

MUGILIDAE

grey mullets

Planiliza haematocheilus

(Temminck and Schlegel, 1845)



Drawing : Tuvia Kurz

Relevant synonyms: *Mugil so-iuy*, *Mugil soiuy*, *Liza haematocheila*
 Misidentification: None
 Meristic formula: D1, IV; D2, I +8-9; A, III + 8-9; P, 13-15; V, 1+5

SHORT DESCRIPTION

Body elongated, subcylindrical. Two well-separated dorsal fins, the first with four spines. Second dorsal fin origin behind anal fin origin. Caudal fin forked. Head pointed and flat dorsally, its length ca. 1/4 standard length. Small mouth with thin lips. Maxillary pad not visible when mouth closed. Two rows of minute teeth in the upper jaw. Very small teeth on tongue arch. Transparent adipose eyelid covers only small part of the iris. Single group of six pyloric caeca, of similar size. Large cycloid scales. No clear lateral line, but 41-50 scales in lateral series.

color: back greenish-grey to brownish. Dorsal fins darker. Belly light grey. Anal and ventral fins have yellow touch. Iris—reddish-orange.

common size: 20-30 cm (max. 43 cm).*

*Note Exceptionally large specimens have been caught (up to 10 kg) in the Black Sea.

DISTINGUISHING CHARACTERISTICS

- *Mugil cephalus*: slit-like eyelid covering most of the pupil.
- *Liza* spp.: maxillary pad below mouth cover is visible when mouth closed.
- *Chelon labrosus* and *Oedalechilus labeo*: thick upper lip.

Scombridae: presence of finlet.

Moronidae, Atherinidae and Sphyraenidae: first dorsal fin with five or more spines.

BIOLOGY / ECOLOGY

A highly euryhaline species that inhabits both freshwater and marine environments. Omnivorous; in the Black Sea, prefers to feed in less saline water and main food is detritus, diatoms and blue-green algae. Very high growth rate, reaching ca. 60 cm in five years. Eggs and larvae are planktonic. Juveniles spend their first year in freshwater then migrate to sea to breed.

habitat: mainly coastal waters and estuaries.

DISTRIBUTION

Worldwide: Northwest Pacific: Hokkaido southward to Kyushu, Japan; Amur River southward to Xiamen through the Korean Peninsula. Reported from Vietnam.

Mediterranean: recorded first in northern Aegean Sea (Kaya *et al.*, 1998); successively recorded in north-east Thracian Sea (Koutrakis and Economidis, 2000) and northern Aegean Sea (Minos *et al.*, 2007; 2010).

MODE OF INTRODUCTION

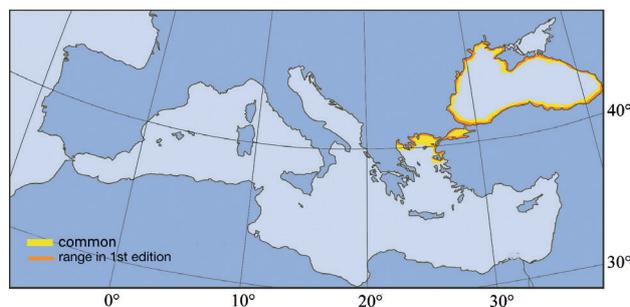
Introduced by humans for aquaculture in the Sea of Azov and the Black Sea before entering the Mediterranean (the northern Aegean Sea) via the Sea of Marmara.

ESTABLISHMENT SUCCESS

It forms large populations in Thracian and Macedonia lagoons.

IMPORTANCE TO HUMANS

It appears frequently in the fish markets of northern Greece. Further north, commercially important and introduced into the Black Sea and the Sea of Azov, establishing large populations of commercial importance.



1st Med. record
Northern Aegean
Sea, 1998.

KEY REFERENCES

- Kaya M., Mater S. and Korkut A. Y. 1998. A new grey mullet species "*Mugil so-iuy* Basilewsky" (Teleostei: Mugilidae) from the Aegean Coast of Turkey. *Turkish Journal of Zoology*, 22: 303-306.
- Koutrakis E.M. and P.S. Economidis 2000. First record in the Mediterranean (North Aegean Sea, Greece) of the Pacific mullet *Mugil soiyu* Basilewsky, 1855 (Mugilidae). *Cybium*, 24(3): 299-302.
- Minos G., Imsiridou A. and Economidis P.S. 2007. *Liza haematocheilus* (Pisces, Mugilidae) in Northern Aegean Sea. New records and gonad structure. XII European Congress of Ichthyology in Cavtat (Dubrovnik), Croatia 9-13 September 2007 Book of Abstracts. p. 243.
- Minos G., Imsiridou A. and Economidis P.S. 2010. *Liza haematocheilus* (Pisces, Mugilidae) in the northern Aegean Sea. pp. 313-332. In: D. Golani and B. Appelbaum-Golani (eds.). Fish Invasions of the Mediterranean Sea: Change and Renewal. Pensoft, Sofia.