



Short communication

Occurrence of *Tylosurus acus imperialis* (Rafinesque, 1810) (Osteichthyes: Belonidae) in Edremit Bay (Northern Aegean Sea)

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Introduction

The family Belonidae includes 32 species occurring in all tropical and temperate seas. Four of the species (*Belone belone*, *B. svetovidovi*, *Tylosurus acus imperialis*, and *T. choram*) inhabit the Mediterranean Sea (Golani et al., 2006). *T. acus imperialis* is epipelagic and usually swims in small groups or solitarily near the surface (Golani et al., 2006). It has a distribution throughout the sub-tropical waters of the Eastern Atlantic from the Cape Verde Islands to Morocco and in the Mediterranean Sea (Collette and Parin, 1986; Golani et al., 2006; Froese and Pauly, 2010), especially the Tyrrhenian Sea and along the southern Turkish coasts as well as Syria and Israel (Collette and Parin, 1986). According to the FishBase electronic databank, records of *T. acus imperialis* were confirmed from Lebanon in 1958 and 1964 (Catalogue nos. USNM 196300 and 201678) and from Israel in 1996 (Catalogue nos. USNM 352447 and 352448). Records also exist from Messina (Italy).

Recent Turkish checklists mentioned the species by name as only amongst the marine fishes of the Aegean Sea (Bilecenoglu et al., 2002; Fricke et al., 2007). However, the precise locations, depths of occurrences, morphometrics and other biological features of this uncommon fish were not given. Data deficiencies for this species were also noted by Fricke et al. (2007). Records from 27 May 2010 and 2 June 2010 include two *T. acus imperialis* specimens from the coast of Izmir Bay on a sandy bottom at a depth of 10 m (Akyol and Kara, 2011).

Materials and methods

On June 2012 and July 2012, three 79.5 cm SL, 83.0 cm SL and 60.0 cm SL *T. acus imperialis* were captured at the coast of Edremit Bay (Table 1). The specimens were fixed in 4% formalin and deposited in the fish collection of Balikesir University, Science and Arts Faculty. Diagnostic characters were: head 3.2–3.5 times SL, 23–25 dorsal finrays, 22–23 anal finrays, six ventral finrays and 12–13 pectoral finrays. All measurements, counts, and colour patterns determined are in accordance with the description of Collette and Parin (1986, 1990), Golani et al. (2006), Froese and Pauly (2010), and Akyol and Kara (2011) (Table 1).

In conclusion, the present collection of the three adult specimens indicates that *T. acus imperialis* occasionally visits Edremit Bay, although the occurrence of this epipelagic species does not clearly indicate that there is an established population.

References

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Table 1
Morphometric and meristic parameters of *Tylosurus acus imperialis* (Rafinesque, 1810)

Parameters	This Study			Bello, 1995;			Akyol and Kara, 2011	
	1	2	3	1	2	3	1	2
Weight (g)	768.4	848.4	319.8	728	1138	1315	*	*
Total length (cm)	87	91	66.5	87.4	92.5	96.5	107.0	84.3
Fork length (cm)	83.5	86.5	63.2	*	*	*	*	*
Standard length (cm)	79.5	83	60	79.4	84.4	86.9	*	*
Body depth (cm)	4.5	4.5	3.1	*	*	*	*	*
Head length (cm)	22.7	26.2	19	24.2	25.8	25.7	*	*
Head depth (cm)	3.8	3.5	2.5	*	*	*	*	*
Head width (cm)	14.1	15.4	10.3	*	*	*	*	*
Eye diameter (cm)	2.2	2.3	1.8	*	*	*	*	*
Dorsal finrays	25	25	25	24	25	24	23	24
Pectoral finrays	*	13	12	14	14	13	12	12
Ventral finrays	6	6	6	*	*	*	6	6
Anal finrays	22	22	22	22	22	22	22	22

*Unrecorded data

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