**A RECORD OF BLUESPOTTED CORNETFISH, *FISTULARIA COMMERSONII*
(ACTINOPTERYGII: SYNGNATHIFORMES: FISTULARIIDAE), OFF THE COAST
OF BENGHAZI, LIBYA (SOUTHERN MEDITERRANEAN)**

Houssein ELBARAASI* and Osama ELSALINI

Department of Zoology, Faculty of Science, Garyounis University, Benghazi, Libya

Elbaraasi H., ElSalini O. 2009. A record of bluespotted cornetfish, *Fistularia commersonii* (Actinopterygii: Syngnathiformes: Fistulariidae), off the coast of Benghazi, Libya (southern Mediterranean). Acta Ichthyol. Piscat. 39 (1): 63–66.

Abstract. A record of bluespotted cornetfish *Fistularia commersonii* Rüppell, 1835, (Fistulariidae) from the depth of 30 m, caught off the coast of Benghazi, Libya (Southern Mediterranean), is reported herewith.

Keywords: bluespotted cornetfish, *Fistularia commersonii*, first record, Mediterranean, Libya

The opening of Suez Canal in 1869 connected the Red Sea to the Mediterranean and allowed the introduction of numerous Indo-Pacific species into the Mediterranean (Golani 1998a, 1998b, Kasapidis et al. 2007), including bluespotted cornetfish, *Fistularia commersonii* Rüppell, 1835 (cf. Golani 2000, Karachle et al. 2004, Golani et al. 2007).

The bluespotted cornetfish *F. commersonii* is distributed in tropical and subtropical seas, common among reefs, shallow sandy bottoms, and on sea grass beds (Fischer and Bianchi 1984, Golani et al. 2002). It lives either solitarily or in small groups preying chiefly on small fishes and small crustaceans such as shrimps, mysids, euphasiids, crabs, and other benthic crustaceans (Fischer and Bianchi 1984, Nakamura et al. 2003, Karachle et al. 2004, Froese and Pauly 2007). It is a Lessepsian migrant, recorded for the first time in the Mediterranean Sea off the coast of Israel by Golani (2000). Its geographical distribution has extended rapidly in the basin, with records from the Gulf of Gokova, Turkey (Bilecenoglu et al. 2002, Gokoglu et al. 2002), from the Rhodes Island, Greece (Corsini et al. 2002, Kalogirou et al. 2007), and from the Chalkidiki Peninsula, Greece (Karachle et al. 2004). It was also, recently reported from the central Mediterranean in Sicily, (Azzurro et al. 2004, Fiorentino et al. 2004) and Sardinia, Italy (Pais et al. 2007), Tyrrhenian Sea, Italy (Micarelli et al. 2006, Psomadakis et al. 2008), from Tunisian Coast (Ben Souissi et al. 2004, Charfi-Cheikhrouha 2004), from Libya (Shakman et al. 2007), and from as far as Granada, Spain (Sanchez-Tocino et al. 2007). To date, the most recent records of the species was from the Adriatic Sea (Dulčić et al. 2008, Joksimović et al. 2008) and along

the Algerian coasts, in Skikda Bay (eastern Algeria) and offshore of Bou Ismail Bay (central Algeria) at the Mediterranean (Kara and Oudjane 2008).

In this short note, a record of the bluespotted cornetfish, *F. commersonii*, in the Libyan waters is reported.

The specimen of *F. commersonii* was caught in November 2007 by a commercial bottom trawl, 5 nautical miles off the coast of Benghazi, Southern Mediterranean, Libya, (lat 32°06'N, long 20°03'E, Fig. 1) at the depth of approximately 30 m. The fish was frozen on board the ship by fishermen. Once in the laboratory, the specimen was photographed (Fig. 2), and identified based on FAO Species Identification Sheets (Fischer and Bianchi 1984), and has been deposited in the Natural Museum of the Zoology Department, Faculty of Science, Garyounis University, Benghazi, Libya. The specimen had the typical morphometric and meristic diagnostic features of *F. commersonii* (cf. Golani 2000, Froese and Pauly 2007).

The specimen was 95.5 cm long (TL) and it weighed 395 g. It has very long tubular mouth, extremely elongated body shape and whip-like filamentous caudal middle rays. The body colouration was brownish to olive, with rows of blue spots and a pair of blue stripes along the back. White belly, fins with orange crest, transparent at base. Fin rays counts were: 16 dorsal, 15 anal, 14 pectoral, and 6 pelvic.

Stomach contents consisted of 3 small fish vertebral columns and remains of small euphasiids and crabs.

Over the last decade several investigators have reported the occurrence of new fish species in the Mediterranean basin (Dulčić and Grbec 2000, Dulčić et al. 2006, Francour 2008) including the Lessepsian

* Correspondence: Dr. Houssein Elbaraasi, Department of Zoology, Faculty of Science, Garyounis University, P.O. Box: 9480, Benghazi, Libya, phone: +218 91 379 4547, fax: +218 61 222 2805, e-mail: albrasi2000@yahoo.com

Fig. 1. Map showing where the herein reported specimen of *Fistularia commersonii* was collected off Benghazi, Libya

Fig. 2. Bluespotted cornetfish, *Fistularia commersonii*; inset shows head of the specimen

migrant fish *F. commersonii* that migrate from Red Sea via the Suez Canal (Golani et al. 2007). The presently reported finding represents the second record of this species in the coast of Benghazi, Libya, thus confirms its expansion in the southern Mediterranean. The cause of the increase could be a sign of climate changes, and water warming in the Mediterranean Sea and/or adaptation of the species to local condition (Dulčić et al. 2008, Garibaldi and Orsi-Relini 2008, Kara and Oudjane 2008).

Although, *F. commersonii* is now well established in the Mediterranean (Golani et al. 2007), the exact begin-

ning of colonization or establishing a breeding population of the present record in the Libyan waters is difficult to determine. Therefore, more studies need to be done in the area where many new exotic species has been found recently (Elbaraasi et al. 2007).

ACKNOWLEDGEMENTS

Many thanks to two fishermen for providing the reported specimen. The authors wish to thank two anonymous reviewers for providing useful suggestions to improve the manuscript.

REFERENCE:

- Azzurro E., Pizzicori F., Andaloro F. 2004. First record of *Fistularia commersonii* (Fistulariidae) from the central Mediterranean. *Cybiu* **28**: 72–74.
- Ben Souissi J., Zaouali J., Bradai N., Quignard P. 2004. Lessepsian migrant fishes off the coast of Tunisia. First record of *Fistularia commersonii* (Osteichthyes, Fistulariidae) and *Parexocottus mento* (Osteichthyes, Exocoetidae). *Vie et Milieu* **54**: 247–248.
- Bilecenoglu M., Taskavak E., Kunt B. 2002. Range extension of three Lessepsian migrant fish (*Fistularia commersonii*, *Sphyrna flavicauda*, *Lagocephalus suezensis*) in the Mediterranean Sea. *Journal of the Marine Biological Association of the United Kingdom* **82**: 525–526. DOI: 10.1017/S0025315402005829.
- Charfi-Cheikhrouha F. 2004. Premières observations de quatre espèces de poissons allochtones à Rafrat (Nord-Est de la Tunisie). *Bulletin de l'Institut National Scientifique et Technique de la Mer de Salammbô* **31**: 115–117.
- Corsini M., Kondilatos G., Economidis S. 2002. Lessepsian migrant *Fistularia commersonii* from the Rhodes marine area. *Journal of Fish Biology* **60**: 1061–1062. DOI: 10.1111/j.1095-8649.2002.tb01865.x.
- Dulčić J., Grbec B. 2000. Climate change and Adriatic ichthyofauna. *Fisheries Oceanography* **9**: 187–191.
- Dulčić J., Tutman P., Čaleta M. 2006. Northernmost occurrence of the white grouper, *Epinephelus aeneus* (Perciformes: Serranidae), in the Mediterranean area. *Acta Ichthyologica et Piscatoria* **36**: 73–75.
- Dulčić J., Scordella G., Guidetti P. 2008. On the record of Lessepsian migrant *Fistularia commersonii* (Rüppell, 1835) from the Adriatic Sea. *Journal of Applied Ichthyology* **24**: 101–102. DOI: 10.1111/j.1439-0426.2007.01022.x.
- Elbaraasi H., Elmariami M., Elmeghrabi M., Omar S. 2007. First record of oilfish, *Ruvettus pretiosus* (Actinopterygii, Gempylidae), off the coast of Benghazi, Libya (Southern Mediterranean). *Acta Ichthyologica et Piscatoria* **37**: 67–69.
- Fiorentino F., Giusto B., Sinacori G., Norrito G. 2004. First record of *Fistularia commersonii* (Fistulariidae, Pisces) in the strait of Sicily (Mediterranean Sea). *Biologia Marina Mediterranea* **11**: 583–585.
- Fischer W., Bianchi G. 1984. FAO species identification sheets for fishery purposes. Vol. 2. Western Indian Ocean (Fishing Area 51). FAO, Rome.
- Francour P. 2008. First records of *Didogobius splechnai* along the French Mediterranean coast and additional comments about *D. schlieveni*. *Acta Ichthyologica et Piscatoria* **38**: 139–141. DOI: 10.3750/AIP2008.38.2.09.
- Freese R., Pauly D. 2007. FishBase. <http://www.fishbase.org>
- Garibaldi F., Orsi-Relini L. 2008. Record of the bluespotted cornetfish *Fistularia commersonii* Rüppell, 1838 in the Ligurian Sea (NW Mediterranean). *Aquatic Invasions* **3**: 471–474. DOI: 10.3391/ai.2008.3.4.20.
- Gokoglu M., Bodur T., Gulyavuz H. 2002. The first record of bluespotted cornetfish (*Fistularia commersonii* Rüppell, 1835) along the Turkish Mediterranean coast. *Israel Journal of Zoology* **48**: 252–254. DOI: 10.1560/J3U8-NGCW-VDM2-3WWV.
- Golani D. 1998a. Impact of Red Sea fish migrants through the Suez Canal on the aquatic environment of the eastern Mediterranean. *Bulletin of Yale School of Forestry and Environmental Studies* **103**: 375–387.
- Golani D. 1998b. Distribution of Lessepsian migrant fish in the Mediterranean. *Italian Journal of Zoology* **65** (Suppl.): 95–99. DOI: 10.1080/11250009809386801
- Golani D. 2000. First record of bluespotted cornetfish from the Mediterranean Sea. *Journal of Fish Biology* **56**: 1545–1547. DOI: 10.1111/j.1095-8649.2000.tb02163.x.
- Golani D., Azzurro E., Corsini-Foka M., Falautano M., Andaloro F., Bernardi G. 2007. Genetic bottlenecks and successful biological invasions: the case of a recent Lessepsian migrant. *Biology Letters* **2007** (3): 541–545. DOI: 10.1098/rsbl.2007.0308.
- Golani D., Orsi-Relini L., Massuti E., Quignard J.P. 2002. CIEM atlas of exotic species in the Mediterranean. In: *Fishes*, Vol. 1. Briand F. (ed.). CIESM Publisher, Monaco.
- Joksimović A., Dragicević B., Dulčić J. 2008. Additional record of *Fistularia commersonii* from the Adriatic Sea (Montenegrin coast). *JMBA 2 Biodiversity records 2008* (6232): 1–2. <http://www.mba.ac.uk/jmba/pdf/6232.pdf>.
- Kalogirou S., Corsini M., Kondilatos G., Wennhage H. 2007. Diet of the invasive piscivorous fish *Fistularia commersonii* in a recently colonized area of the Mediterranean. *Biological Invasions* **9**: 887–896.
- Kara M.H., Oudjane F. 2008. First observations of the Indo-Pacific bluespotted cornetfish *Fistularia commersonii* (Fistulariidae) from Algerian coasts. *JMBA2 – Biodiversity Records 2008* (6470): 1–4. <http://www.mba.ac.uk/jmba/pdf/6470.pdf>.
- Karachle K., Triantaphyllidis C., Stergiou I. 2004. Bluespotted cornetfish, *Fistularia commersonii* Rüppell, 1838: A Lessepsian sprinter. *Acta Ichthyologica et Piscatoria* **34**: 103–108.
- Kasapidis P., Peristeraki P., Tserpes G., Magoulas A. 2007. A new record of the Lessepsian invasive fish *Etrumeus teres* (Osteichthyes: Clupeidae) in the Mediterranean Sea (Aegean, Greece). *Aquatic Invasions* **2**: 152–154. DOI: 10.3391/ai.2007.2.2.12.
- Micarelli P., Barlettani M., Ceccarelli R. 2006. Prima segnalazione di *Fistularia commersonii* (Rüppell, 1838) (Fistulariidae, Pisces) nel Tirreno settentrionale. *Biologia Marina Mediterranea* **13**: 887–889. [In Italian.]
- Nakamura Y., Horinouchi M., Nakai T., Sano M. 2003. Food habits of fishes in a seagrass bed on a fringing coral reef at Iriomote Island, southern Japan. *Ichthyological Research* **50**: 15–22. DOI: 10.1007/s102280300002.
- Pais A., Merella P., Follesa C., Garippa G. 2007. Westward range expansion of the Lessepsian migrant *Fistularia commersonii* (Fistulariidae) in the Mediterranean Sea, with notes on its parasites. *Journal of Fish Biology* **70**: 269–277. DOI: 10.1111/j.1095-8649.2006.01302.x.
- Psomadakis P.N., Scacco U., Consalvo I., Bottaro M., Leone F., Vacchi M. 2008. New records of the Lessepsian fish

Fistularia commersonii (Osteichthyes: Fistulariidae) from the Central Tyrrhenian Sea: signs of an incoming colonization? JMBA 2 – Biodiversity records **2008** (6123): 1–7. <http://www.mba.ac.uk/jmba/pdf/6123.pdf>.

Sanchez-Tocino L., Hidalgo Puertas F., Pontes M. 2007. Primera cita de *Fistularia commersonii* Ruppell, 1838 (Osteichthyes: Fistulariidae) en aguas mediterráneas de la Península Ibérica. Zoologica Baetica **18**: 79–84.

Shakman E.A., Kinzelbach R. 2007. Distribution and characterization of Lessepsian migrant fishes along the coast of Libya. Acta Ichthyologica et Piscatoria **37**: 7–15.

Received: 21 February 2008

Accepted: 19 February 2009

Published electronically: 20 May 2009