

Confirmed record of the Black jack, *Caranx lugubris* Poey, 1880 from Lima at the north of the Sea of Oman

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Captura confirmada de jurel negro, Caranx lugubris Poey, 1880 en Lima, Golfo de Omán

Se reporta la primera cita de *Caranx lugubris* en el Golfo de Omán, basada en un espécimen de 670 mm de longitud. Éste se capturó en aguas cercanas a la ciudad de Lima, en el norte del Golfo de Omán. Esta cita representa la captura más septentrional de esta especie en el océano Índico. La longitud estándar se compara con la de especímenes capturadas en las costas de Laquedivas, Okinawa, Isla de Pascua y Taiwan.

Palabras clave: Nueva cita, Carangidae, Golfo de Omán.

Abstract

The first record of *Caranx lugubris* in the Sea of Oman is reported based on one specimen 670 mm in total length. The specimen obtained from waters around City of Lima at the north the Sea of Oman. This account represents the north most record of this species in the Indian Ocean region. The standard length is compared with specimens caught from the coasts of Lacadives, Okinawa, Easter Island and Taiwan.

Key words: New substantial record, new extension, Carangidae, Sea of Oman, Sultanate of Oman.

Introduction

The Family Carangidae includes ecologically and economically important species such as the jacks, scads, trevallies, pampano, amberjacks and queenfishes. These species live in diverse marine habitats, found in all tropical and subtropical marine waters of the world, and some occur in temperate regions and acquire different body shapes ranging from deep bodied of the neretic bottom feeders to the more slender neretic planktivores (Nair et al. 1990). In Oman, fishes of the Family Carangidae are widely distributed along the coasts of Sea of Oman and the Arabian Sea coasts of Oman. During 2010, an estimated 5400 t of carangids were landed from the Omani waters in general (Mi-

nistry of Agriculture and Fisheries Statistics, 2011).

The Family Carangidae consists of 710 species belonging to 124 genera (Eschmeyer, 2012). In Omani waters, this family consists of 48 species belonging to 21 genera (Randall, 1995) while in the Arabian Sea coasts of Oman alone this family showed to comprise 46 species belonging to 20 genera (L.A. Jawad, unpublished data).

Lacépède (1801) has established the genus *Caranx* and assigned the species *C. carangua* Lacépède as type-species. The genus *Caranx* consists of 278 valid species (Eschmeyer 2012). In Omani waters, there are five species belonging to this genus (Randall 1995, L.A. Jawad, unpublished data).

C. lugubris has a circumtropical distribution. Randall (1995) reported this species among the coastal fishes of Oman, but he did not specify exactly where from in Oman he collected this species, thus it is left open to where to find *C. lugubris* in Oman. On the other hand, Al-Jufaili et al. (2010) reported *C. lugubris* from waters of Oman and as in the case of Randall (1995), they did not state the area of collection. Oman is situated on three major seas, the Arabian Gulf (Persian Gulf), the Sea of Oman and the Arabian Sea. Each of these seas has its own zoogeographic entity and peculiar fish fauna. Therefore, in case of Al-Jufaili et al. (2010) it is important to specify from which sea their specimens were obtained. The present study confirms the presence of this species in the Sea of Oman and record the north most range extension of this species in the Indian Ocean.

Material and methods

On 7th May 2011, a catch of Black jack, *Caranx lugubris* Poey, 1880 (Fig. 1) was recorded from the coasts of the city of Lima at the north most of the Sea of Oman where a local fisherman captured one specimen with gill net (Fig. 2). Age of the specimen was estimated from the scales taken from different body areas for age verification. Dissecting microscope was used in the study of the stomach content and determination of the mat-

uration stage. Morphometric and meristic details were recorded following (Smith-Vaniz & Carpenter 2007); the data are presented in table 1. The specimen was deposited in the fish collection of the Marine Science and Fisheries Centre, Ministry of Fisheries Wealth, Muscat, Sultanate of Oman, catalogue number OMMSTC 1090.

Results and description

The specimen obtained in the present work was matured male with riped gonad at its 2nd stage of maturation and in its third year of lie. The stomach content showed that the specimen was fed mainly on small pelagic fish species such as sardines and crustacea. To make the results of the present work more informative, an attempt was made to locate the specimens of *C. lugubris* reported to be collected by Al-Jufaili et al. (2010). No specimens were found, therefore comparison with the present specimen become impossible.

C. lugubris is characterized in having the following set of characters: in large specimens, pre-dorsal profile with concavity in front of nostril and angularly curved at occipital, otherwise it is steep. Snout obtuse, longer than eye diameter. Anterior lateral line strongly curved, becoming straight below 3rd-4th rays of 2nd dorsal fin. Breast completely scaly. Color in life, body and fin uniform grey to black. A small opercular spot present.



Figura 1. *Caranx lugubris*, OMMSFC 1090, 670 mm longitud total. Capturado en las costas de Lima, norte del Golfo de Omán, 7-V- 2011, por un pescador empleando red de enmalle.

Figure 1. *Caranx lugubris*, OMMSFC 1090, 670 mm total length, caught at the coasts of the City of Lima, north of the Sea of Oman, 7-V-2011, collected by fisherman using gill net.



Figura 2. Mapa mostrando el lugar de captura del ejemplar de *Caranx lugubris*.

Figure 2. Map showing the collection site of the specimen of *Caranx lugubris*.

This species is distinguished from the congener *Caranx* species occurring in the area in having breast completely scaled where it is partially naked in other species; in adults, height of dorsal fin lobe usually long; body and fins essentially uniform grey to brown, with a small dark spot at upper end of opercle often present (Fischer & Bianchi 1984).

As far as the authors are aware, few specimens of *C. lugubris* have been provided only with total length, standard length or forked length and they are available in fish collections around the world: 265-277 mm total length, Lacadives (Jones & Kumaran 1966); 248mm standard length, Okinawa (Gushiken 1988); 380-650mm forked length, Easter Island (Randall, 1995); 338 mm forked length, Taiwan (Lin & Shao 1999). The three fish lengths (total, standard and forked lengths) of the specimen obtained in the present study are larger than any of the specimens obtained by above mentioned.

With only one large-sized specimen of *C. lugubris*, it is premature to consider that this species has established a sustainable population in its new region. Thus, there is a need to investigate further the frequency of occurrence and to study the biological characteristics of this species in order to determine its establishment. However, the presence of this species in the identified location may be explained by a lack of sufficient ichthyological expeditions and surveys to detect rare species.

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