

FIRST RECORDS OF RANDALL'S THREADFIN BREAM *NEMIPTERUS RANDALLI* (OSTEICHTHYES: NEMIPTERIDAE) OFF THE SYRIAN COAST (EASTERN MEDITERRANEAN)

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ABSTRACT

The first records of 5 specimens of Randall's threadfin bream *Nemipterus randalli* Russell, 1986 off the Syrian coast are reported in this note. These records confirm the eastern extension range of the species in the Mediterranean. The occurrence of *N. randalli* in the region and the eastern Mediterranean is commented and discussed in this report, suggesting that a sustainable and breeding population is already established since a decade at least.

**Keywords:** Nemipteridae, *Nemipterus randalli*, first records, distribution, Syrian coast, eastern Mediterranean Sea

PRIME SEGNALAZIONI DI *NEMIPTERUS RANDALLI* (OSTEICHTHYES: NEMIPTERIDAE) AL LARGO DELLA COSTA DELLA SIRIA (MEDITERRANEO ORIENTALE)

SINTESI

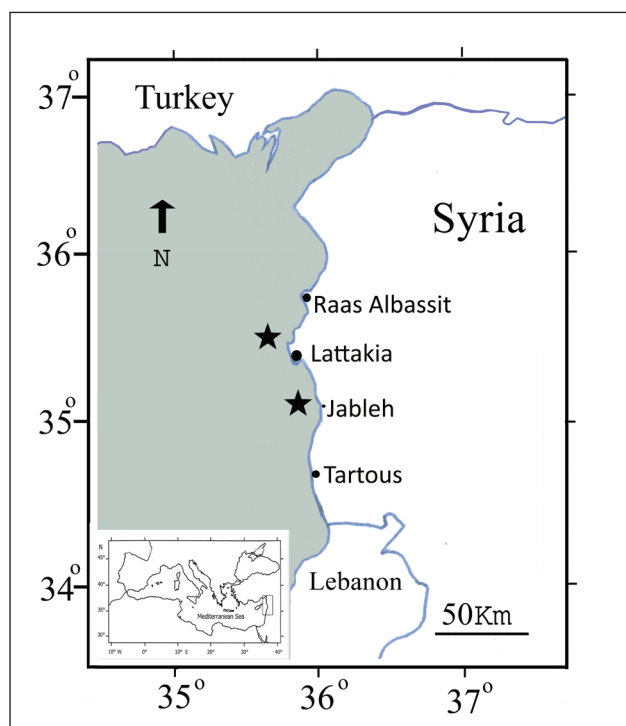
L'articolo riporta il ritrovamento di cinque individui di *Nemipterus randalli* Russell, 1986 al largo della costa della Siria. Tali segnalazioni confermano l'estensione a est della distribuzione della specie nel Mediterraneo. La presenza di *N. randalli* nella regione e nel Mediterraneo orientale viene commentata e discussa. Gli autori ipotizzano che una popolazione sostenibile e riproduttiva si sia stabilita nell'area da almeno un decennio.

**Parole chiave:** Nemipteridae, *Nemipterus randalli*, prime segnalazioni, distribuzione, costa della Siria, Mediterraneo orientale

## INTRODUCTION

Randall's threadfin breams *Nemipterus randalli* Russell, 1986 is widely distributed in the western Indian Ocean, especially off India, Pakistan, Persian Gulf and in the Gulf of Aden. Additionally, the species is known off the east African coast and in waters surrounding Seychelles and Madagascar (Russell, 1990). *N. randalli* is reported in the Red Sea including the Gulf of Aqaba (Baranes & Golani, 1993; Golani & Bogorodsky, 2010). The first Mediterranean record of *N. randalli* was reported in the eastern Levantine Basin by Golani & Sonin (2006), but wrongly identified as *Nemipterus japonicus* (Bloch, 1791). At present, the species appears to be up to date successfully established in some areas of the eastern Mediterranean such as the Turkish marine waters (Erguden *et al.*, 2010) and the close coast of Lebanon (Lelli *et al.*, 2008).

Surveys conducted off the Syrian coast since 2000 allowed to collect specimens of *N. randalli* which are presented and described in this short report, concomitantly the distribution of the species in the region and the eastern Mediterranean is commented and discussed.



**Fig. 1:** Map of the Mediterranean showing Syria and map of the coast of Syria pointing out the capture sites of Randall's threadfin breams *Nemipterus randalli* (black stars).

**Sl. 1:** Zemljevid Sredozemlja, ki prikazuje Sirijo, ter zemljevid obrežnih voda Sirije, na katerem so označena mesta zajetja vrste *Nemipterus randalli* (črne zvezdice)

## MATERIAL AND METHODS

Two specimens of *N. randalli* were caught on 21 September 2013, using a bottom handlining of nylon rope n 80°, at a depth of approximately 25 m, on sandy-rocky bottom. The capture site was located 2 km off Rass Eben Hanni harbour (35° 36' N, 35° 40' E), 5 km north of Lattakia (Fig. 1). Additionally, three specimens were caught on 6 November 2013, using a bottom handlining of nylon rope n 70°, at a depth of approximately 20 m, on sandy-rocky bottom. The capture site was located 4 km off Jablah City (35° 21' N, 35° 48' E). The five specimens were measured to the nearest millimetre and weighed to the nearest gram. Morphometric measurements with percents of standard length (SL) and counts followed Russell (1990), Golani & Sonin (2006) and Lelli *et al.* (2008) and were included in Table 1. All specimens 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: 255 M.S.L., 256 M.S.L. (Fig. 2), 257 M.S.L., 258 M.S.L. and 259 M.S.L. respectively.

## RESULTS AND DISCUSSION

The Syrian specimens were identified following Russell (1990), with main characteristic features as snout length about equal to eye diameter, interorbital width 1.4 to 2.0 in eye, pectoral and pelvic fins very long, reaching to or just beyond level of origin of anal fin, caudal fin forked, upper rays produced into a long trailing filament; body compressed silvery-pink with 3-4 yellow stripes on sides below lateral line, eye salmon pink, dorsal fin pale bluish, caudal fin pink, caudal filament reddish, pelvic fins whitish, pectoral fins transparent. Additionally, morphometric measurements (including percent of standard length - SL) and counts are in total



**Fig. 2:** *Nemipterus randalli* captured off the Syrian coast: specimen referenced 256 M.S.L., scale bar = 50 mm.

**Sl. 2:** Vrsta *Nemipterus randalli*, zajeta ob sirski obali: primerek, zabeležen kot 256 M.S.L., tračno merilo = 50 mm

**Tab. 1: Morphometric measurements in mm and as a percentage of standard length (%SL), a weight in gram recorded in the 5 specimens of *Nemipterus randalli* caught off the Syrian coast.****Tab. 1: Morfometrične mere v milimetrih in v odstotkih standardne dolžine (% SL) ter teža v gramih, zabeleženi pri petih primerkih vrste *Nemipterus randalli*, zajetih ob obali Sirije**

Reference of specimens	255 M.S.L		256 M.S.L		257 M.S.L		258 M.S.L.		259 M.S.L	
	mm	%SL	mm	%SL	mm	%SL	mm	%SL	mm	%SL
Standard length	128	100.0	121	100.0	173	100.0	186	100.0	151	100.0
Total length	176	137.5	165	136.4	269	155.5	247	131.1	198	132.8
Total length without filament	161	125.8	151	124.8	233	134.7	-	-	-	-
Filament length	17	13.3	16	13.2	34	19.7	-	-	-	-
Forked length	144	112.5	137	113.2	216	124.9	214	112.6	170	115.1
Head length	42	32.8	40	33.1	58	33.5	58	33.8	51	31.2
Interorbital space	9	7.0	8	6.6	12	6.9	14	6.0	9	7.5
Eye horizontal diameter	12	9.4	12	9.9	15	8.7	16	9.9	15	8.6
Eye vertical diameter	12	9.4	12	9.9	13	7.5	15	9.3	14	8.1
Iris horizontal diameter	6	4.7	5	4.1	7	4.0	7	3.3	5	3.8
Iris vertical diameter	5	3.9	5	4.1	5	2.9	6	4.0	6	3.2
Snout length	13	10.2	12	9.9	11	6.4	13	7.3	11	7.0
Upper jaw length	14	10.9	13	10.7	18	10.4	18	9.3	14	9.7
Lower jaw length	15	11.7	14	11.6	19	11.0	18	9.3	14	9.7
Pectoral fin length	44	34.4	40	33.1	56	32.4	64	30.5	46	34.4
Pectoral fin base	9	7.0	8	6.6	10	5.8	7	6.0	9	3.8
Dorsal fin length	84	65.6	74	61.2	121	69.9	123	66.9	101	66.1
Dorsal fin base	66	51.6	60	49.6	95	54.9	97	51.7	78	52.2
Dorsal fin height	13	10.2	12	9.9	14	8.1	19	10.6	16	10.2
Pelvic fin length	38	29.7	33	27.3	58	33.5	56	31.8	48	30.1
Pelvic fin base	7	5.5	7	5.8	7	4.0	8	4.0	6	4.3
Pelvic axillary scale process length	8	6.3	7	5.8	11	6.4	11	6.0	9	5.9
Anal fin length	38	29.7	36	29.8	57	32.9	61	30.5	46	32.8
Anal fin base	25	19.5	22	18.2	35	20.2	37	19.2	29	19.9
Anal fin height	12	9.4	11	9.1	15	8.7	16	9.3	14	8.6
Body depth	39	30.5	37	30.6	56	32.4	58	28.5	43	31.2
Pre-pectoral length	45	35.2	40	33.1	59	34.1	63	33.8	51	33.9
Pre-dorsal length	43	33.6	41	33.9	54	31.2	61	35.1	53	32.8
Pre-anal length	84	65.6	78	64.5	112	64.7	122	64.2	97	65.6
Pre-pelvic length	44	34.4	38	31.4	64	37.0	68	36.4	55	36.6
Caudal peduncle length	18	14.1	17	14.0	26	15.0	26	13.2	20	14.0
Suborbital depth	5	3.9	4	3.3	9	5.2	9	4.6	7	4.8
First dorsal spine length	9	7.0	9	7.4	11	6.4	8	5.3	8	4.3
Longest spine length of dorsal fin	16	12.5	13	10.7	17	9.8	21	11.9	18	11.3
<b>Counts</b>	<b>255 M.S.L</b>		<b>256 M.S.L</b>		<b>257 M.S.L</b>		<b>258 M.S.L.</b>		<b>259 M.S.L</b>	
Pelvic fin spinous rays	1+ axillary scale		1+ axillary scale		1+ axillary scale		1+ axillary scale		1+ axillary scale	
Pelvic fin soft rays	5		5		5		5		5	
Anal fine spinous rays	3		3		3		3		3	
Anal fin soft rays	7		7		7		7		7	
Pectoral fin spinous rays	-		-		-		-		-	
Pectoral fin soft rays	16		16		16		16		16	
Caudal fin soft rays	20		20		20		18		18	
Lateral line scales	49		48		48		45		48	
Total weight (g)	144		82		148		182		93	

agreement with Russell (1990), Golani & Sonin (2006) and Lelli *et al.* (2008). So, these findings constitute the first records of *N. randalli* off the Syrian coast, and the species could be included in the local ichthyofauna (see Saad, 2005). Consequently, the occurrence of *N. randalli* in the Mediterranean Levant Basin is confirmed, suggesting that a sustainable population is established in the region.

The definitive intrusion and expansion of an alien species such as *N. randalli* in the eastern Mediterranean could constitute a new case of a probable competition pressure with indigenous species. For instance, the drastic decline of captures of Salema *Sarpa salpa* (Linnaeus, 1758) in the area is probably due to a competition pressure for food with a Lessepsian migrant marbled spinefoot *Siganus rivulatus* (Forsskål 1775), both species being herbivorous (Bariche *et al.*, 2004). Niche displacements were also reported between indigenous and in-

vasive species (Golani & Galil, 1991; Lelli *et al.*, 2008). Bluespotted cornetfish, *Fistularia commersonii* Rüppell, 1838 described as a 'Lessepsian sprinter' by Karachle *et al.* (2004) rapidly expanded in the eastern Mediterranean Sea (Golani *et al.*, 2002). *F. commersonii* is at present abundantly collected throughout the Tunisian coast (Rafrafi-Nouira *et al.*, 2012) where it constitutes an ecological danger for sparid species, such as gilt-head sea bream *Sparus aurata* Linnaeus, 1758, having locally a high economical interest.

In total agreement with Lelli *et al.* (2008), the successful establishment of a breeding population of *N. randalli* off the coasts of Syria and Lebanon deserves a thorough study in order to show its role in the local ecosystem and its impact on indigenous species, mainly on the related species belonging to the family of Sparidae, greatly appreciated for local consumption and exported outside their areas of capture.

PRVI PODATKI O VRSTI *NEMIPTERUS RANDALLI* (OSTEICHTHYES: NEMIPTERIDAE) OB  
SIRSKI OBALI (VZHODNO SREDOZEMLJE)

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POVZETEK

Članek navaja prve podatke o petih primerkih vrste *Nemipterus randalli* (Russell, 1986), zajetih ob sirski obali, ki potrjujejo, da je omenjena vrsta razširjena tudi v vzhodni predel Sredozemlja. Avtor obravnava pojavljanje vrste *N. randalli* na tem področju in v vzhodnem Sredozemlju in sklepa, da je trajna in razmnožujoča se populacija tu ustaljena že vsaj desetletje.

**Ključne besede:** Nemipteridae, *Nemipterus randalli*, prvi podatki, razširjenost, sirska obala, vzhodno Sredozemsko morje

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