

Confirmation of the presence of the African spadefish, *Tripteron orbis* Playfair, 1867 (Perciformes: Ephippidae) in the Arabian Sea coast of Oman

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The Arabian Gulf, the Sea of Oman and the Arabian Sea, all biologically productive seas, are bordering the coasts of The Sultanate of Oman (RANDALL, 1995). BOULENGER (1887) is considered the first to study the ichthyofauna of Oman when he reported on the A. S. G. Jayakar collection of 172 species from the vicinity of Muscat City. Among these were 14 new species. Another six new species were described in 1889 when Boulenger studied the second A. S. G. Jayakar collection. Several significant works have been published on the Omani fish fauna from the late 19th to the end of the first quarter of the 20th Century (BOULENGER, 1892, STEINDACHNER, 1902, REGAN, 1905). The fish species obtained during the John Murray Expedition were studied by Norman (1939) and documented them in the 1933-1934 Validivia and Investigator (RANDALL, 1995). During the second half of the 20th century, "The Common Sea Fishes of The Arabian Gulf and Gulf of Oman" (WHITE & BARWANI, 1971) was the first book on the fish fauna of Oman. Later on, several more publications made their appearance to report on a number of species for the first time (RANDALL, 1986, 1994; HARE, 1990, DEBELIUS, 1993, AL-

ABDESSALAAM, 1995).

The family Ephippidae as currently recognized incorporates eight genera and 15 species (ESCHMEYER, 2012). The *Platax* is the largest genera of this family while the genus *Tripteron* is monotypic (ESCHMEYER, 2012).

T. orbis has been collected from various locations in the Indian Ocean, including Zanzibar and the whole coast of East Africa (PLAYFAIR & GÜNTHER, 1867, DOR, 1984); South Africa (SMITH, 1986; HEEMSTRA & HEEMSTRA, 2004); Red Sea (GOREN & DOR, 1994); several localities in the Arabian Sea, but not from the Omani waters of the Arabian sea (MANILO & BOGORODSKY, 2003); Tanzania (SMITH, 1986); Mozambique (FISCHER *et al.*, 1990); Somalia (SOMMER, 1996); and India (KAPOOR, 2002). RANDALL (1995) and AL-ABDESSALAAM (1995) in their books on the fish fauna of Oman did not record this species in Omani waters.

Recently AL-JUFALI *et al* (2010) has reported this species from the Omani waters. SINCE AL-JUFALI *et al.* (2010) did not state where in Oman they obtained this species from then their finding is considered incomplete record. In addition, AL-JUFALI *et al.*

(2010) have not deposited voucher specimens anywhere. This practice rendered their record of *T. orbis* unreliable.

Key Words: The present paper reports the first confirmed record of the African spadefish from the Arabian Sea coast of Oman; the record constitutes an additional record in the north Indian Ocean to the previously known distributions of this species.

In July 2011, a catch of African spadefish, *T. orbis* fish species was recorded at Salalah City on the Arabian Sea coasts of Oman using deep gill net by local fisherman. Morphometric and meristic details were recorded following MAUGÉ (1984); the data are presented in Table 1. The specimen is fixed in 10% formalin and later preserved in 70% ethanol for deposit in the fish collection of the Marine Science and Fisheries Centre, Ministry of Agriculture and Fisheries Wealth, Muscat, Sultanate of Oman. Catalogue numbers OMMSTC 1089.

Tripteronodon orbis Playfair, 1867 is characterized by deep, oblong body with parabolic front profile; high, vertical forehead in

adults; mouth small and terminal with thick lips; usually large, movable, tricuspid teeth arranged in several rows in both jaws; roof of mouth smooth, lacking teeth; preopercular flange and top of head without scales while opercle is completely covered with scales almost to its ventral edge; nine feeble, broad dorsal spines, 3rd and 4th spines elongated, and 19-21 soft dorsal rays; short, rounded pectoral fins; pelvic fins present; three spines and 15-17 soft rays in anal fin; body scales small, finely ciliated and extending to the soft parts of vertical fins.

Colour: body grey, silvery characterised with the presence of 8-10 indistinct darker crossbars, fading with age, the first pass through eye; tail and dorsal fin are yellowish, while pelvic and anal fins are blackish.

The maximum size attained by this species is 750 mm (FISCHER & BIANCHI, 1984, HEEMSTRA & HEEMSTRA, 2004) with common total length reaching to 300 mm. The total length of the specimen obtained in this study is over the common size reported.



Fig. 1 – *Tripteronodon orbis*, OMMSTC 1089, 256 mm SL, caught at the coasts of the City of Salalah, southern Oman, Arabian Sea, VII 2011, collected by fisherman using deep gill net.

Morphometric/ meristic characters	
Total length	341
Standard length (% in TL)	256 (75.1)
Fork length (% in TL)	314 (92.1)
Head length (% in SL)	78.2 (30.5)
Head depth (% in SL)	145.1(56.7)
Preorbital length (% in HL)	28.8 (36.8)
Posorbital length (% in HL)	31.4(40.2)
Predorsal fin length (% in SL)	14.3(18.3)
Postdorsal fin length (% in SL)	19.3(7.5)
Prepectoral fin length (% in SL)	79.0(30.9)
Prepelvic fin length (% in SL)	71.6(28)
Preanus length (% in SL)	137.1(53.6)
Preanal fin length (% in SL)	162(63.2)
Postanal fin length (% in SL)	244(95.3)
Maximum body depth (% in SL)	18.5(7.2)
Caudal peduncle depth (% in SL)	31.4(12.3)
Pectoral fin length (% in SL)	45.7(17.9)
Meristic characters	
Dorsal fin spines	9
Dorsal fin rays	19-21
Anal fin spines	3
Anal fin rays	15-17
Pectoral fin rays	17-19
Pored-lateral line scales	43-45

Table 1 – Morphometric and meristic characters of *Tripteron orbis* collected from the Arabian Sea coasts of Oman (TL, total; HL, head length; SL standard length).

Originally, *T. orbis* was described as a member of the family Sparidae by PLAYFAIR (1827). This species differs from the similar species, *Ehippus orbis* in having more oblong body shape, large and tricuspid teeth, large eye diameter about half of distance from mouth to eye, scaleless top of head and 9-10 indistinct vertical bars, the first pass across eye; from drepanid species in having short pectoral fins, non-protrusible mouth, and long 3rd and 4th dorsal fin spines; from the members of the family Scatophagidae in having 3 anal spines and in having vertical head profile (FISCHER & BIANCHI, 1984).

The range extension of the African spadefish species reported here suggests that this species may have been overlooked by investigators on the Arabian Sea coasts of Oman, and that lack of sampling in the area prevents its regular detection.

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