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Short communication

On the occurrence of the Monrovian surgeonfish, *Acanthurus monroviae* Steindachner, 1876 (Osteichthyes: Acanthuridae) off the coast of Algeria (southern Mediterranean)

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Two records of the Monrovian surgeonfish, Acanthurus monroviae *Steindachner 1876, off the coast of Algeria (southern Mediterranean) are recorded for the first time. The species is briefly described and its distribution in the Mediterranean Sea is discussed.*

Key words: Teleost, Acanthuridae, *Acanthurus monroviae*, distribution, Algeria, Mediterranean

INTRODUCTION

The Monrovian surgeonfish, *Acanthurus monroviae* Steindachner 1876, was previously reported in a restricted Fishes of the North-eastern Atlantic and the Mediterranean (FNAM), area south of the Strait of Gibraltar, off the Atlantic Moroccan coast (DESOUTTER, 1986). It was first recorded in the Mediterranean off Marbella in the Alboran Sea, southern Spain (CRESPO *et al.*, 1987). The second Mediterranean record was reported in the eastern basin, off Haifa (Israel) by GOLANI & SONIN (1996). In this paper, we report for the first time the capture of two specimens of *A. monroviae* off the Algerian coast. We give a brief description of the specimens and comment on the species distribution in the Mediterranean Sea.

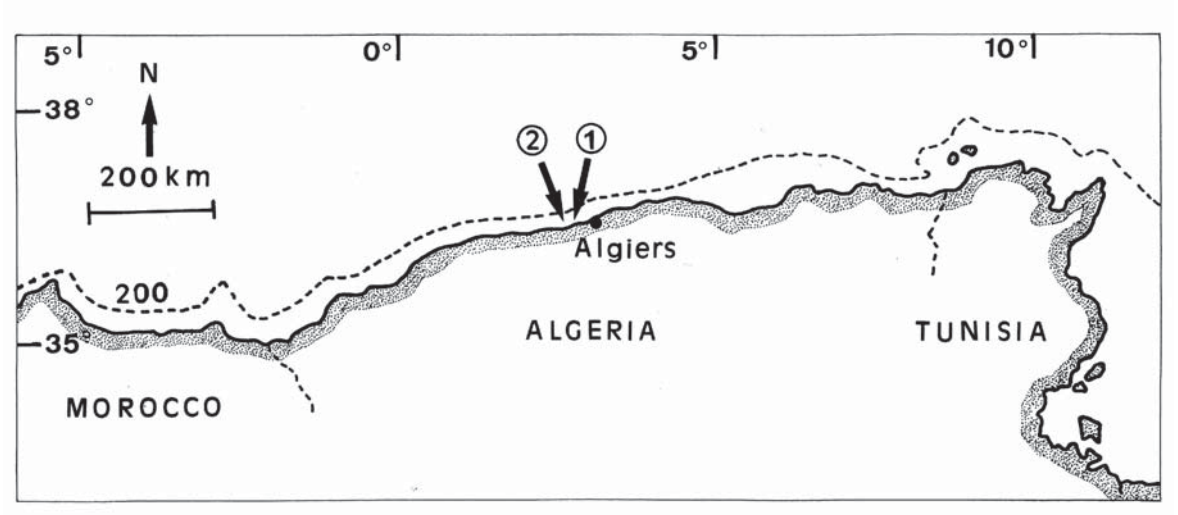

Fig. 1. Study area (central Algerian coast)

DESCRIPTION OF THE ALGERIAN SPECIMENS

On 5 December 2001, a large Monrovian surgeonfish was speared by Mr. Djamel LAZRAD in a rocky habitat at a depth between 5 and 9 meters, off Ain Banian on the central Algerian coast, 15 km west of Algiers (Fig. 1). The specimen was a large female, 380 mm TL, eviscerated mass 795.4 g. This specimen was deposited in the Laboratoire Halieutique, Institut des Sciences de la Nature, Université des Sciences et Techniques Houari Boumédienne at Algiers and its catalogue number is HAL 011 (Fig. 2). Its stomach contained numerous urchin spines and its ovaries did not contain eggs. The second specimen was captured off Sidi Fredj, 20 km west of Algiers, on 15 August 2002 by Mr. Toufik Aabi who provided us only a photograph (Fig 3). Morphometric measurements and meristic counts of the first specimen are given in Table 1.

Fig. 2. Female Acanthurus monroviae*, 380 mm TL, caught off Ain Banian, point ① and ② (catalogue no. HAL 011, photo F. HEMIDA)*

Fig. 3. Acanthurus monroviae *caught off Sidi Fredj (photo Toufik AABI)*

Table 1. Morphometric measurements and meristic counts of Acanthurus monroviae *specimen*

	mm
Total length	380
Length to fork	340
Space between tip of snout to caudal fin origin	276
Head length	75
Interorbital space	17
Space between tip of snout to pectoral fin origin	72
Space between tip of snout to dorsal fin origin	101
Space between tip of snout to pelvic fin origin	97
Space between tip of snout to anal fin origin	147
Depth of upper lip	9
Depth of lower lip	8
Space between snout and anus	205
Dorsal fin length	127
Pelvic fin length	77
Anal fin length	129
Caudal fin length	117
Caudal fin width	89
Body height	138
Body depth	44
Height of caudal fin peduncle	28
Dorsal fin rays	IX+25
Anal fin rays	III+24
Lower jaw teeth number	14
Upper jaw teeth number	20

The body of the *A. monroviae* is rather elliptic and compressed, entirely covered with small ctenoid scales. The snout profile is convex, mouth small with thick lips. Eyes are rounded. Caudal fin lunate with a single erectile spine on the caudal peduncle. Body is brownish with dark brown head. Pectoral fin with an ochre blotch on its posterior and dark edges. About 20 longitudinal alternative yellow and blue-violet lines on the upper anterior third of the flank. Caudal with an oval yellow patch around spine on peduncle. This description agrees with CADENAT (1950), RANDALL (1981, 2001), DESOUTTER (1986), SÉRET & OPIC (1990) and GOLANI & SONIN (1996).

DISCUSSION

A. monroviae is rather common along the eastern tropical Atlantic shore (RANDALL, 1981), especially off the coast of Senegal where it is currently landed in commercial fisheries (N'DAO, 1997). The species was also reported off Mauritania (MAIGRET, 1974; DESOUTTER, 1990).

A progressive Mediterranean invasion of species from the eastern Atlantic was noted and commented on by QUIGNARD & TOMASINI (2000). They enumerated 26 immigrant species since 1984-1986, among them *A. monroviae*. This invasion was confirmed by recent shark records originating from the eastern tropical Atlantic (HEMIDA *et al*., 2002) and the present records of the Monrovian surgeonfish.

GOLANI & SONIN (1996) recorded the occurrence in the Levant of species from the eastern tropical Atlantic that are absent from other parts of the Mediterranean, especially the western basin, in previous reports of BEN-TUVIA (1971) and BEN-TUVIA & GOLANI (1984). They suggested that, "these records do not represent isolated populations but rather a continuous sparse, "patchy" population occurring along the poorly investigated shores of North Africa". The two records reported in this paper confirm this opinion. According to the diver who gave us the photograph of the second record (Fig. 3), small specimens of *A. monroviae* have been observed swimming among rocky bottoms, however, they must be identified before concluding that a sustainable Monrovian surgeonfish population has been established off the Algerian coast.

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REFERENCES

BEN-TUVIA, A. 1971. Revised list of the Mediterranean fishes of Israel. Israel J. Zool., 20: 1-39.

BEN-TUVIA, A. & D. GOLANI. 1984. A west African fangtooth moray eel *Enchelycore anatina* from the Mediterranean coast of Israel. Copeia, 1984: 541-544.

CADENAT, J. 1950. Poissons de mer du Sénégal. Init. Afr., 3: 1-345.

CRESPO J., J.C. REY & A. GARCIA. 1987. Primera cita de *Acanthurus monroviae* Steindachner, 1876 y de *Diodon eydouxi* Brissout de Barneville, 1846 para la ictiofauna Europea. Miscel. Zool., 11: 271-275.

DESOUTTER, M. 1986. Acanthuridae. pp. 962-963. In: J.P. Whitehead, M.L. Bauchot, J.C. Hureau, J. Nielsen, E. Tortonese (Editors). Fishes of the North-western Atlantic and the Mediterranean. Vol. II, UNESCO, Paris.

DESOUTTER, M. 1990. Acanthuridae. pp. 962-963. In: J.C. Quéro, J.C. Hureau, C. Karrer, A. Post, L. Saldanha (Editors). Check-list of the Fishes of the Eastern Tropical Atlantic, Vol. II. JNICT/EIU/UNESCO, Lisbon.

GOLANI, D. & O. SONIN. 1996. The occurrence of the tropical west African marine fishes *Acanthurus monroviae* (Acanthuridae) and *Arius parkii* (Ariidae) in the Levant. J. Ichthyol. Aquat. Biol., 2(1): 1-3.

HEMIDA, F., R. SERIDJI, N. LABIDI, J. BENSACI & C. CAPAPÉ. 2002. New data on *Carcharhinus* spp. (Chondrichthyes: Carcharhinidae) from off the Algerian coast (southern Mediterranean). Acta Adriat., 43 (2): 83-93.

MAIGRET, J. 1974. Inventaire ichtyologique des côtes Mauritaniennes. Bull. Lab. Pêch. Nouadhibou, 3: 131-152.

N'DAO, M. 1997. Observations sur les Débarquements de Poissons Téléostéens Effectués au Site de Soumbédioune (Sénégal, Atlantique Oriental Tropical). Ph.D. Dissertation, Univ. Cheikh Anta Diop of Dakar, Dakar, Senegal. 93 pp.

QUIGNARD, J.P. & J.P. TOMASINI, 2000. Mediterranean fish biodiversity. Biol. Mar. Medit., 7 (3): 1-66.

RANDALL, J.E., 1981. Acanthuridae. In: W. Fischer, G. Bianchi, W.B. Scott (Editors). Fiches FAO d'Identification des Epèces pour les Besoins de la Pêche. Atlantique Centre-est; Zones de Pêche 34, 47 (en partie). Canada Fond de Dépôt. Ottawa, Ministère des Pêcheries et Océans du Canada, en accord avec l'Organisation des Nations-Unies pour l'Alimentation et l'Agriculture, Vol. 165.

RANDALL, J.E. 2001. Surgeonfishes of Hawaii and the World. Mutual Publishing and Bishop Museum Press, Hawaii, 123 pp.

SÉRET, B. & P. OPIC. 1990. Poissons de Mer de l'Ouest Africain Tropical. Init. Doc., 49. ORSTOM, Paris. 416 pp.

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O pojavi ribe *Acanthurus monroviae* Steindachner, 1876 (Osteichthyes: Acanthuridae) izvan obalih voda Alžira (južni Mediteran)

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SAŽETAK

Autori izvješćuju o prvom nalazu dvaju primjeraka ribe *Acanthurus monrovie* Steindachner, 1876, izvan alžirskih obalnih voda (južni Mediteran). Dat je kratak opis tih primjeraka i raspodjela ove vrste u Mediteranu.

Ključne riječi: Teleostea, Acanthuridae, *Acanthurus monroviae*, raspodjela, Alžir, Mediteran