

First occurrence of common snook, *Centropomus undecimalis* (Centropomidae), in Argentinean waters

by

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RÉSUMÉ. - Première présence du crossie blanc, *Centropomus undecimalis* (Centropomidae), dans les eaux argentines.

Un exemplaire de crossie blanc ou brochet de mer, *Centropomus undecimalis* (Bloch, 1792) (785 mm LT), a été capturé dans la région côtière de Miramar (province de Buenos Aires, Argentine) en 1996. Celui-ci constitue le signalement le plus au sud sur les côtes de l'Atlantique sud-ouest et le premier dans des eaux argentines. Le crossie blanc est un poisson d'eaux tropicales et subtropicales, il est possible qu'il soit arrivé dans les eaux argentines grâce à la descente d'eaux superficielles chaudes provenant du Brésil.

Key words. - Centropomidae - *Centropomus undecimalis* - ASW - Argentinean waters - First record.

The twelve *Centropomus* species are found in tropical and subtropical American waters. Six of them have been recorded from the Atlantic coast and the remaining ones from the Pacific coast (Rivas, 1986). The common snook, *Centropomus undecimalis* (Bloch, 1792), is a highly prized marine food and sport fish, which has been reported from Pamlico Sound, North Carolina, USA (Rivas, 1986) to Santa Catarina, Brazil, including the Gulf of Mexico, and occasionally extending to Rio Grande do Sul (Carvalho-Filho, 1999).

On 26 January 1996 (austral summer), a 785 mm total length (TL) specimen of common snook was caught and gutted by traditional fishermen off Miramar city (38°15'S, 57°52'W; Fig. 1), Buenos Aires Province, Argentina. The specimen is deposited in the ichthyological collection of the Instituto Nacional de Investigación y Desarrollo Pesquero (Mar del Plata, Argentina) under the number INIDEP 471 (Fig. 2). The record off Miramar constitutes the southernmost report of *C. undecimalis* from the Southwest Atlantic coast and the first from the Argentinean waters.

The specimen identification was based on Figueiredo and Menezes (1980), Rivas (1986) and Cervigón (1991). The following morphometric and meristic characters of the specimen were registered: standard length 670 mm; head length 246 mm; snout length 58.98 mm; eye diameter 19.88 mm; first dorsal fin rays VII; second dorsal fin rays I+10; anal fin rays III+6; pectoral fin rays 15; pelvic fin rays I+5; caudal fin rays 21; first branchial arch with 8 gill rakers in the lower branch, not including rudiments; distinctive black lateral line with 71 scales from the post-temporal to the caudal fin base. The sex is unknown since the specimen was gutted on board by the fishermen.

The occasionally occurrence of tropical and subtropical fish species on the northern temperate coast of Argentina has been recorded by different authors (Cousseau and Figueroa, 1989; Díaz de Astarloa and Figueroa, 1995; Díaz de Astarloa *et al.*, 2000; Rico and Acha, 2003). There is no clear explanation of how tropical spe-

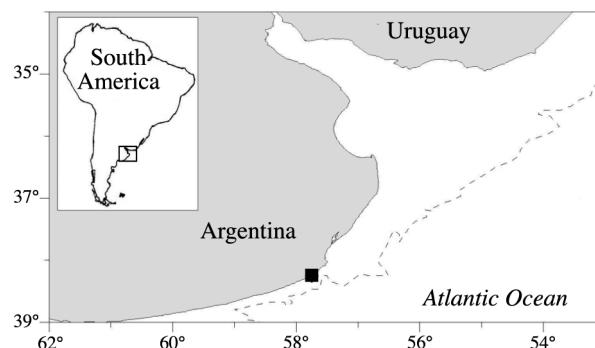


Figure 1. - Capture location of *Centropomus undecimalis*. [Lieu de capture de *Centropomus undecimalis*.]

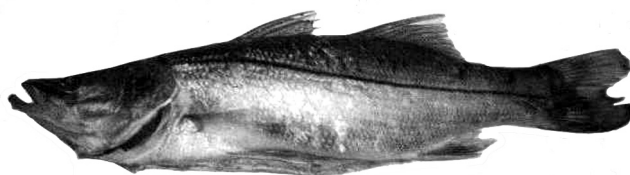


Figure 2. - Specimen of *Centropomus undecimalis* (785 mm TL, INIDEP 471) from Miramar coast, Argentinean waters. [Spécimen de *Centropomus undecimalis* provenant des eaux côtières argentines au large de Miramar.]

cies arrive to this region. However, it is known that species, which have subtropical and Antarctic origin utilize the Brazil and Malvinas/Falkland currents for long distance transport (Seeliger and Odebrecht, 1997). The tropical and subtropical specimen of common snook found in Argentinean waters could have reached the Miramar coast by means of warm waters, which ranged 19-22°C from 25 January to 1st February 1996. These values would not be the optimal temperature range of common snook, which is between 27° and 28°C, but they are included into survival temperature range, from 10° to 30°C (Tucker and Kennedy, 2001). Two hypotheses have been postulated to explain the presence of warm waters along the coast of Buenos Aires Province during summer. Boltovskoy (1981) indicated that a branch of the Brazil Current can flow southwards, to the west of the Malvinas/Falkland current. Balech (1986) suggested that the subantarctic waters of the Malvinas/Falkland system, after reaching lower latitudes and warming up, return polewards, west of cold current, mixed with coastal Brazilian subtropical waters.

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