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A FUGITIVE LESSEPSIAN FISH IN A SEA-CAGE FARM IN THE AEGEAN SEA: *STEPHANOLEPIS DIASPROS* (MONACANTHIDAE)

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ABSTRACT

*This paper presents the first recorded sighting of a *Stephanolepis diaspros* school at a sea-cage fish farm in the Bay of Izmir, north-eastern Aegean Sea. On 17 December 2024, a group of 20 individuals of *S. diaspros* was observed around a sea cage used for rearing meagre (*Argyrosomus regius*) off Urla, at a depth of 30 m. This study not only documents the first observation of *S. diaspros* in a fish farm in the northern Aegean Sea but also provides the first evidence of this fish species intruding into sea cages.*

Key words: Reticulated leatherjacket, behaviour, habitat, feeding, meagre

PESCE LESSEPSIANO FUGGITIVO IN UN ALLEVAMENTO IN GABBIA NEL MAR EGEO: *STEPHANOLEPIS DIASPROS* (MONACANTHIDAE)

SINTESI

*L'articolo presenta il primo avvistamento registrato di un branco di *Stephanolepis diaspros* in un allevamento di pesci in gabbia nella baia di Smirne, nell'Egeo nord-orientale. Il 17 dicembre 2024, un gruppo di 20 esemplari di *S. diaspros* è stato osservato intorno a una gabbia marina utilizzata per l'allevamento dell'ombrina boccadoro (*Argyrosomus regius*) al largo di Urla, a una profondità di 30 m. Questo studio non solo documenta la prima osservazione di *S. diaspros* in un allevamento ittico nel mare Egeo settentrionale, ma fornisce anche la prima prova dell'intrusione di questa specie ittica nelle gabbie marine.*

Parole chiave: monacanto reticolato, comportamento, habitat, alimentazione, ombrina boccadoro

INTRODUCTION

The reticulated leatherjacket, *Stephanolepis diaspros* Fraser-Brunner, 1940 (Tetraodontiformes: Monacanthidae), is a demersal marine fish typically encountered on rocky bottoms with vegetation, but also on sandy and muddy substrates with seagrass, at depths between 20 and 50 m (Golani *et al.*, 2006; Froese & Pauly, 2024). It feeds on small rock-dwelling organisms that it plucks from among the algae (Golani *et al.*, 2006).

The natural distribution of *S. diaspros* includes the Red Sea and the Arabian Gulf. The species entered the Mediterranean via the Suez Canal and is considered one of the earliest Lessepsian immigrants, now well established in the eastern Mediterranean (Golani *et al.*, 2002, 2006, 2021; Golani, 2010; Froese & Pauly, 2024). The species has also been recorded in the central Mediterranean, including Malta; Lampedusa, the Egadi Islands, and Sicily in Italy (Deidun *et al.*, 2015; Balistreri & Paraspuro, 2015); Tunisia (Ben Amor & Capapé, 2008; Zouari-Ktari *et al.*, 2008); and as far north as the Sea of Marmara (Bilecenoğlu & Yokeş, 2013; Bilecenoğlu, 2024) and the northern Adriatic Sea (Lipej *et al.*, 2014).

In Turkish waters, *S. diaspros* was first reported by Koswig (1950). Since then, it has been documented in studies from the Iskenderun Bay in the NE Mediterranean Sea (Gücü *et al.*, 1994; Torcu & Mater, 2000; Başusta & Erdem, 2000; Taşkavak & Bilecenoğlu, 2001; Sangun *et al.*, 2007; Ergüden *et al.*, 2009; Yemişken *et al.*, 2014); Cyprus (Iglésias & Frotté, 2015); the Gulf of Antalya (Türker *et al.*, 2020); the SE Aegean Sea (Öz *et al.*, 2007; Corsini-Foka *et al.*, 2010; Servonnat & Drakulic, 2015; Akyol *et al.*, 2018); and the NE Aegean Sea (Akyol & Özgül, 2015; Metin & Akyol, 2021).

In the Aegean Sea, the species has been expanding its distribution range towards the northern latitudes. In 2023, Akyol (2023) documented *S. diaspros* among the 15 Lessepsian fish species found in the Bay of Izmir. This fish has occasionally been observed in both sandy areas and seagrass meadows and is typically caught using fishing lines and gillnets in the Bay of Izmir (fisherman E. Akgün, *pers. comm.*). Additionally, *S. diaspros* was observed on 31 May 2024 around the artificial reef near Hekim Island in the Bay of Izmir (*pers. obs.* by the second and third authors). This ichthyologic note presents the first sighting of a *S. diaspros* school within a sea-cage fish farm in the Bay of Izmir, north-eastern Aegean Sea.

MATERIAL AND METHODS

On 17 December 2024, a group of *Stephanolepis diaspros* was observed at a sea cage used for rearing meagre (*Argyrosomus regius*) off Urla, Bay of Izmir (coordinates: 38°26'48"N, 26°36'18"E), at a depth of 30 m (Fig. 1). Scientific diving was conducted around the sea cages and the intruding fish were recorded using a GoPro 10 Hero camera. In-depth interviews were car-

ried out with the farm owner (manager) to obtain detailed information. The water temperature at the diving site was 17 °C. Species identification and taxonomic nomenclature of an observed specimen follow Golani *et al.* (2006), Froese and Pauly (2024).

RESULTS AND DISCUSSION

The species description is based on the specimens observed in the video footage: body deep, laterally compressed and rounded ventrally; a single strong spine with barbs on posterior edge of first dorsal fin, originating just above the posterior margin of the orbit; second dorsal fin just above and parallel to the anal fin; pelvic fin poorly developed, resembling a simple flap of skin; snout pointed, with a small terminal mouth containing incisor-like teeth; slit-like gill opening above origin of pelvic fin; body colour brownish green or greyish green with a complex pattern of spots, dark horizontal lines, and sinuous lines; two dark bands on convex caudal fin separated by a pale band, dorsal and anal fins yellow to orange. Based on this description, which aligns with those found in Golani *et al.* (2006), and Froese and Pauly (2024), the specimens were positively identified as *Stephanolepis diaspros* Fraser-Brunner, 1940 (Fig. 2).

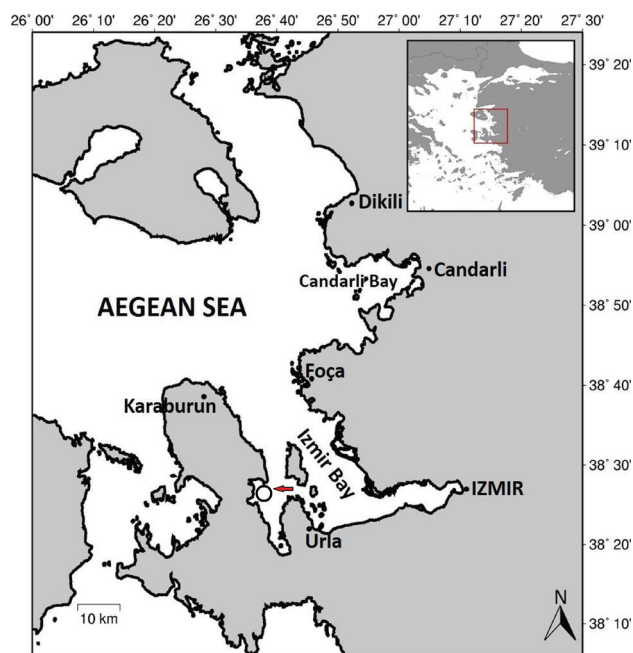


Fig. 1: Sampling site (circle) of the *Stephanolepis diaspros* observed in a sea cage in the Bay of Izmir, north-eastern Aegean Sea.

Sl. 1: Zemljevid obravnavanega območja z lokaliteto (krogec), kjer je bila vrsta *Stephanolepis diaspros* opažena v ribjih kletkah v Izmirskem zalivu, severovzhodno Egejsko morje.



Fig. 2: A school of *Stephanolepis diaspros* with reared *Argyrosomus regius* in a sea cage of Izmir Bay, northeastern Aegean Sea.

Sl. 2: Jata afriških kostorogov (*Stephanolepis diaspros*) z gojenimi primerki hame (*Argyrosomus regius*) v ribjih kletkah v Izmirskem zalivu, severovzhodno Egejsko morje.

In our preliminary observations, a group of 20 *S. diaspros* individuals of approximately 15 cm in length were observed (Fig. 2) congregating at the base of the net and consuming the algae that adhered to the net. While the school of meagre were swimming in the upper part of the net cage, showing no interest in the Lessepsian fish group, *S. diaspros* appeared to be avoiding contact with the farmed fish (Fig. 2).

In-depth interviews with the managers revealed that, in the past few years, juvenile *S. diaspros* have entered the cages during the annual net changes, remaining resident for approximately eight to nine months and departing during the subsequent net change. Cultivated meagre (*A. regius*) in sea cages are initially fed a diet of fresh fish, transitioning to pellet food during summer months. According to farm managers, when the meagre is hungry, it may pursue *S. diaspros*, sometimes chasing, biting, or even killing it. Their diet consists of fouling organisms, algae, and bait fish accumulating at the base of the net (S. Şanlı & K. Şanlı, *pers. comm.*).

Pelagic fish are strongly attracted to floating structures, including coastal cage farms, and may form highly dense aggregations. It is well-known that wild fish communities can be attracted to sea-cage farms; consequently, sea cages as floating structures have been categorised as Fish Aggregation Devices (FADs) (Dempster & Taquet, 2004; Sanchez-Jerez *et al.*, 2007). A recent study (Akyol *et al.*, 2020) identified a total of 39 wild species around the six fish farms in the Turkish Aegean Sea. Notably, one single specimen of *S. diaspros* was documented in proximity of a

sea-cage farm in Güllük Bay in the south-eastern Aegean Sea (Akyol *et al.*, 2020).

The tendency of juvenile demersal fish to enter floating cages in pelagic waters may be attributed to the ease of access to food in these environments. While the level of interest in pellet food for *S. diaspros* remains equivocal, this could be determined through of stomach content analyses. Due to lost pellets, wild fish may feed on excess feed around coastal fish farms. If this occurs, the condition of wild fish can improve within no-take areas (leasehold areas) and their lipid profiles may become modified (Izquierdo-Gomez *et al.*, 2015). A recent study documented a *S. diaspros* specimen with a total length of 305 mm (weighing 464 g) captured by hand-line in the Bay of Izmir, which has been recorded as the maximum reported size (Metin & Akyol, 2021). However, FishBase (Froese & Pauly, 2024) lists 250 mm as the maximum size. We believe this individual likely exhibited signs of further growth due to feeding near sea cages.

In conclusion, this study not only reports the first observation of *S. diaspros* in a fish farm in the northern Aegean Sea but also provides the first recorded instance of this species intruding into sea cages.

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UBEŽNI LESEPSKI MIGRANT IZ RIBOGOJNICE V EGEJSKEM MORJU:
STEPHANOLEPIS DIASPROS (MONACANTHIDAE)

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POVZETEK

*Pričujoči zapis predstavlja prvo zabeleženo pojavljanje jate afriškega kostoroga (*Stephanolepis diaspros*) v bližini ribogojnice s kletkami v Izmirskem zalivu v severovzhodnem Egejskem morju. Sedemnajstega decembra 2024 so opazili jato 20 osebkov v bližini kletke z gojenimi primerki hame (*Argyrosomus regius*) v vodah blizu Urle, na globini 30 m. Poleg dejstva, da gre za prvi zapis o opazovanju afriškega kostoroga v severnem Egejskem morju, je to tudi prvi zabeležen primer vdora te vrste v morske kletke.*

Ključne besede: afriški kostorog, vedenje, habitat, prehranjevanje, hama

REFERENCES

- Akyol, O. & A. Özgül (2015):** Record of reticulated leatherjacket *Stephanolepis diaspros* Fraser-Brunner, 1940 (Tetraodontiformes: Monacanthidae) from Izmir Bay, Turkey. *Journal of Black Sea/Mediterranean Environment*, 21(3), 316-322.
- Akyol, O., T. Ceyhan, A. Özgül & O. Ertosluk (2018):** Maximum size of reticulated leatherjacket, *Stephanolepis diaspros* Fraser-Brunner, 1940 (Tetraodontiformes: Monacanthidae), for the Turkish Seas. *Journal of Black Sea/Mediterranean Environment*, 24, 149-156.
- Akyol, O., A. Özgül, F.O. Düzbastılar, H. Şen, J.M.O. de Urbina & T. Ceyhan (2020):** Seasonal variations in wild fish aggregation near sea-cage fish farms in the Turkish Aegean Sea. *Aquaculture Reports*, 18(100478), 1-11.
- Akyol, O. (2023):** Lessepsian Fishes of İzmir Bay (Aegean Sea). *COMU Journal of Marine Science and Fisheries*, 6(1), 83-89. (in Turkish, English Abstract).
- Başusta, N. & Ü. Erdem (2000):** A study on the pelagic and demersal fishes of Iskenderun Bay. *Turkish Journal of Zoology*, 24(Suppl.), 1-19.
- Balistreri, P. & M. Paraspuro (2015):** First record of *Stephanolepis diaspros* (Tetraodontiformes, Monacanthidae) from the Egadi Islands Marine Protected Area (western Sicily). In: Tsiamis et al. *New Mediterranean Biodiversity Records* (July 2015). *Mediterranean Marine Science*, 16, 472-488.
- Ben Amor, M.M. & C. Capapé (2008):** Occurrence of a filefish closely related to *Stephanolepis diaspros* (Osteichthyes: Monacanthidae) off northern Tunisian coast (south-western Mediterranean Sea). *Cahiers de Biologie Marine*, 49, 323-328.
- Bilecenoğlu, M. & B. Yokeş (2013):** New Lessepsian fish records from the Aegean and Marmara Sea. In: Bilecenoğlu et al., *New Mediterranean marine biodiversity records* (December 2013). *Mediterranean Marine Science*, 14, 463-480.
- Bilecenoğlu, M. (2024):** Diversity of fishes along the coast of Türkiye. *Turkish Journal of Zoology*, 48, 589-616.
- Corsini-Foka, M., M.A. Pancucci-Papadopoulou & S. Kalogirou (2010):** Is the Lessepsian province in expansion? The Aegean Sea experience. Sub-regional Technical meeting on the Lessepsian migration and its impact on eastern Mediterranean fishery. Nicosia, 7-9 Dec. *FAO East Med Tech. Document*, pp. 50-59.
- Deidun, A., L. Castriota, M. Falautano, G. Maraventano, E. Prazzi & F. Andaloro (2015):** Documenting the occurrence of the Lessepsian fish *Stephanolepis diaspros* within the Strait of Sicily, central Mediterranean. *Journal of Black Sea/Mediterranean Environment*, 21(1), 1-11.
- Dempster, T. & M. Taquet (2004):** Fish aggregation device (FAD) research: gaps in current knowledge and future directions for ecological studies. *Reviews in Fish Biology and Fisheries*, 14, 21-42.
- Erguden, D., C. Turan & M. Gurlek (2009):** Weight-length relationships for 20 Lessepsian fish species caught by bottom trawl on the coast of Iskenderun Bay (NE Mediterranean Sea, Turkey). *Journal of Applied Ichthyology*, 25, 133-135.
- Golani, D., L. Orsi-Relini, E. Massutí & J.-P. Quignard (2002):** CIESM atlas of exotic species in the Mediterranean. Vol. 1. Fishes. Briand, F. (ed.). Monaco: CIESM Publishers. 254 pp.
- Golani, D., B. Öztürk & N. Başusta (2006):** Fishes of the Eastern Mediterranean. Turkish Marine Research Foundation. Publication number: 24, İstanbul, 259 pp.
- Golani, D. (2010):** Colonization of the Mediterranean by Red Sea fishes via the Suez Canal – Lessepsian migration. p. 145-188. In: *Fish Invasions of the Mediterranean Sea: Change and Renewal*. Golani, D., Appelbaum-Golani, B. (Eds). Pensoft Publishers, Sofia–Moscow.
- Golani, D., E. Azzurro, J. Dulčić, E. Massutí & L. Orsi-Relini (2021):** Atlas of Exotic Fishes in the Mediterranean Sea. Briand F. (ed), 2nd Edn. CIESM Publishers, Paris, 365 pp.
- Froese, R. & D. Pauly (2024):** FishBase. World Wide Web electronic publication. www.fishbase.org, version (02/2024).
- Gücü, A.C., F. Bingel, D. Avşar & N. Uysal (1994):** Distribution and occurrence of Red Sea fish at the Turkish coast-northern Cilician basin. *Acta Adriatica*, 34, 103-113.
- Iglésias, S.P. & L. Frotté (2015):** Alien marine fishes in Cyprus: Update and new records. *Aquatic Invasions*, 10, 425-438.
- Izquierdo-Gómez, D., D. González-Silvera, P. Arechavala-López, J.A. LópezJiménez, J.T. Bayle-Sempere & P. Sánchez-Jerez (2015):** Exportation of excess feed from Mediterranean fish farms to local fisheries through different targeted fish species. *ICES Journal of Marine Sciences*, 72, 930-938.
- Kosswig, C. (1950):** Erythraische fische im Mittelmeer und an der grenze der Agais. *Syllegomena Biologica, Festschrift Kleinschmidt*, 203-212 (in German).
- Lipej, L., B. Mavrič & J. Dulčić (2014):** Northern most record of the reticulated leather-jacket *Stephanolepis diaspros* Brunner-Fraser, 1940 in the Mediterranean Sea. In: Kapisir et al., *New Mediterranean Biodiversity Records* (April, 2014). *Mediterranean Marine Science*, 15, 198-212.
- Metin, G. & O. Akyol (2021):** Maximum size of *Stephanolepis diaspros* (Tetraodontiformes: Monacanthidae). *Marine Science and Technology Bulletin*, 10(1), 23-27.

Öz, M.İ., E. Okuş & A. Yüksek (2007): Notes on the Erythrean alien fishes of Datça-Bozburun Peninsula- A specially protected area in the southeastern Aegean Sea (Turkey). Rapport du 38e Congrès de la CIESM (Rapp. Comm. int Mer Médit.), 38, 563.

Sanchez-Jerez, P., J. Bayle-Sempere, D. Fernandez-Jover, C. Valle & T. Dempster (2007): Ecological relationship between wild fish populations and Mediterranean aquaculture in floating fish cages. Impact of mariculture on coastal ecosystems. Lisboa, 21-24 Feb., CIESM Workshop Monographs No. 32, 86.

Sangun, L., E. Akamca & M. Akar (2007): Weight-length relationships for 39 fish species from the north-eastern Mediterranean coasts of Turkey. Turkish Journal of Fisheries and Aquatic Sciences, 7, 37-40.

Servonnat, M., & M. Drakulic (2015): New records of *Fistularia commersonii* and *Stephanolepis diaspros* around Lipsi Island, Dodacanese, Greece. In: Zenetos *et al.* New Mediterranean Biodiversity Records (April 2015). Mediterranean Marine Science, 16, 266-284.

Taskavak, E. & M. Bileceoglu (2001): Length-weight relationships for 18 Lessepsian (Red Sea) immigrant fish species from the eastern Mediterranean coast of Turkey. Journal of the Marine Biological Association of the United Kingdom, 81, 895-896.

Torcu, H. & S. Mater (2000): Lessepsian fishes spreading along the coasts of the Mediterranean and the southern Aegean Sea of Turkey. Turkish Journal of Zoology, 24, 139-148.

Türker, D., K. Zengin, & H. Bal (2020): Length-Weight Relationships of 11 Lessepsian Migrant Fish Species Caught from Antalya Bay (Turkey). Acta Aquatica Turcica, 16(2), 301-304.

Yemisken, E., C. Dalyan, & L. Eryılmaz (2014): Catch and discard fish species of trawl fisheries in the Iskenderun Bay (North-eastern Mediterranean) with emphasis on Lessepsian and Chondrichthyan species. Mediterranean Marine Science, 15, 380-389.

Zouari-Ktari, R., M.N. Bradai & A. Bouain (2008): The feeding habits of the Lessepsian fish *Stephanolepis diaspros* (Fraser-Brunner, 1940) in the Gulf of Gabes (eastern Mediterranean Sea). Cahiers de Biologie Marine, 49, 329-335.