BRIEF COMMUNICATION

Lessepsian migrant Fistularia commersonii from the Rhodes marine area

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The bluespotted cornetfish Fistularia commersonii which originates from the Red Sea, appeared in the marine area of Rhodes Island (south-east Aegean Sea). This is a new record of the species based on 37 specimens caught during summer–winter 2001. The species appears to be spreading rapidly west and easily becoming established in Mediterranean coastal habitats.

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Key words: Fistularia commersonii; Lessepsian migration; Aegean Sea; Greece.

Thirty-seven specimens of Fistularia commersonii Rüppell, 141–734 mm standard length (Ls), were collected by trawling during experimental fishing in the marine area of the north-western coast of Rhodes Island, close to the city of Rhodes, and in the Ixia area, Gulf of Trianda. Sampling was conducted from the surface to 25–30 m depth and nearly 500 m off the coast. Other fishes caught included various common Mediterranean demersal fishes, mainly species of Centrarchidae, Sparidae, Labridae and Serranidae, including several Lessepsian migrants such as Siganus luridus (Rüppell), Siganus rivulatus Forsskål, Stephanolepis diaspros Fraser-Brunner and Pteragogus pelycus Randall, which have already established populations in the area (Corsini & Economidis, 1999), and pelagics such as Sphyraena chrysotaenia (Klunzinger).

The specimens of F. commersonii had the typical diagnostic features of the species (Heemstra, 1986; Golani, 2000). These are: a very elongate and depressed body, flattened between the pectoral and the caudal fins; a very long and tubular snout; a small and oblique mouth; a forked caudal fin having the two middle rays very elongated in the form of a long filament. The fin ray counts were: dorsal 14–16, anal 13–16, pectoral 14–15 and pelvic 6. The live body colour varied from grey to olive-green in the snout, the back and the flanks. In the larger specimens in particular there were seven or fewer large dark bands along the body and some blue spots. The belly was silvery white, while the dorsal, the anal and the caudal fins were transparent, pink distally. A quick change of the colour pattern has been recorded, which apparently relates to the habitat (Randall et al., 1997).

Fistularia commersonii has a very large ' anti-tropical ' and sub-tropical distribution in the Indian and western Pacific oceans, from the Red Sea and East Africa northward to southern Japan and eastward to north-eastern Australia and Indonesia (Golani, 1999). According to FishBase 2001 (www.fishbase.org), however, the species also occurs in south Australia and New Zealand and in the eastern Pacific from Mexico to Panama, including offshore islands. It has been often misidentified as Fistularia petimba Lacepède (Randall, 1992). In the Red Sea it is a rather common species mainly frequenting coral

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Table I: Food preferences of *Fistularia commersonii* from Rhodes Island marine area (n=26)

<table>
<thead>
<tr>
<th>Food items</th>
<th>No. of food items</th>
<th>No. of stomachs</th>
<th>Total mass of stomach contents (g)</th>
<th>Food item mass (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Coris julis</em></td>
<td>2</td>
<td>2</td>
<td>3.34</td>
<td>0.87</td>
</tr>
<tr>
<td><em>Mullus surmuletus</em></td>
<td>5</td>
<td>4</td>
<td>22.93</td>
<td>11.93</td>
</tr>
<tr>
<td><em>Sparisoma cretense</em></td>
<td>1</td>
<td>1</td>
<td>2.50</td>
<td>1.98</td>
</tr>
<tr>
<td><em>Spicara smaris</em></td>
<td>3</td>
<td>2</td>
<td>23.30</td>
<td>9.74</td>
</tr>
<tr>
<td><em>Thalassoma pavo</em></td>
<td>5</td>
<td>4</td>
<td>14.02</td>
<td>2.60</td>
</tr>
<tr>
<td><em>Xyrichtys novacula</em></td>
<td>1</td>
<td>1</td>
<td>3.18</td>
<td>1.87</td>
</tr>
<tr>
<td><em>Atherina sp.</em></td>
<td>1</td>
<td>1</td>
<td>2.43</td>
<td>0.59</td>
</tr>
<tr>
<td><em>Gobius sp.</em></td>
<td>1</td>
<td>1</td>
<td>4.35</td>
<td>1.04</td>
</tr>
<tr>
<td><em>Sphyraena sp.</em> (?)</td>
<td>1</td>
<td>1</td>
<td>1.20</td>
<td>0.80</td>
</tr>
<tr>
<td>Fishes (not identified)</td>
<td>14</td>
<td>13</td>
<td>60.58</td>
<td>7.80</td>
</tr>
<tr>
<td>Fish fry (not identified)</td>
<td>126</td>
<td>14</td>
<td>37.52</td>
<td>28.74</td>
</tr>
</tbody>
</table>

reefs, but also occurring in shallow sandy shores (Field & Field, 1998; Golani, 2000). It was recorded in the Mediterranean, along the coasts of Israel, <2 years ago and originated from Red Sea (Golani, 2000). Its spread westwards has been rapid.

The species is considered carnivorous, seeking food over reefs and seagrass beds mainly feeding on bottom-dwelling fishes and occasionally on shrimps (Randall, 1992; Randall et al., 1997). The stomach contents of 26 specimens from the present study were mainly composed of bottom-living common local fishes and their fry. Several water column-dwelling species, however, were also present (*Atherina sp.* and *Sphyraena sp.*) (Table I). The recorded behaviour of keeping the body hanging in the water, seems to play an important role in its feeding success (Field & Field, 1998). The new invader, however, is a predator on several exploited native populations of economic importance mainly *Spicara smaris* (L.) and *Mullus surmuletus* L. (Table I). The permanent establishment of a large population of the species in the area, and how harmful it would be on the native fishes, will be related to its reproductive success. A population explosion of the Lessepsian invader *Upeneus moluccensis* (Bleeker) was observed in the area (Laskaridis, 1948) followed by a dramatic decline, so that now this species is rather rare in the area (Corsini & Economidis, 1999).

References


