

received: 2020-07-10

DOI 10.19233/ASHN.2020.26

OCCURRENCE OF *SCARUS GHOBBA* (SCARIDAE) AT THE BORDER OF THE AEGEAN SEA (KAŞ, TURKEY)

Inci TÜNEY-KIZILKAYA

Ege University Faculty of Science, 35100 Bornova, İzmir, Turkey

Okan AKYOL

Ege University Faculty of Fisheries, 35440 Urla, İzmir, Turkey;

e-mail: okan.akyol@ege.edu.tr

ABSTRACT

A single specimen of *Scarus ghobban* was caught on 5 May 2020 by a trammel net in the shallows off Cape Uluburun, southeast of Kaş, at a depth of 35 m. This ichthyological note is the second north-westernmost report of *S. ghobban* in the Levantine Sea since its recording at Kastellorizo, an island located close to Cape Uluburun. Only twelve records of *S. ghobban* since 2001 suggest that this species is still rare in the Mediterranean.

Key words: Scaridae, north-westernmost record, Cape Uluburun, Mediterranean Sea

PRESenza DI *SCARUS GHOBBA* (SCARIDAE) AL CONFINE DEL MAR EGEO (KAŞ, TURCHIA)

SINTESI

Un esemplare di *Scarus ghobban* è stato catturato il 5 maggio 2020 da un trammaglio nelle secche al largo di Capo Uluburun, a sud-est di Kaş, ad una profondità di 35 m. Questa nota ittiologica rappresenta il secondo avvistamento di *S. ghobban* più a nord-ovest nel Mar Levantino dalla sua segnalazione a Kastellorizo, un'isola situata vicino a Capo Uluburun. Dal 2001 sono stati riportati solo dodici avvistamenti di *S. ghobban*, il che suggerisce che questa specie sia ancora rara nel Mediterraneo.

Parole chiave: Scaridae, record a nord-ovest, Capo Uluburun, Mediterraneo

INTRODUCTION

The Scaridae family (parrotfishes) consists of 83 species. Two of them are also present in the Mediterranean, one being a Lessepsian migrant (Golani et al., 2006). *Scarus ghobban* Forsskål, 1775 entered the Mediterranean from the Red Sea via the Suez Canal (Golani et al., 2006). Initially, only a few specimens were reported off Israeli and Lebanese coasts (Golani et al., 2006). The species is widely distributed over the Indo-Pacific region (Golani et al., 2006), including the Persian Gulf, the Red Sea and Algoa Bay, South Africa,

southern Japan, and other regions, such as the New South Wales, Gulf of California, Ecuador, and Eastern Mediterranean (Froese & Pauly, 2019).

Since the first record of *S. ghobban* in the Mediterranean Sea in 2001, from the Shiqmona coast, Israel (Goren & Aronov, 2002), the fish has expanded its range from Beirut, Lebanon (Bariche & Saad, 2008), to Kastellorizo Island, which is close to the location of the present study (Apostolopoulos & Karachle, 2016). The successive records are shown in Figure 1. This ichthyological note presents the second north-westernmost record of *S. ghobban* in the Levantine Sea.



Fig. 1: Successive records of *Scarus ghobban* from the Mediterranean Sea: (1) 20 Oct. 2001, Shiqmona, Israel (Goren & Aronov, 2002), (2) 20 Sept. 2004, Shiqmona, Israel (Golani & Levy, 2005), (3) 9 Nov. 2004, Beirut, Lebanon (Bariche & Saad, 2008), (4) 7 Feb. 2010, Zygi, Cyprus (Ioannou et al., 2010), (5) 20 July 2013, Iskele City, Northern Cyprus (Filiz & Sevingel, 2014), (6) 6 Aug. 2013, Keldag coast, Iskenderun Bay (Turhan et al., 2014), (7) Sept. 2014, Kastellorizo Island, Greece (Apostolopoulos & Karachle, 2016), (8) July 2012 - Aug. 2016, Tartus, Syria (Soliman et al., 2018), (9) 20 Dec. 2015, Yeşilovacık Bay, Mersin (Yaglioglu & Ayas, 2016), (10) 24 Dec. 2016, Gazipaşa, Antalya (Ergüden et al., 2018), (11) 22 Dec. 2018, Mina Hasheesh Beach, Egypt (Al Mabruk et al., 2020), (12) 5 May 2020, present study.

Sl. 1: Zapis o pojavljanju vrste *Scarus ghobban* v Sredozemskem morju: (1) 20. okt. 2001, Shiqmona, Izrael (Goren & Aronov, 2002), (2) 20. sept. 2004, Shiqmona, Izrael (Golani & Levy, 2005), (3) 9. nov. 2004, Bejrut, Libanon (Bariche & Saad, 2008), (4) 7. feb. 2010, Zygi, Ciper (Ioannou et al., 2010), (5) 20. jul. 2013, Iskele City, severni Ciper (Filiz & Sevingel, 2014), (6) 6. avg. 2013, obala Keldag, Zaliv Iskenderun (Turhan et al., 2014), (7) sept. 2014, otok Kastellorizo, Grčija (Apostolopoulos & Karachle, 2016), (8) julij 2012 - avg. 2016, Tartus, Sirija (Soliman et al., 2018), (9) 20. dec. 2015, zaliv Yeşilovacık, Mersin (Yaglioglu & Ayas, 2016), (10) 24. dec. 2016, Gazipaşa, Antalya (Ergüden et al., 2018), (11) 22. dec. 2018, plaža Mina Hasheesh, Egipt (Al Mabruk et al., 2020), (12) 5. maj 2020, pričajoče delo.



Fig. 2: *Scarus ghobban*, captured off Cape Uluburun, Kaş, Turkey (Scale bar: 50 mm).
Sl. 2: *Scarus ghobban*, ujet pri rtu Uluburun, Kaş, Turčija (Merilo: 50 mm).

MATERIAL AND METHODS

On 5 May 2020, one specimen of *Scarus ghobban* was caught by a trammel net in the shallows off Cape Uluburun, Kaş (lat. 36°08.130 N, long. 29°40.394 E,

Fig. 1), on the south-western coast of Turkey, at a depth of 35 m. The sample (Fig. 2), fixed in a 6% formaldehyde solution, has been preserved in the fish collection of the Fisheries Faculty, Ege University (ESFM-PIS/2020-01).

RESULTS AND DISCUSSION

The morphological description, colour, morphometric measurements with percentages of total length and meristic counts, as presented in Table 1, are in agreement with Golani et al. (2006), Froese & Pauly (2019), Ergüden et al. (2018). Two distinctive features of *S. ghobban* are its teeth, in both jaws fused to form dental plates with a median suture, and three rows of scales on the cheek.

Scarus ghobban inhabits rocky habitats in shallow waters and feeds on the algae it scrapes off rocks and corals (Golani et al., 2006; Froese & Pauly, 2019). *S. ghobban* is usually found in shallow waters at depths of 1–100 m (see Ergüden et al., 2018 and references therein) along the eastern Mediterranean. In this study, the specimen was captured in the shallows off Cape Uluburun. It is not known yet how *S. ghobban* crosses Cyprus, but ships could be a possible vector. Finally, it seems that *S. ghobban* is still rare in the Mediterranean, as only twelve intermittent records in various sites in the eastern Mediterranean have been reported since 2001. Seeing that this Lessepsian fish has settled only 100 km away from the Aegean Sea, we expect it will shortly occur in that area as well.

ACKNOWLEDGEMENTS

We thank fisherman M. Aydin for bringing the fish to our attention, and also, Mediterranean Conservation Society for their support.

| Measurements | Size (mm) | Proportion (TL %) |
|-------------------------|-----------|-------------------|
| Total length (TL) | 501 | |
| Standard length (SL) | 412 | 82.2 |
| Pre-dorsal fin length | 138 | 27.5 |
| Pre-anal fin length | 248 | 49.5 |
| Pre-pectoral fin length | 115 | 22.9 |
| Interorbital length | 48 | 9.6 |
| Head length | 130 | 25.9 |
| Eye diameter | 15 | 3.0 |
| Preorbital length | 47 | 9.4 |
| Meristic counts | | |
| Dorsal fin rays | IX-9 | |
| Anal fin rays | III+9 | |
| Ventral fin rays | I+5 | |
| Pectoral fin rays | 15 | |
| Weight (g) | 1830 | |

POJAVLJANJE MODROPROGASTE MORSKE PAPIGE (SCARIDAE) NA MEJI EGEJSKEGA MORJA (KAŞ, TURKEY)

İnci TÜNEY-KIZILKAYA

Ege University Faculty of Science, 35100 Bornova, İzmir, Turkey

Okan AKYOL

Ege University Faculty of Fisheries, 35440 Urla, İzmir, Turkey;
e-mail: okan.akyol@ege.edu.tr

POVZETEK

Primerek modropogaste papige, Scarus ghobban, je bil ujet 5. maja 2020 v trislojno mrežo v plitvinah rta Uluburun, jugovzhodno od Kaša, na globini 35 m. Ta ihtiološki zapis je po pojavu te vrste pri otoku Kastellorizo blizu rta Uluburun, drugi najbolj severozahodni zapis o pojavu vrste S. ghobban v Levantskem morju. Doslej je bilo zabeleženih 12 zapisov o pojavljanju te vrste v Sredozemskem morju, kar kaže na to, da je vrsta še vedno redka.

Ključne besede: Scaridae, skrajni severozahodni zapis, Rt Uluburun, Sredozemsko morje

REFERENCES

- Al Mabruk, S.A.A., J. Rizgalla, I. Giovos & M. Bariche (2020):** Social media reveals the first records of the invasive lionfish *Pterois miles* (Bennett, 1828) and parrotfish *Scarus ghobban* Forsskål, 1775 from Egypt (Mediterranean Sea). *BiolInvasions Rec.*, 9, (*in press*).
- Apostolopoulos, G. & P.K. Karachle (2016):** New records of two fish species in Hellenic waters (Kastelorizo Island): *Scarus ghobban* (Forsskal, 1775) and *Oxyurichthys petersi* (Klunzinger, 1871). In: Karachle, P.K., A. Angelidis, G. Apostolopoulos, D. Ayas, M. Ballesteros *et al.*: A New Mediterranean Biodiversity Records (March 2016). *Med. Mar. Sci.*, 17(1), 230-252.
- Bariche M. & M. Saad (2008):** Settlement of the lessepsian bluebarred parrotfish *Scarus ghobban* (Teleostei: Scaridae) in the eastern Mediterranean. *Mar. Biodivers. Rec.*, 1, e5, pp.1-3.
- Ergüden, D., Y.K. Bayhan, S. Alagöz-Ergüden & A. Altun (2018):** Range extension of blue-barred parrotfish *Scarus ghobban* Forsskal, 1775 along the Mediterranean coast of Turkey. *Acta Biologica Turcica*, 31(3), 82-85.
- Filiz H. & N. Sevingel (2014):** A new record of the Blue-Barred Parrotfish, *Scarus ghobban* (Actinopterygii: Scaridae), from the coastal waters of Cyprus. *Zool. Middle East*, 60(3), 281-282.
- Froese, R. & D. Pauly (eds.) (2019):** Fishbase. [version 12/2019] <http://www.fishbase.org>
- Golani, D. & Y. Levy (2005):** New records and rare occurrences of fish species from the Mediterranean coast of Israel. *Zool. Middle East*, 36(1), 27-32.
- Golani, D., B. Öztürk & N. Başusta (2006):** Fishes of the eastern Mediterranean. Turkish Marine Research Foundation (Publication No. 24), Istanbul, 259 pp.
- Goren, M. & A. Aronov (2002):** First record of the Indo-Pacific Parrot fish *Scarus ghobban* in the eastern Mediterranean. *Cybium*, 26, 239-240.
- Ioannou, G., N. Michailidis, A. Loucaides & I. Manitaras (2010):** First occurrence of *Scarus ghobban* (Actinopterygii: Scaridae) in the coastal waters of Cyprus (Eastern Mediterranean Sea). *Med. Mar. Sci.*, 11, 353-356.
- Soliman, A., A. Saad & M. Ali (2018):** First record of the blue-barred parrotfish, *Scarus ghobban* (Actinopterygii: Scaridae) from Syrian marine waters. *Tishreen University Journal for Research and Scientific Studies – Biological Sciences Series*, 40(2), 57-66. (in Arabic).
- Turan C., D. Erguden, M. Gurlek, D. Yaglioglu & N. Uygur (2014):** First record of the blue-barred parrotfish, *Scarus ghobban* Forsskal, 1775, from Turkish coastal waters. *J. Appl. Ichthyol.*, 30, 424-425.
- Yağlıoğlu D. & D. Ayas (2016):** New occurrence data of four alien fishes (*Pisodonophis semicinctus*, *Pterois miles*, *Scarus ghobban* and *Parupeneus forsskali*) from the North Eastern Mediterranean (Yeşilovacık Bay, Turkey). *Biharean Biol.*, 10(2), 150-152.