On the record of the red cornet fish *Fistularia petimba* (Syngnathiformes, Fistularidea) in Jask port, the Oman sea

Yasemi, M.*

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Institute of Technical and Vocational Higher Education of Jihad-E-Agriculture, Tehran. Iran.

*Corresponding author's email: yasami_m@yahoo.com

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According to the data recorded from Cadiz area located in the Mediterraneans (Cardenas. et al.,1997) the red cornet fish *Fistularia petimba* Lacepede,1803 is a large fish typically found along soft bottom coastal areas and usually at a depth of over 10m (Banon and Sande, 2008). *Fistularia commersonii* is often misidentified as *Fistularia petimba* Lacepede (Randall, 1992). Cornet fish distribute in the tropical waters of the Atlantic and Indo pacific. The north eastern limit of distribution is recognized in the Atlantic from Cape Blanc and Cape Verde Islands to Angola (Fritzsche, 1990). Besides, the geographic distribution ranges from tropical waters of the Atlantic to the Indian and pacific oceans (Banon and Sande, 2007). Two other variant species records were noted from northward of this area in Cadiz, on the Mediterraneans (Cardenas et al., 1997) and along to the Azores Islands (Azevedo et al., 2004). According to Fritzsche 1976, *Fistularia L.* comprises four species: *F.corneta* Gillbert and Starks, 1904, *F.petimba* Lacepede, 1803, *F.taba* Caria L., 1758 and *F.commersonii* RÜppel, 1835. Species identification was based on the absence of both elongated bony plates embedded in the skin along the midline of the back anterior to dorsal fin posterior lateral line and ossifications ending in a sharp spine immaculate red or orange (typical of *F.petimba*). No elongated bony plates along the midline of the back, posterior lateral line ossification without a spin, rows of blue spots on the back, sides and snout typically, were observed in *Fistularia commersonii* (Pais et al., 2007). The genus *Fistularia Linnaeus*, 1758 contain four species of which only two, *Fistularia tabacaria* and *F.petimba*, are distributed in the eastern Atlantic. *Fistularia petimba* differs from *F.tabacaria* mainly by the presence of imbricate bony plates prior to the dorsal and anal fins (Fritzsche, 1976, Banon and sande, 2007, Pais et al., 2007), which are clearly visible as well as *F.petimba*; other species of this genus have been recorded outside their natural distribution area. This is the case of *F.tabaccaria* occasionally caught in warm and low salinity Hudson river water, New York (Yong et al.,1982, Banon and sande, 2007) and *Fistularia*

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commersonii recorded in the Mediterranean sea as a Lessepsian species (Golani, 2000). Some records of *Fistularia commersonii* RÜppell, 1835 found from the Adriatic as Lessepsian migrant species (Dulcic etal., 2008). Morphometric and meristic characters were used to record the data (Fritzsch, 1976). The specimen morphology fully agrees with the typical diagnostic feature of the species (Golani, 2000, Ligas et al., 2007). Fish weight and morphometric and meristic characters were recorded following the methods of Strauss and Bond (1999). May and Maxwell, 1986 expressed that the life of *F.petimba* takes place between 10 to 200 m. Bahramand and Yasemi, 2006 showed fishing gears and method changes with variant depths. *F.petimba* was caught by a trammel net at a depth of 7 m near a local beach, Traba de Laxe, at the north-west coast of Galicia (NW spain) (Banon and Sande ,2007). *F. petimba* was caught by a trawler off Verval coast, Gujarat at a depth of 60m (Thangavelu et al., 2007). Midwinter trawl as fishing gear method was used in our study in the case of *F.petimba* at the depth of 150m. one specimen of *Fistularia petimba* was captured by midwater trawl on muddy bottoms, in 150m depth, in the north-west, Jask port, Kooh Mobarak area in Hormozgan province (Fig.1), at the coast of the Oman sea, Iran (57° 31 N,25° 31 E). The fish was photographed and immediately frozen at -20°C. According to Fritzsche (1976), Banon and Sande (2007), and Yasemi et al. (2008). the main diagnostic meristic count and morphometric measurements are given in centimeters to identify the species collected in our study.The meristic and morphometric parameters used in our research are given in Table 1.

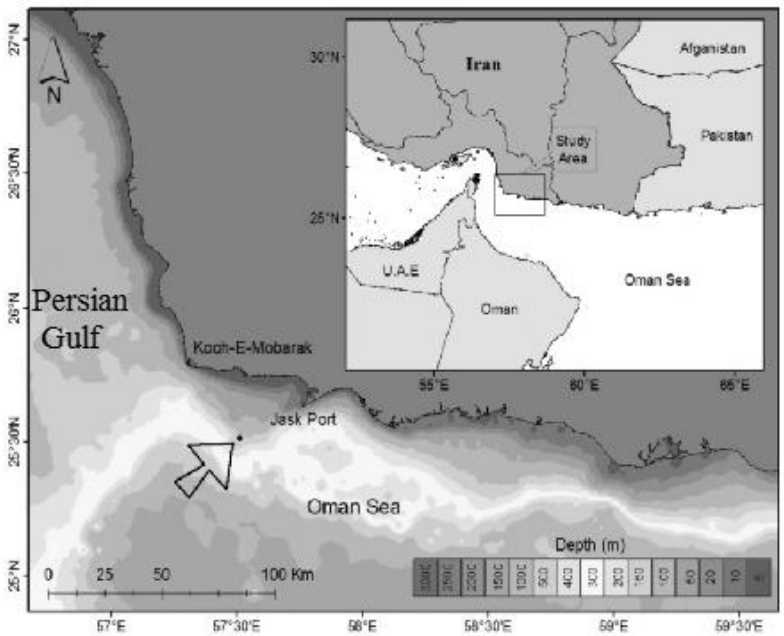

Figure 1: Map showing the station area where the *F.patimba* specimen was captured at Jask port in the Oman Sea

• *F. petimba* were found in 150 m depth in the Oman Sea

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Table 1: Countable and measuring parameters used in the study

Morphometric (cm)	Meristic (count)
Total length with filament	Dorsal fin rays
Total length without filament	Anal fin rays
Forke length	Pectoral fin rays
Standard length	Ventral(pelvic) fin rays
Head length	Branchiostegal rays
Pro-orbital(snout) length	
Post- orbital length	
Horizontal eye diameter	
Inter orbital length	
Pre-dorsal length	
Dorsal base length	
Upper jaw length	
Lower jaw length	
Pectoral length	
Ventral (pelvic) length	
Body depth	
Body width	

The total length and weight of the specimen were recorded, 152.50 cm and 1760 gr, respectively. The body of the fish was elongated giving depressed mouth at the end of long tubular snout which was cross sectionally hexagonal and antrorse serrations (Figs 2 and 3). The upper ridges extended anterior to the inter-orbital location. Dorsal and anal fins were covered with light transparent cast at the basement and caudal filament (fig. 4) in orange-reddish body color with scale and lateral line. The gill included non-raker, branchiostagal rays (fig. 5), and a small oblique mouth, with a slightly projecting lower jaw. Small sharp teeth, caudal forked fin and a dorsal fin with bony plates (fig. 6). Table 2 shows the data included morphometric indices of the F.petimba captured in the Oman Sea. In table 3 the meristic indices are given.

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Figure 2: Overview of the *F. petimba*

Figure 3: Hexagonal tubular snout of *F. petimba*

Figure 4: Caudal filament of *F.petimba*

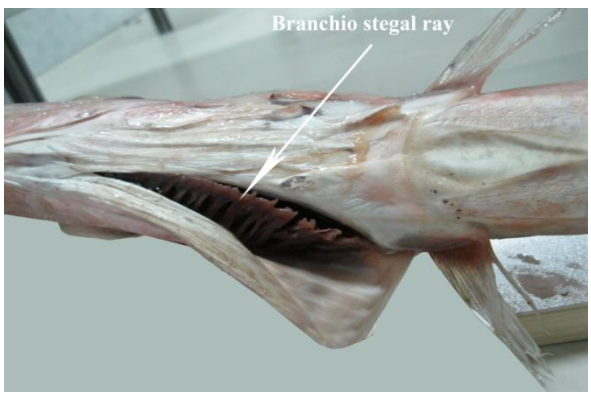

Figure 5: Branchiostegal rays of *F. petimba*

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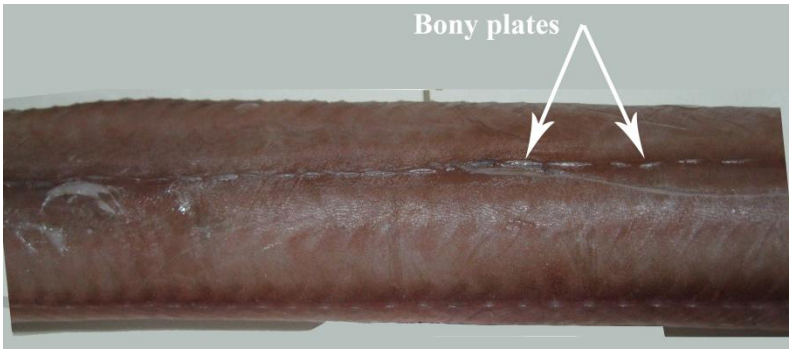

Figure 6: Bony plates of *F. petimba*

Table 2: The morphometric data of *F. petimba*

Diagnostic attributes	Measurements (cm)
Total length with filament	152.50
Total length without filament	131.00
Forke length	127.40
Standard length	123.30
Opercular length	11.00
Head length	45.60
Pro-orbital snout length	32.70
Post- orbital length	8.20
Horizontal eye diameter	4.50
Inter orbital length	4.40
Pre-dorsal length	101.60
Dorsal base length	6.50
Pre- anal length	102.70
Anal base length	5.80
Upper jaw length	5.70
Lower jaw length	6.60
Pectoral length	6.20
Ventral (pelvic) length	3.40
Body depth	7.20
Body width	8.70

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Table 3: The meristic data of *F.petimba*

Diagnostic attributes	Counts
Dorsal fin rays	16
Anal fin rays	15
Pectoral fin rays	15
Ventral(pelvic) fin rays	7
Branchiostegal rays	9
Bony plates	32

According to the records, *F. petimba* could be an important species for fish biologists who are focusing on Oman Sea fishes. Santos et al. (1997) and Forse and Paly (2003) recorded over 70% of identification of this species distributed in tropical and sub-tropical areas as well as our area. Pais et al., 2007 stressed Fistularia L. (osteichthys: *Fistularidae*) distribute in tropical and sub-tropical seas. Similar to those of Santos et al., 1997 and Forse and Paly, 2003, Pais et al., 2007, our results showed that the species distributes through the Oman Sea specially in the tropical area. Carpenter et al., 1984 explained morphometric characters of the Fistularidae as elongated body fishes with a tubular snout and long filament in the middle of the caudal fin. Captured specimens in the Oman Sea, Jask Port showed the same attributes with the mentioned records. Randall, 1995 represented just two species, *Fistularia commersonii* and *Fistularia petimba* the genus of *Fistularidae* are distributed in the Oman Sea. The specified characters in *Fistularia petimba* differ from *F.commersonii* mainly by the presence of imbricate bony plates prior to the dorsal fin (Fritzsche, 1976) which are clearly visible in the captured *Fistularia petimba* from the Oman Sea waters. The meristic characters showed 32 bony plates along the dorsal middle in front and behind the dorsal fin in *F. petimba*. Sanches, 1991 expressed that the maximum length of this species has been reported as 200 cm, in contrary to the result of Randall, 1997 that depicted 100 cm as maximum length of *F. petimba* in the Oman Sea. It is in contradiction to the findings of our study which showed the length of the captured *F.petimba* in the Oman Sea reached to the new record of more than 1 meter (TL=152.50cm). Morphometric and meristic attributes of the *F. petimba* collected off Galician waters in Spain were reported as Total length, TL=1400 mm, total length without filament 1241 mm, standard length SL= 1182 mm, pre-orbital (snout) length 321 mm, total weight 1580 g and 7 branchiostegal rays (Banon and Sande, 2007). Specimens caught off the Veraval coast, Gujarat showed the same characters measured as TL=1480 mm, opercular length 100 mm, total weight 2529 g and 8 branchiostegal rays (Thangavelu et al., 2009). Other captures

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from Azores in the north Atlantic were measured as SL=1007 mm, snout length 284 mm and no gill rakers (Azevedo et al., 2004). The largest *F. petimba* captured from north-western Australia has shown the morphometric attributes as TL= 200 cm and total weight 4.650 g (Allen and Swainston, 1988). Based on the our results, the same characters with the former report were shown as total length TL=152.50 cm, total length without filament=131.00 cm, standard length SL=123.30 cm, pro-orbital (snout) length 32.70cm, opercular length 11.00 cm, total weight 1760 g and 9 branchiostegal rays in case of *F. petimba* were caught from Koohe mobarak, Jask port in the north western waters of the Oman Sea. Randall et al., 1997 and Corsini et al., 2002 showed quick changes in color patterns which were apparently related to the habitat. The fish in Veraval coast- Gujarat in a depth of 60 m were brown in color becoming lights to silvery blue. The color of the body of our captured specimen could be changed in case of varied depth from 150 m to other depths. The fish was orange-reddish in color.

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