

Short scientific article  
Received: 2014-03-22

UDK 597.556.331.52:574.91(262.2)

## FIRST RECORDS OF SIDEBURN WRASSE *PTERAGOGUS PELYCUS* (*OSTEICHTHYES: LABRIDAE*) OFF THE SYRIAN COAST (EASTERN MEDITERRANEAN)

Ahmad SOLIMAN, Malek ALI & Adib SAAD

Marine Sciences Laboratory, Faculty of Agriculture, Tishreen University, Lattakia, Syria

Christian REYNAUD

Laboratoire Interdisciplinaire de Recherche sur la Didactique, l'Éducation et la Formation, E. A. 3749, case 77, Université Montpellier II, Sciences et Techniques du Languedoc, 34 095 Montpellier cedex 5, France

Christian CAPAPÉ

Laboratoire d'Ictyologie, case 104, Université Montpellier 2, Sciences et Techniques du Languedoc, 34095 Montpellier cedex 5, France  
E-mail: capape@univ-montp2.fr

### ABSTRACT

*This paper reports the first records of two specimens of sideburn wrasse Pteragogus pelycus Randall, 1981 from the Syrian coast. These records confirm the occurrence of P. pelycus Randall, 1981 in the eastern Mediterranean and suggest that a sustainable population is progressively established since two decades in this sea.*

**Key words:** Lessepsian migrants, description, morphometric measurements, meristic counts, distribution

## PRIME SEGNALAZIONI DI *PTERAGOGUS PELYCUS* (*OSTEICHTHYES: LABRIDAE*) AL LARGO DELLA COSTA SIRIANA (MEDITERRANEO ORIENTALE)

### SINTESI

*L'articolo riporta le prime segnalazioni di due individui del labride Pteragogus pelycus Randall, 1981 al largo della costa della Siria. A seguito di tali segnalazioni, gli autori confermano la presenza di P. pelycus Randall, 1981 nel Mediterraneo orientale e ipotizzano che una popolazione sostenibile si sia progressivamente stabilita nell'area negli ultimi due decenni.*

**Parole chiave:** migranti lessepsiani, descrizione, misurazioni morfometriche, conteggi meristici, distribuzione

## INTRODUCTION

Sideburn wrasse *Pteragogus pelycus* Randall, 1981 is widely distributed in the western Indian Ocean, from South Africa coast (Randall, 1986), Mozambique (Smith, 1969), Seychelles, Mauritius and Madagascar Islands (Randall, 2013) to Red Sea (Golani et al., 2002). *P. pelycus* migrated toward northern areas and penetrated through Suez Canal into the Mediterranean Sea, where it was recorded for the first time in Haifa Bay by Golani & Sonin (1992).

*P. pelycus* extended its distribution range in the eastern Mediterranean and was recorded off Rhodes Island (Corsini & Economidis, 1999), northern Cyprus (Kaya et al., 2000), eastern Aegean Sea, where the species is one of the most abundant wrasses in *Posidonia* beds (Kalogirou et al., 2010), the coast of Turkey (Taskavak et al., 2000; Oz et al., 2007) and Lebanon (Harmelin-Vivien et al., 2005). Additionally, *P. pelycus* was recorded off the Mediterranean coast of Egypt which is considered to date as the southwesternmost extension range of the species in the Mediterranean Sea (Halim & Rizkalla, 2011; Azzurro et al., 2012).

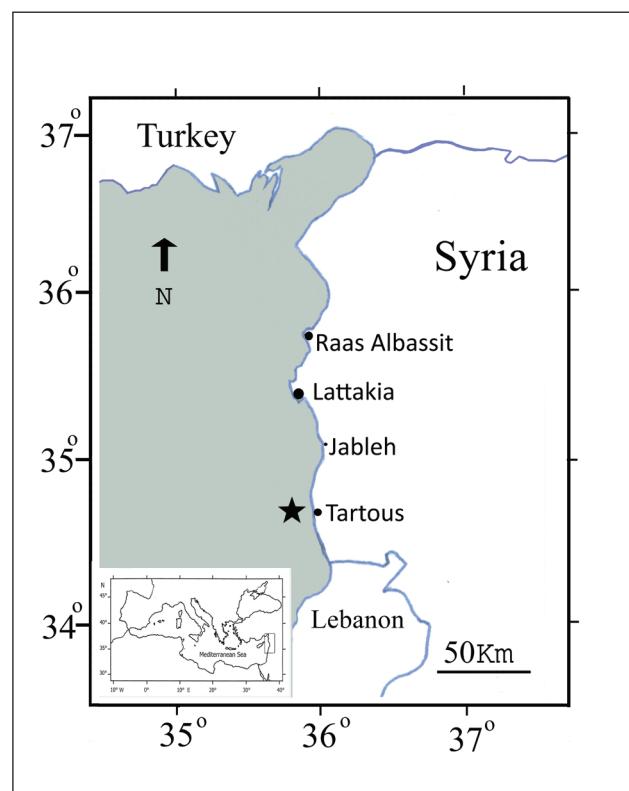
Surveys conducted in the Syrian waters since 2000 allowed to collect some Lessepsian migrants (Ali et al., 2010, 2012, 2013a, 2013b), and, in the present paper, we report the capture of two specimens of *P. pelycus* that allow us to comment and discuss the spread of the species in the broader eastern Mediterranean, to assess its actual status in the same region.

## MATERIAL AND METHODS

Two specimens of *P. pelycus* were caught on 15 February, 2014, using a bottom cage net made of metal wire, at a depth of approximately 38 m, on rocky bottom. The capture site was located 1.5 km off Tartous Harbour ( $34^{\circ} 51' N$  and  $35^{\circ} 48' E$ ; Fig. 1). Both specimens were measured to the nearest millimetre and weighed to the nearest gram. Morphometric measurements with percents of standard length (SL) and counts followed Randall (1981, 1986) and Golani et al. (2002); they are included in Table 1. Samples were preserved in 10 % buffered formalin and deposited in the Ichthyological Collection of the Marine Sciences Laboratory, Agriculture Faculty at Tishreen University, Syria, under the catalogue numbers 260 M.S.L (Fig 2) and 261 M.S.L, respectively.

## RESULTS AND DISCUSSION

Both Syrian specimens of *P. pelycus* were identified referring to Randall (1981, 1986) and Golani et al. (2002) with main characteristic features as follows: moderately deep and compressed body, its depth 2.62.7 in SL, head profile straight to slightly concave, head length 3.43.6 in SL, interorbital convex, eye diameter 3.5 in head length (Tab. 1), no long filaments extending from



**Fig. 1:** Map of the Mediterranean showing Syria and map of the coast of Syria pointing out the capture sites of sideburn wrasse *Pteragogus pelycus* (black star).  
**Sl. 1:** Položaj raziskovanega območja na zemljevidu Sredozemskega morja z lokalitetami, kjer je bila v sirskeh vodah ujeta ustnača vrste *Pteragogus pelycus* (črna zvezdica).

tips of dorsal fins, caudal fin rounded, lateral line complete with dark brown-red spots, mouth terminal slightly



**Fig. 2:** Sideburn wrasse *P. pelycus* captured off the Syrian coast: (specimen referenced 260 M.S.L. in the Ichthyological Collection of Tishreen University, Syria); scale bar = 20 mm.  
**Sl. 2:** Primerek ustnače vrste *P. pelycus*, ujet v sirskeh vodah (primerek s kataloško številko 260 M.S.L. v ihtiološki zbirkni Univerze v Tishreenu v Siriji); merilo = 20 mm.

**Tab. 1: Morphometric measurements in mm and as a percentage of standard length (% SL), meristic counts and weight in gram recorded in the 2 specimens of sideburn wrasse *P. pelycus* caught off the Syrian coast.****Tab. 1: Morfometrične meritve v mm in izražene v deležu standardne dolžine (% SL), meristična števja ter teža v gramih pri dveh primerkih ustnake *P. pelycus*, ujetih ob obali Sirije.**

Reference of specimens	260 M.S.L		261 M.S.L	
Morphometric measurements	mm	% SL	mm	% SL
Standard length	75	100.0	74	100.0
Total length	93	124.0	92	124.3
Head length	21	28.0	21	28.4
Interorbital space	4	5.3	4	5.4
Eye horizontal diameter	6	8.0	6	8.1
Eye vertical diameter	6	8.0	6	8.1
Iris horizontal diameter	2	2.7	2	2.7
Iris vertical diameter	2	2.7	2	2.7
Snout length	7	9.3	8	10.8
Upper jaw length	9	12.0	8	10.8
Lower jaw length	8	10.7	8	10.8
Pectoral fin length	14	18.7	15	20.3
Pectoral fin base	4	5.3	5	6.8
Dorsal fin length	54	72.0	52	70.3
Dorsal fin base	44	58.7	43	58.1
Dorsal fin height	7	9.3	8	10.8
Pelvic fin length	37	49.3	32	43.2
Pelvic fin base	2	2.7	2	2.7
Anal fin length	28	37.3	29	39.2
Anal fin base	20	26.7	19	25.7
Anal fin height	4	5.3	4	5.4
Body depth	28	37.3	28	37.8
Pre-pectoral length	25	33.3	23	31.1
Pre-dorsal length	24	32.0	23	31.1
Pre-anal length	42	56.0	41	55.4
Pre-pelvic length	25	33.3	25	33.8
Caudal peduncle length	10	13.3	10	13.5
Suborbital depth	5	6.7	4	5.4
First dorsal spine length	5	6.7	5	6.8
Longest spine length of dorsal fin	10	13.3	8	10.8
<b>Meristic counts</b>				
Dorsal fin spinous rays	11		11	
Dorsal fin soft rays	9		8	
Pelvic fin spinous rays	1		1	
Pelvic fin soft rays	5		5	
Anal fine spinous rays	3		3	
Anal fin soft rays	8		9	
Pectoral fin spinous rays	-		-	
Pectoral fin soft rays	13		13	
Caudal fin soft rays	13		12	
Lateral line scales	23		23	
<b>Total weight (g)</b>	11.61		10.92	

oblique, with two pairs of large recurved canine teeth. Colour olivaceous, an oblique elliptical black spot present on operculum with yellow ring near its edge, fins yellowish with black spots on the upper part of the first 2-4 interspinous dorsal membrane (Fig. 2).

Morphometric measurements (including percent of SL), meristic counts, morphology and colour are in total agreement with Randall (1981, 1986) and Golani et al. (2002). So, these findings of *P. pelycus* constitute the first records of the species reported from the Syrian coast. Consequently, the addition of *P. pelycus* in the local ichthyofauna brings the number of species to 270, including 43 chondrichthyan species and 227 teleost species (Saad et al., 2004; Saad, 2005; Ali et al., 2010, 2013a, 2013b).

These two new records suggest that a sustainable population of *P. pelycus* is at present established in the eastern Mediterranean. However, the western extension range of *P. pelycus* seems to be rather limited; since its first record which occurred twenty-two years ago (Golani & Sonin, 1992). *P. pelycus* reached only to date the Mediterranean coast of Egypt (Halim & Rizkalla, 2011; Azzurro et al., 2012). Such pattern could be due to the fact *P. pelycus* lives in restricted habitats where it feeds on invertebrate species strictly related to endemic Mediterranean Sea grass niches (Kalogirou et al., 2010). Additionally, lacks of information concerning new findings of *P. pelycus* from the western Mediterranean cannot be totally ruled out.

PRVI ZAPIS O POJAVLJANJU USTNAČE VRSTE *PTERAGOGUS PELYCUS*  
(OSTEICHTHYES: LABRIDAE) OB SIRSKI OBALI (VZHODNO SREDOZEMSKO MORJE)

*Ahmad SOLIMAN, Malek ALI & Adib SAAD*  
Marine Sciences Laboratory, Faculty of Agriculture, Tishreen University, Lattakia, Syria

*Christian REYNAUD*

Laboratoire Interdisciplinaire de Recherche sur la Didactique, l'Éducation et la Formation, E. A. 3749, case 77, Université Montpellier II, Sciences et Techniques du Languedoc, 34 095 Montpellier cedex 5, France

*Christian CAPAPÉ*

Laboratoire d'Ictyologie, case 104, Université Montpellier 2, Sciences et Techniques du Languedoc, 34095 Montpellier cedex 5, France  
E-mail: capape@univ-montp2.fr

*POVZETEK*

*Prispevek obravnava prvi zapis o pojavljanju dveh primerkov ustnače Pteragogus pelycus (Randall, 1981) iz sirskeh voda. Ti podatki vnovično potrjujejo pojavljanje vrste P. pelycus v vzhodnem Sredozemskem morju in kažejo, da se je ta vrsta v vzhodnem Sredozemlju po prvih zapisih izpred dvajsetih let danes že popolnoma ustalila.*

**Ključne besede:** Lessepske selivke, opis, morfometrične meritve, meristika, razširjenost

## REFERENCES

- Ali, M., A. Saad, M. M. Ben Amor & C. Capapé (2010):** First records of the honeycomb stingray *Himantura uarnak* (Forskål 1775), off the Syrian coast (eastern Mediterranean) (Chondrichthyes: Dasyatidae) off the Syrian coast (Eastern Mediterranean). Zool. Middle East, 49, 104–106.
- Ali, M., A. Saad, C. Reynaud & C. Capapé (2012):** Occurrence of basking shark, *Cetorhinus maximus* (cetorhinidae) off the Syrian coast (eastern Mediterranean) with first description of egg case. Acta Ichthyol. Piscat., 42, 335–339.
- Ali, M., A. Saad, C. Reynaud & C. Capapé (2013a):** First records of the Round Fantail Stingray, *Taeniura grata* (Chondrichthyes: Dasyatidae), off the Syrian coast (eastern Mediterranean). Zool. Middle East, 59, 176–178.
- Ali, M., A. Saad, C. Reynaud & C. Capapé (2013b):** First records of Randall's threadfin bream *Nemipterus randalli* (Osteichthyes: Nemipteridae) off the Syrian coast (eastern Mediterranean). Annales, Ser. Hist. Nat., 23(2), 119–124.
- Azzurro, E., M. Milazzo & F. Maynou (2012):** First confirmed record of the Lessepsian migrant *Pteragogus pelycus* Randall, 1981 (Teleostei: Labridae) for the North African coasts. BiolInvasions Rec., 1, 45–48.
- Corsini, M. & P. S. Economidis (1999):** Distribution extension of two Lessepsian migrants found in the marine area of the Island of Rhodes (Aegean Sea, Greece). Cybium, 23, 195–199.
- Golani, D. & O. Sonin (1992):** New records of the Red Sea fishes, *Pterois miles* (Scorpaenidae) and *Pteragogus pelycus* (Labridae) from the eastern Mediterranean Sea. Jap. J. Ichthyol., 39, 167–169.
- Golani, D., L. Orsi-Relini, E. Massuti & J. P. Quignard (2002):** CIESM Atlas of exotic species in the Mediterranean. Vol. 1. Fishes. (Briand, F. ed.). CIESM Publications, Monaco, 256 p.
- Halim, Y & S. Rizkalla (2011):** Aliens in Egyptian Mediterranean waters. A check-list of Erythrean fish with new records. Medit. Mar. Sci., 12, 479–490.
- Harmelin-Vivien, M. L., G. Bitar, J. J. Harmelin & P. Monestier (2005):** The littoral fish community of the Lebanese rocky coast (eastern Mediterranean Sea) with emphasis on Red Sea immigrants. Biol. Invasions, 7, 625–637.
- Kalogriou, S., M. Corsini-Foka, A. Sioulas, H. Wennhage & L. Pihl (2010):** Diversity, structure and function of fish assemblages associated with *Posidonia oceanica* beds in an area of the eastern Mediterranean Sea and the role of non-indigenous species. J. Fish Biol., 77, 2338–2357.
- Kaya, M., M. Bilecenoglu & D. Golani (2000):** New record of a Lessepsian migrant *Pteragogus pelycus* Randall, 1981 (Teleostei: Labridae) for northern Cyprus. Zool. Middle East, 49, 65–68.
- Oz, M. I., E. Okuṣ & A. Yüksek (2007):** Notes on the Erythrean alien fishes of Datça-Bozburun Peninsula a specially protected area in the south eastern Aegean Sea (Turkey). Rapp. Comm. inter. Mer Médit., 38, pp. 563.
- Randall, J. E. (1981):** Two new species and six new records of labrid fishes from the Red Sea. Seckenbergiana Marit., 13, 79–109.
- Randall, J. E. (1986):** Labridae. In: Smith, M. M. & P. C. Heemstra (eds.): Smiths' sea fishes. Springer-Verlag, Berlin, pp. 683–706.
- Randall, J. E. (2013):** Seven new species of labrid fishes (*Coris*, *Inistioides*, *Macropharyngodon*, *Novaculops*, and *Pteragogus*) from the Western Indian Ocean. J. Ocean Sci. Found., 7, 1–43.
- Saad, A. (2005):** Check-list of bony fish collected from the coast of Syria. Turk. J. Fish. Aquat. Sci., 5, 99–106.
- Saad, A., B. Séret & M. Ali (2004):** Liste commentée des Chondrichthyens de Syrie (Méditerranée orientale). Rapp. Comm. inter. Mer Médit., 37, pp. 430.
- Smith, J. L. B. (1969):** Fishes of Inhaca. In: Macnae, W. & M. Kalk (eds.): A natural history of Inhaca Island, Moçambique. Witwatersrand University Press, Johannesburg, pp. 131–136.
- Taskavak, E., M. Bilecenoglu, N. Basusta & S. Mater (2000):** Occurrence of *Pteragogus pelycus* Randall, 1981 (Teleostei: Labridae) and *Petroskirtes aencylodon* Rüppell, 1838 (Teleostei: Blenniidae) at the eastern Mediterranean coast of Turkey. Acta Adriat., 41, 53–57.

