

# First record of *Aplatophis chauliodus* (Actinopterygii: Ophichthidae) for the northeastern coast of Brazil, with expansion of its geographic range

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**Abstract.** We expanded its geographical distribution to the south by more than 3,000 km. Some variations were observed in relation to body proportions in the present study, thus contributing to a better knowledge about *A. chauliodus*, which is still little known in its more distinct aspects as well as little represented in the material housed in scientific collections

**Keywords:** Anguilliformes, Brazil, meristics characters, morphometrics characters, occurrence.

**Resumo.** Ampliamos em mais de 3.000 km sua distribuição geográfica ao Sul. Algumas variações foram observadas em relação às proporções corporais no presente estudo, contribuindo assim para um melhor conhecimento sobre *A. chauliodus*, que ainda é pouco conhecido em seus aspectos mais distintos, bem como rara em coleções científicas.

**Palavras-chave:** Anguilliformes, Brasil, caracteres merísticos, caracteres morfométricos, registro.

## INTRODUCTION

The family Ophichthidae, belonging to order Anguilliformes, comprises 52 genera and about 290 species of mainly marine fishes inhabiting coastal areas of tropical and warm temperate oceans (NELSON, 2006).

*Aplatophis chauliodus* Böhlke, 1956, belonging to family Ophichthidae, reaches a maximum size of about 84.0 cm and is recorded

from the Gulf of Mexico to north of Brazil, near estuarine areas and also in marine waters from the coast up to 91 m in depth, being captured occasionally in shrimp trawling fishing, although it has no importance as a fishery resource, with only a small number of specimens being known (MCEACHRAN & FECHHELM, 1998; CERVIGÓN *et al.*, 1992; MCCOSKER IN CARPENTER, 2002; MENEZES IN MENEZES *et al.*, 2003).

*A. chauliodus* is characterized by

presenting the anterior teeth, in both jaws, like long canines, protruding from the mouth when it is closed and the lower jaw extending beyond the snouth (MCCOSKER IN CARPENTER, 2002).

### MATERIALS AND METHODS

The specimen here examined is housed in the collection of Divisão de Peixes (Museu de Zoologia, Departamento de Ciências Biológicas), Universidade Estadual de Feira de Santana (Bahia state, Brazil) preserved in alcohol 70%

Measurements were taken from the right side of the specimen body by means of calipers to the nearest 0.05 mm (except for total length and pre-dorsal length, when a tape measure to the nearest 1.0 mm was used) and are presented.

### RESULTS

One specimen was examined, recorded under number LIUEFS 12627, collected in Praia da Ribeira (Salvador municipality, inside Baía de Todos os Santos), Bahia state (northeastern coast of Brazil), on January 14<sup>th</sup>, 2004, by a professional



**Figure 1.** detail of the head of *Aplatophis chauliodus*, distinctive characteristic of the genus (LIUEFS 12627).

collector of ornamental fishes, in shallow water, less than 10 m deep.

Total length: 670.0 mm, pre-dorsal length: 180.0 mm, head length: 103.6 mm, trunk length: 342.0 mm, pre-anal length: 370.0 mm, snout length: 22.5 mm, upper jaw length: 40.9 mm, lower jaw length: 42.3 mm, orbital diameter: 4.1 mm, pectoral fin length: 16.0 mm, body depth (behind branchial opening): 32.6 mm, body depth (to the level of pectoral fins): 38.6 mm, body depth (to the level of anus): 38.3 mm.

Proportions in relation to total length: head length: 15.5%, body depth (pectoral fins): 5.8%, body depth (anus): 5.7%, snout length: 3.3%, orbital diameter: 0.6%, upper jaw length: 6.1%, lower jaw length: 6.3%, pectoral fin length: 2.4%.

Coloration (in alcohol 70%): body overall coloration brownish with white spots, with the brown color tending to fade towards the posterior region of the body, being the tail tip of a light color; anterior part of the head and the tip of lower jaw darker (including its ventral regions), whereas the posterior part of the head is of a lighter color (also including its ventral region); pectoral fins light brown with dark upper and median posterior borders; margin of branchial opening of a light color, with also a lighter area below and ventrally to the branchial openings; dorsal and anal fins brownish and with a dark margin, being that of the anal darker than that of the dorsal and both presenting a reddish region

along most of the bases of these fins.

### DISCUSSION

With 27 known species, family Ophichthidae presents the highest number of species in the order Anguilliformes in Brazil (MENEZES IN MENEZES *et al.*, 2003). In the Western Atlantic, 25 genera and 52 species are known in this family (MCCOSKER & ROBERTSON, 2001).

CERVIGÓN (1991) examined 3 specimens of *A. chauliodus* measuring between 565.0 and 847.0 mm in total length collected in Venezuela in soft bottoms of neritic waters from the continental shelf and near brackish estuarine areas and he states, erroneously, that the species also occurs in Eastern Atlantic; in the western side it is recorded from Puerto Rico and Panama besides Venezuela.

Some variations (for lesser or higher values) were observed in relation to body proportions taken from specimen examined in the present study, when compared to CERVIGÓN (1991) thus contributing to a better knowledge about *A. chauliodus*, which is still little known in its more distinct aspects as well as little represented in the material housed in scientific collections.

ACERO P. & GARZÓN-FERREIRA (1995) recorded *A. chauliodus* from the northern Colombian-Venezuelan coast. Only another species of the genus *Aplatophis* Böhlke, 1956 is known: *A. zorro* McCosker & Robertson, 2001, recorded on the basis of a single specimen

measuring 1,039.0 mm and collected in the Pacific coast of Panama (MCCOSKER & ROBERTSON, 2001).

There are no data on the biology of *A. chauliodus* along its distribution range. MCEACHRAN & FECHHEM (1998) cited mature males with 334.0 mm in total length and mature females with 439.0 mm in total length.

The present record extends the geographic distribution range of *A. chauliodus* in the Brazilian coast, in more than 3,000 km, also constituting its first occurrence for the northeastern coast of Brazil (Western Atlantic Ocean).

### ACKNOWLEDGMENTS

To the collector of the specimen of *A. chauliodus*, Samuele Clerici (Axé OnLine Fishes) for donating the specimen to the senior author.

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Recebido: 17/03/2017

Revisado: 30/03/2017

Aceito: 20/04/2017