

NOTES ON THE ERYTHREAN ALIEN FISHES OF DATÇA-BOZBURUN PENINSULA - A SPECIALLY PROTECTED AREA IN THE SOUTH EASTERN AEGEAN SEA (TURKEY)

M. İdil Oz *, Erdoğan Okuş and Ahsen Yüksek

İstanbul University, Institute of Marine Sciences and Management, Vefa, İstanbul, TURKEY - idiloz@gmail.com

Abstract

Fourteen alien fish of Red Sea origin are reported from Datça-Bozburun Peninsula (SE Aegean Sea, Turkey). Their biology and ecology were explored by underwater visual surveys and interviews with local fishermen. We report the first records of *Etrumeus teres* and *Apogon pharaonis*, and the second occurrence of *Pteragogus pelycus* off the Turkish coast of the Aegean Sea.

Keywords : Aegean Sea, Species Introduction.

This study is based on the project "Coastal and Marine Biological Diversity Assessment of Datça-Bozburun Specially Protected Area" [1]. The survey of Erythrean alien fish species was carried in 5 sub-regions specified along the Specially Protected Area (SPA) [Fig.1].

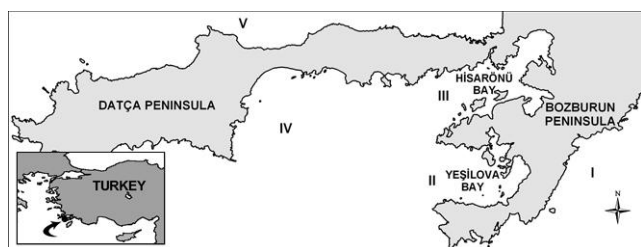


Fig. 1. Datça-Bozburun SPA is situated in the southwestern Anatolia.

The presence of 14 alien fish of Red Sea origin was determined by means of underwater visual assessment and interviews with local fishermen.

- 1) *Etrumeus teres* (DeKay, 1848): not observed during dives.
- 2) *Saurida undosquamis* (Richardson, 1848): not observed during dives.
- 3) *Atherinomorus lacunosus* (Forster in Bloch & Schneider, 1801): one of the most common species, preyed upon by another Red Sea alien, *Fistularia commersonii*. Large schools were observed while snorkeling at the depths of 1 to 2 m. 4) *Sargocentron rubrum* (Forsskal, 1775): one of the most common species, encountered in small groups of 5-10 individuals among rocks and in caverns at depths of 15-40 m. It shares that habitat with *Apogon imberbis*, an indigenous species.
- 5) *Fistularia commersonii* Rüppell, 1835: first recorded from the Datça-Bozburun Peninsula on 17.5.2002, from Selimiye Bay (III). Solitary or small groups of up to 10 individuals were observed to a maximum depth of 20 m. *F. commersonii* was observed changing its colour patterns and staying motionless while waiting to prey on *A. lacunosus* schools.
- 6) *Apogon pharaonis* Bellotti, 1874: first recorded from the Datça-Bozburun Peninsula on 11.9.2002, from east of Kocaada Island (III). *A. pharaonis* was mostly observed in turbid waters near fish farms or dockyards.
- 7) *Alepes djedaba* (Forsskal, 1775) was not observed during dives but its eggs were found in the ichthyoplankton survey [1].
- 8) *Upeneus moluccensis* (Bleeker, 1855): its eggs were recorded in June and September ichthyoplankton surveys [1]. *U. moluccensis* and the indigenous *Mullus surmuletus* were observed feeding in the same area.
- 9) *Pempheris vanicolensis* Cuvier, 1821: groups of 10-15 individuals were observed in caverns.
- 10) *Pteragogus pelycus* Randall, 1981: first recorded from the Datça-Bozburun Peninsula on 16.9.2002, in waters off Bozburun village (II). Solitary individuals were generally seen swimming in and around *Posidonia oceanica* meadows.
- 11& 12) *Siganus luridus* Rüppell, 1828, and *Siganus rivulatus* Forsskal, 1775: The most common species, generally recorded in mixed groups of 10-20 individuals at depths between 2-30 m. Juveniles were seen together with adults at 2-8 m. Both species were observed feeding on algae in rocky areas and on epiphytic algae off *Posidonia oceanica* leaves and *Cystoseira* spp., together with the indigenous *Diplodus vulgaris*, *Diplodus sargus*, *Symphodus tinca* and *Sparisoma cretense*. Interviews with fishermen revealed that siganids are target species for the local artisanal fishery and constitute its main catch between May and October.
- 13) *Scomberomorus commerson* (Lacepède, 1800) (no sample obtained):

a rare species seen only in Yeşilova Bay(II). Local fishermen indicated that, *S. commerson* populations have declined sharply in 2005 due to over-exploitation between 2000-2004.

14) *Stephanolepis diaspros* Fraser-Brunner, 1940: mostly solitary individuals were seen at a depth range of 10-20 m.

Tab. 1. Observation notes on the alien fish species of Red Sea origin(a: purse seine, b: gill net, c: hand net).

ERYTHREAN ALIEN FISH SPECIES	Material Examined				Underwater Observations		
	No of spm.	TL (mm)	Fish. Gear	Location	Freq. (%)	Depth Range (m)	Location
<i>E. teres</i>	40	107-145	a	III, IV	-	-	-
<i>S. undosquamis</i>	4	209-250	a,b	III, IV	-	-	-
<i>A. lacunosus</i>	5	93-100	a	III, IV	30.8	1-2	I,II,III,IV,V
<i>S. rubrum</i>	4	106-140	a,b	III, IV, V	27.8	15-40	I,II,III,IV,V
<i>F. commersonii</i>	4	591-748	a,b	III, IV, V	12.7	3-20	I,II,III,IV,V
<i>A. pharaonis</i>	1 ivl.	27	c	III	0.58	5-6	II, III, IV
<i>A. djedaba</i>	2	105-118	a	III, IV	-	-	-
<i>U. moluccensis</i>	8	95-129	a,b	III, IV	0.58	10-20	II, III
<i>P. vanicolensis</i>	2	103-157	b	III, IV, V	0.58	1-2	I,II,III,IV,V
<i>P. pelycus</i>	-	-	-	-	0.87	6-15	II, III
<i>S. luridus</i>	202	135-221	b	II,III,IV,V	67.2	2-30	I,II,III,IV,V
<i>S. rivulatus</i>	84	86-222	a,b	II,III,IV,V	67.9	2-30	I,II,III,IV,V
<i>S. commerson</i>	-	-	-	-	0.29	15-25	II
<i>S. diaspros</i>	3	98-212	a,b	II	0.96	10-20	I, II, IV

E. teres, *A. pharaonis* and *P. pelycus* are rarely encountered in the studies carried out along the Aegean Sea coasts. The first records of these species in Aegean waters were from Rhodes Island (SE Aegean Sea-Greece) [2,3,4]. The presence of *P. pelycus* along the Turkish coasts of the Aegean Sea is mentioned in [5] as personal observation, without giving a specific reference. In 2005 it was recorded for the first time from Gökova Bay (SW Aegean Sea-Turkey) [6].

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