

**New Records of the Red Sea Fishes, *Pterois miles* (Scorpaenidae) and *Pteragogus pelycus* (Labridae) from the Eastern Mediterranean Sea**

Daniel Golani<sup>1</sup> and Oren Sonin<sup>2</sup>

<sup>1</sup> Department of Evolution, Systematics and Ecology,  
The Hebrew University of Jerusalem,  
91904 Jerusalem, Israel

<sup>2</sup> Department of Fisheries, Ministry of Agriculture,  
P.O. Box 584, Kiryat Motzkin 26117, Israel

The invasion rate of the eastern Mediterranean by new Red Sea fishes (Lessepsian migrants) has accelerated in recent years. It was estimated by Ben-Tuvia (1985) that during the years 1950–1983, an average of 1.2 Red Sea fish species followed the Suez Canal into the Mediterranean each year. Since 1987 six species (Golani and Ben-Tuvia, 1989; Golani, 1992), as well as the two reported herein, have been added to the list of Lessepsian migrant fishes.

On July 16, 1991, a 52.1 mm SL specimen of *Pteragogus pelycus* was collected in Haifa Bay by the second author, on board the trawler F/V Nitzan Capt. Z. Havushi, from a catch trawled from a depth of 32 to 80 m. An additional 60.5 mm SL specimen was collected on the same ground the following day.

On July 28, 1991, a 328 mm SL specimen of *Pterois miles* was landed by the trawler F/V Galdag, Capt. L. Ornoy, from a depth of 35 m near Herzliya, Israel, 10 km north of Tel-Aviv. The specimen was presented fresh to the first author at the fishing harbor of Ashdod.

The specimens of the new migrants were deposited in the Hebrew University of Jerusalem fish Collection (HJ), where they were compared to conspecific Red Sea specimens. The descriptions refer to the Mediterranean specimens, followed by numbers in parenthesis for the compared Red Sea specimens.

***Pteragogus pelycus* Randall, 1981  
(Fig. 1)**

**Materials examined.** Mediterranean: HJ 15199, 52.1 mm SL, 16 July 1991, Haifa Bay, trawl between 32–80 m; HJ 15200, 60.5 mm SL, 17 July, location and method same as HJ 15199, Gulf of Aqaba; HJ 3803, 40.4 mm SL, Eilat, 1955; HJ 5999, 21 July 1969, Ras Burqa, rotenone; HJ 15607, (2 spec.) 51.5–57.8 mm SL, 22 September 1970, Ras Misalla. Gulf of Suez: HJ 4218 (2 spec.), 65.8–54.0 mm SL, 21 September 1969, A-Tur; HJ 15204 (6 spec.), 46.8–66.0 mm SL, 23 September 1970, Ras

Suder.

**Description.** D, XI+9 (XI+8–9); A, III+9 (III+8–9); P, 13 (13–14), G.R., 13 (12–14); preopercular serrae 16–17 (15–23); body depth 32.5–32.6 (32.2–38.7); head length 35.7–37.2 (36.9–41.7). All measurements as percentage of SL.

**Color** (of fresh specimens): Back, flank and nape brown-red, ventral brown-orange, black spot on the upper part of the first 2–4 interspinous membranes of dorsal fin, rest of dorsal fin membrane light with brown upper and lower margin. Anal and ventral fin light with brown margin on the former. Black blotch on opercle slightly lower than eye. Orange eye with dark pupil.

**Remarks.** *Pteragogus pelycus* was first described as *Cossyphus opercularis* Peters and in later works was referred to as *Duymaeria* (Klunzinger, 1871; Al-Hussaini, 1947; Klauswitz, 1964) and *Pteragogus* (Fourmanoir, 1957). Randall (1981) recognized that *C. opercularis* was a junior homonym of *C. opercularis* Guichenot, 1847, and renamed the species.

*P. pelycus* is distinguished from the only congeneric species in the Red Sea, *Pteragogus cryptus* Randall 1981 by having dark spots on the first 2–4 interspinous dorsal membrane and very long filament extending from the first pelvic ray.

*P. pelycus* is distributed throughout the Red Sea and along the eastern coast of Africa, where it inhabits seagrass beds at depths of 0.5–28 m (Randall, 1981). The two Mediterranean specimens match Randall's (1981) description and fall within the range of the compared Red Sea material. *P. pelycus* is the first Red Sea labrid to be found in the Mediterranean.

***Pterois miles* (Bennett, 1828)  
(Fig. 2)**

**Material examined.** Mediterranean: HJ 15203, 328 mm SL, 28 July 1991, Herzliya, trawl at 35 m. Red Sea: HJ 3406, 196 mm SL, Aqaba; HJ 5530, 210 mm SL, 1957, Eilat; HJ 14675 (2 spec.), 111–140 mm SL, 2 June 1969, El-Arqana.

**Description.** D, XII+I+10 (XII+I+10–11); A, III+6 (III+6); P, 14 (14); G.R., 14 (14–16); body depth 41.1 (33.5–41.4); head length 31.7 (32.2–38.9)% of SL. Snout 39.9 (36.1–38.9); eye 19.6 (18.0–25.0); interorbital 23.8 (18.9–24.3)% of head length.

**Color:** Body with alternating wide black and

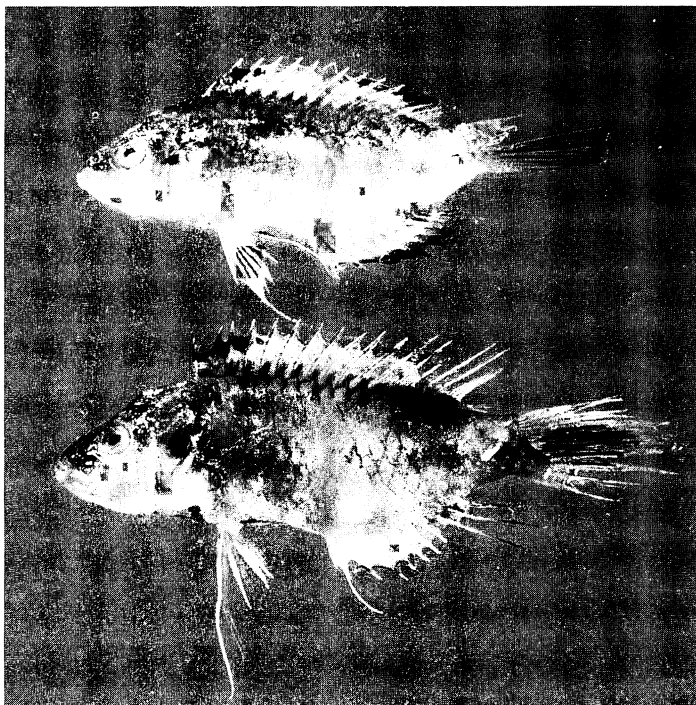


Fig. 1. *Pteragogus pelycus*, Haifa Bay, eastern Mediterranean: HUI 15199, 52.1 mm SL (upper) and HUI 15200, 60.5 mm SL (lower).

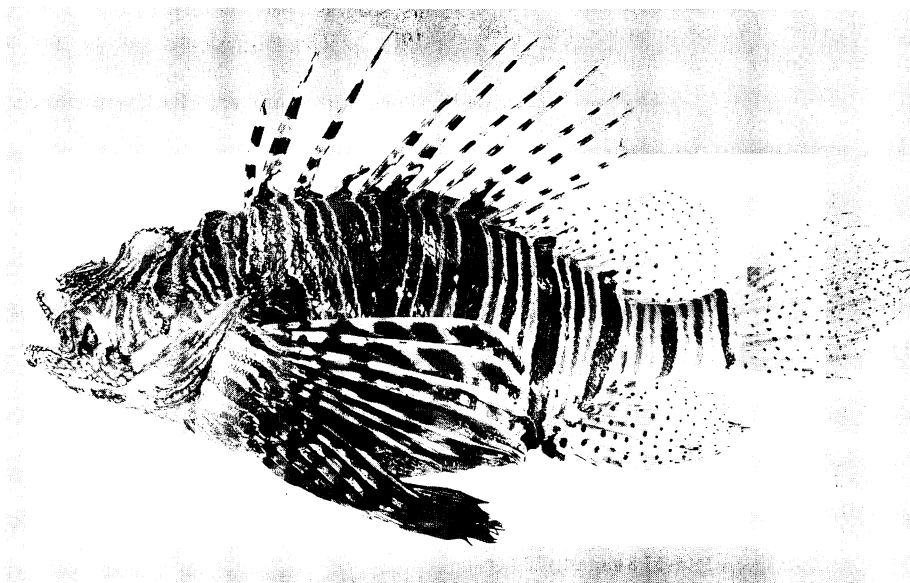


Fig. 2. *Pterois miles*, near Herzliya, Israel, eastern Mediterranean: HUI 15203, 328 mm SL.

narrow white and red bands. Dorsal spines, pectoral and ventral fins are alternately banded with black, red and pink. Dorsal soft rays, anal and caudal fins with a series of dark spots along the rays on a light pink background.

**Remarks.** *Pterois miles* was considered for many years to be a synonym of *P. volitans* (see Dor, 1984). However, Eschmeyer (1986) showed that it represents a distinct species, the former inhabiting the Red Sea and the eastern Indian Ocean and the latter occurring in the central Indian Ocean and the western Pacific.

*P. miles* can be distinguished from the two other species of *Pterois* known in the Red Sea (see Dor, 1984) by its dark dots on the soft dorsal, anal and caudal rays. *P. miles* is the first substantiated Lessepsian migrant scorpaenid. Fröiland (1972) reported *Sebastapistes nuchalis* (= *S. mauritiana*) based on a single specimen from Cyprus; however, Ben-Tuvia (pers. comm.) has subsequently identified the specimen as *Scorpaena maderensis*. The dorsal and anal spines of *P. miles* are highly venomous (Steinitz, 1959), and are reported to have caused fatalities (Randall, 1983).

*P. miles* is a crepuscular piscivour. It was observed in the Red Sea hunting solitarily or in small groups, using its large pectoral fins to force small fishes against the reef (personal observation).

#### Acknowledgments

We thank L. Ornoy for providing the specimen of *Pterois miles* and Dr. D. Darom for the photographs.

#### Literature cited

- Al-Hussaini, A. H. 1947. The feeding habits and the morphology of the alimentary tract of some teleosts living in the neighborhood of the Marine Biological Station, Al-Ghardaga, Red Sea. Pub. Mar. Biol. Sta. Ghardaqa, 5: 1-61.
- Ben-Tuvia, A. 1985. The impact of the Lessepsian (Suez Canal) fish migration on the eastern Mediterranean ecosystem. Pages 367-375 in M. Moraitou-Apostolopoulou and V. Kiortsis, eds. Mediterranean marine ecosystem. Plenum Press, New York.
- Dor, M. 1984. CLOFRES. Check-list of the fishes of the Red Sea. Academy for Sciences and Humanities. Jerusalem, 437 pp.
- Eschmeyer, W. N. 1986. Scorpaenidae. Pages 463-478 in M. M. Smith and P. C. Heemstra, eds. Smith's sea fishes. Macmillan Pub. Johannesburg.
- Fourmanoir, P. 1957. Poissons téléostéens des eaux malgaches du Canal de Mozambique. Mém. Inst. Sci. Madagascar, 1: 1-316.
- Fröiland, O. 1972. Fishes of the family Scorpaenidae from Cyprus, including three new records. Bull. Sea. Fish. Res. Stn. Haifa, 59: 5-16.
- Golani, D. 1992. *Rhabdosangus haffara* (forsskal, 1775) and *Sphyræna flavicauda* Rueppel 1833—New Red Sea immigrants in the Mediterranean. J. Fish Biol., 40: 139-140.
- Golani, D. and A. Ben-Tuvia. 1989. Characterization of Lessepsian (Suez Canal) fish migrants. Pages 234-243 in E. Spanier, Y. Steinberger and M. Luria, eds. Environmental quality and ecosystem stability. Vol. IV. B. ISEEQS Pub., Jerusalem.
- Guichenot, A. 1847. Description de deux nouvelles espèces de Cossyphes. Rev. Zool., Sept. 1847: 282-284.
- Klausewitz, W. 1964. Fische aus dem Rotem Meer. VI. Taxionomische und ökologische Untersuchungen an einigen Fischarten der Küstenzone. Senckenbergiana biol., 45(2): 123-144.
- Klunzinger, C. B. 1871. Synopsis der Fische des Rothen Meeres. II. Verh. Zool. Bot. Ges. Wien, 21: 441-668.
- Randall, J. E. 1981. Two new species and six new records of labrid fishes from the Red Sea. Senckenbergiana Maritima, 13(1/3): 79-109.
- Randall, J. E. 1983. Red sea reef fishes. IMMEL Pub. London, 192 pp.
- Steinitz, H. 1959. Observations on *Pterois volitans* (L.) and its venom. Copeia, 1959(2): 158-160.

(Received December 10, 1991; accepted May 7, 1992)

#### 紅海に生息する魚類 2 種の地中海からの新記録

Daniel Golani • Oren Sonin

紅海産魚類であるフサカサゴ科ミノカサゴ属の *Pterois miles* とベラ科オハグロベラ属の *Pteragogus pelycus* が地中海東部から採集された。前者はこれまで紅海と東部インド洋から知られており、後者は紅海とアフリカ東岸から知られていた。