe: Kyphosidae) na sredozemnoj obali Libije. Pretpostavlja se da je ova vrsta u Sredozemlje stigla iz Crvenog mora preko Sueskog kanala. Iščemo potrebu taksonomskog istraživanja roda *Kyphosus* u Sredozemlju.

**Ključne riječi:** *Kyphosus vaigiensis; Sredozemlje; Libija; invazivne vrste*