



## Short communication

# A new record of *Lagocephalus sceleratus* (Gmelin 1789) confirming a further range extension into the northern Aegean Sea

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The silverstripe blaasop, *Lagocephalus sceleratus* (Gmelin 1789), belongs to the family Tetraodontidae; with the native range in the Indo-West Pacific Ocean (Smith and Heemstra, 1986) it inhabits tropical waters at depths ranging from 18 to 100 m, preferably on reefs (May and Maxwell, 1986). A record from February 2003 in Gökova Bay on the southeastern Aegean coast of Turkey (Akyol et al., 2005) demonstrated the presence of the species in the Mediterranean Sea, most likely as a Lessepsian migrant. A previous record from the Mediterranean Sea by Mouneimne (1977) was a misidentification of a *Lagocephalus suezensis* specimen (Golani, 1996). On September 2004 a specimen was captured in Antalya Bay (Bilecenoglu et al., 2006); in November 2004 another specimen was reported from Jaffa along the Israeli coast (Golani and Levy, 2005); in September 2005 the species was recorded in Rhodos (Corsini et al., 2006) and in July and December 2005 from the Cretan Sea (Aegean, Greece). The latest record was in April 2006 in Izmir Bay (NE Aegean) (Bilecenoglu et al., 2006) (Fig. 1). In this study we report the first-time occurrence of *L. sceleratus* along the northern part of Edremit Bay, Behramkale coast, and Lesvos (Peristeraki et al., 2006) in the Aegean Sea, indicating its further north-bound range extension.

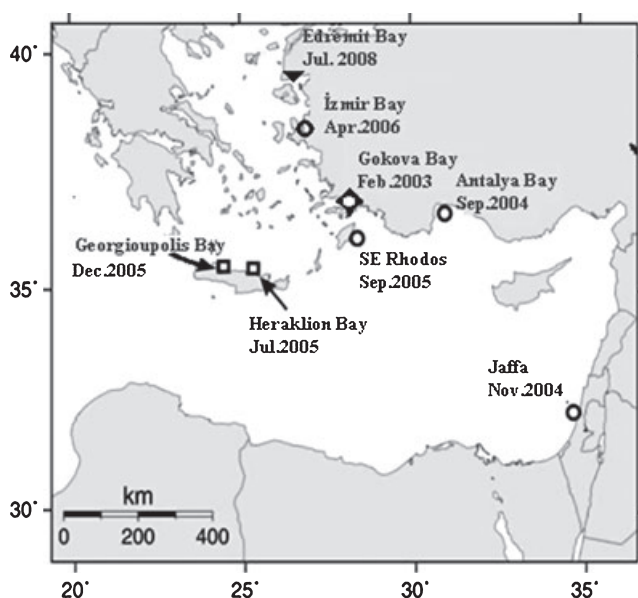


Fig. 1. Spatial and temporal distribution of sampled specimens of *Lagocephalus sceleratus* in the Aegean Sea

This new record of *L. sceleratus* in the northern part of the Aegean Sea represents a specimen of similar size to those reported from previous catches in more-southern locations. The *L. sceleratus* specimen was caught in a trammel-net by a commercial fisherman, hauling at a depth of 60 m. The precise location was in the Edremit Bay (Aegean Sea) in July 2008 (39°28'02.14"N, 26°20'28.04"E) in relatively shallow waters. The specimen was deposited in the collection of the Zoological Museum, Balıkesir University (ZDBAU/PM 103).

The typical morphological and habitus characteristics are well-defined in the common systematic literature, particularly in text books on fishes native to the region and therefore are not further defined here. However, presented here for comparison are the morphometrical and meristic measurements of all specimens described to date from the Aegean Sea (Table 1). Most of these measurements are in agreement with previous descriptions of the species (Smith and Heemstra, 1986; Akyol et al., 2005). Apparently most individuals caught thus far were relatively large adults, except those from the Lebanese coasts, which appear to represent juveniles. It is suggested that these specimens represent long-distance immigrants that have apparently not yet established self-sustaining populations.

As the species contains tetrodotoxin (TTX), there is a risk of food poisoning, particularly because this species is not yet well-known in the region and fishermen are not aware of the possible problem. Two cases of toxicity have been reported from Israel and Lebanon (Golani et al., 2006). Similar to the congeneric tropical species, the silverstripe blaasop may be implicated in food poisoning because of the tetrodotoxin (TTX) content. Depending on the concentration, consumption thereof may cause light muscular paralysis, respiratory depression and circulatory failure, leading finally to mortality (Field, 1998).

Our findings, together with other information on the occurrence and spread of alien species in the North Aegean Sea (Papaconstantinou, 1987, 1988, 1990; Tsimenides et al., 1991; Tingilis et al., 2003; Pancucci-Papadopoulou et al., 2005; Corsini et al., 2006; Peristeraki et al., 2006; Kasapidis et al., 2007), indicate that expansion of Lessepsian immigrants in the Cretan and north Aegean seas is continuing. It is speculated that *L. sceleratus* may have the potential to adapt successfully to the changing environmental conditions.

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Table 1

Measurements and meristic counts of Edremit Bay *Lagocephalus sceleratus* and comparisons with other area specimens. Morphometric measurements in parentheses as proportions of total and head lengths

Measurements (mm) + counts	Present study, Behramkale coast, Edremit Bay, 2008	Lebanese coast (Mouneimne, 1977)	Gökova Bay (Akyol et al., 2005)	Antalya-Kemer, (Bilecenoglu, 2006)	İzmir Bay, (Bilecenoglu et al., 2006)	(Kasapidis et al., 2007)
Number of specimens	1	6	1	1	1	1
Total length	544	91–137	459	389	498	348
Fork length	–	–	431	349	477	331
Standard length	478	–	391	–	–	–
Body depth	115 (21.1% L <sub>T</sub> )	(14.6–6.9% L <sub>T</sub> )	77.1 (16.8% L <sub>T</sub> )	–	–	58.6 (16.8% L <sub>T</sub> )
Head length	101 (18.6% L <sub>T</sub> )	(24.8–27.6% L <sub>T</sub> )	118 (25.7% L <sub>T</sub> )	26.2% L <sub>T</sub>	25.6% L <sub>T</sub>	–
Predorsal length	306 (56.25% L <sub>T</sub> )	(54.3–56.4% L <sub>T</sub> )	263 (57.3% L <sub>T</sub> )	(57.6% L <sub>T</sub> )	(58.8% L <sub>T</sub> )	–
Preanal length	273 (50.2% L <sub>T</sub> )	–	263 (57.3% L <sub>T</sub> )	(57.7% L <sub>T</sub> )	(58.8% L <sub>T</sub> )	–
Eye diameter (maximum)	31 (30.7% L <sub>H</sub> )	(29.4–37.0% L <sub>H</sub> )	26 (22.0% L <sub>H</sub> )	(22.5% L <sub>H</sub> )	(22.2% L <sub>H</sub> )	–
Eye diameter (minimum)	21 (20.8% L <sub>H</sub> )	–	–	–	–	–
Preorbital length	63 (62.4% L <sub>H</sub> )	(44.1–50.0% L <sub>H</sub> )	56 (47.5% L <sub>H</sub> )	–	–	–
Interorbital distance	60 (59.4% L <sub>H</sub> )	–	45 (38.1% L <sub>H</sub> )	(41.2% L <sub>H</sub> )	(40.8% L <sub>H</sub> )	–
Dorsal finrays	12	10–11	12	12	12	12
Anal finrays	11	9–10	10	10	12	10
Pectoral finrays	16	15–16	18	18	18	18
Caudal finrays	II + 14 + II	–	20	20	20	–

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