

NOTA

NEW RECORDS AND DISTRIBUTION EXTENSION OF *POTAMORHINA SQUAMORALEVIS* (BRAGA & AZPELICUETA, 1983) (CHARACIFORMES) AND *PLAGIOSCION TERNETZI* BOULENGER, 1895 (PERCIFORMES) IN URUGUAY

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ABSTRACT

We report new records of *Potamorhina squamoralevis* (Braga & Azpelicueta, 1983) and *Plagioscion ternetzi* Boulenger, 1895, two poorly known species for Uruguay. Their presence was uncertain due to its low occurrence, although both species have been listed for Uruguay. We report new records and extend the known geographic distribution for Uruguay.

Key words: *Potamorhina squamoralevis*, *Plagioscion ternetzi*, Uruguay, new records, freshwater.

RESUMEN

Nuevos registros y ampliación de distribución de *Potamorhina squamoralevis* (Braga & Azpelicueta, 1983) (Characiformes) y *Plagioscion ternetzi* Boulenger, 1895 (Perciformes), en Uruguay. Reportamos nuevos registros de *Potamorhina squamoralevis* (Braga & Azpelicueta, 1983) y *Plagioscion ternetzi* Boulenger, 1895, dos especies poco conocidas para Uruguay. Ambas especies figuran como listadas para el Uruguay, sin embargo, debido a su baja ocurrencia su presencia era incierta. Reportamos nuevos registros y ampliamos la distribución geográfica conocida para Uruguay.

Palabras clave: *Potamorhina squamoralevis*, *Plagioscion ternetzi*, Uruguay, nuevos registros, aguas continentales.

As occurs in the whole Neotropical region, the knowledge about freshwater ichthyofauna of Uruguay is clearly incomplete. Nión *et al.* (2002) presented a list of the fish species of the

country, based in bibliographic sources, some of them outdated. That list did not provide distributional data, or specimens voucher locations, and many of the species cited do not have specimens registered in national scientific collections. To improve the list of species present in Uruguay, the systematization in a geographical form of the records and the standardization in the location of specimens deposited in scientific collections are fundamental. In this paper we present new records of *Potamorhina squamoralevis* (Braga & Azpelicueta, 1983) and *Plagioscion ternetzi* Boulenger, 1895, two poorly known species for Uruguay, with comments on its geographical distribution.

Potamorhina squamoralevis (Braga & Azpelicueta, 1983)

Potamorhina squamoralevis is the largest species of the family Curimatidae in the la Plata River basin (Azpelicueta & Braga, 1991), with a known maximum standard length (SL) of 23.4 cm (Vari, 1984). It is easily distinguished from the other species of curimatids of the basin by the following combination of characters: more than 100 perforated scales in the lateral series, presence of a prominent postero-ventral keel, and caudal fin lobes without scales (Azpelicueta & Braga, 1991). The known distribution extends across the Paraguay and Paraná River basins, and coastal waters of Argentina in la Plata River (Vari, 1984; Azpelicueta & Braga, 1991). In a review of the genus, Vari (1984) stated the existence of one batch of specimens from Uruguay in the Naturhistorisches Museum of Vienna (NMW-68847), but no specific locality was provided. As a result of a recent taxonomic revision of the fishes deposited in Museo Nacional de Historia Natural (Montevideo, Uruguay), we found new specimens of *P. squamoralevis*, confirming its presence in the national territory. One of them consists of one specimen (MHNM 3290, 109 mm SL) from Uruguay River, Paysandú Department, collected by G. W. Teague in 1932. It was originally misidentified as *Prochilodus lineatus*. The other (Fig. 1) consists of four specimens (MHNM 1518, 89-121 mm. SL) from la Plata River near Limetas stream, Conchillas, Colonia Department, collected by R. Carrera in February 1966.

Plagioscion ternetzi Boulenger, 1895

This is one of the three freshwater species of the family Sciaenidae known from la Plata River basin (Casatti, 2003 in Reis *et al.*, 2003), and is distinguished from the other two species by the following combination of characters: densely scaled base of the dorsal fin (with 15–20 longitudinal series of scales), length of the second anal-fin spine 2.8–3.8 in head length (HL) (Casatti, 2005), and 33-37 soft rays in the dorsal fin. Its distribution extends across la Plata River basin, including the Lower Uruguay River. Some records are known for Uruguay, but only one batch with exact location has been published: MZUSP 45841 from the Museu de Zoologia da Universidade de São Paulo (Soares & Casatti, 2000; Casatti, 2005). According to the database of this museum, the record consists of two specimens from the Uruguay River coast in Playa La Agraciada (33° 48' S 58° 25' SW), Soriano Department, collected by F. Skuk in February 21st, 1966. In July of 2011, during fieldwork of the project "Evaluación de los recursos ícticos del Río Uruguay y Río de la Plata interior E (CARU-CARP)", two specimens of *P. ternetzi* (162 mm and 167 mm SL) (Fig. 1) were collected in la Plata River (34° 28' S 57° 49' SW)(Fig. 2), Colonia Department, south-western Uruguay; 140 km south-east to the previous record. Specimens were fixed in 95 % ethanol and deposited at the collection of Facultad de Ciencias, Montevideo, Uruguay (catalogue number ZVC-P 10656).

Fig. 1. Preserved specimens of *Potamorhina squamorealevis* (MHNM 1518 at top) and *Plagioscion ternetzi* (ZVC-P 10656). Scale bar represents 1 cm.

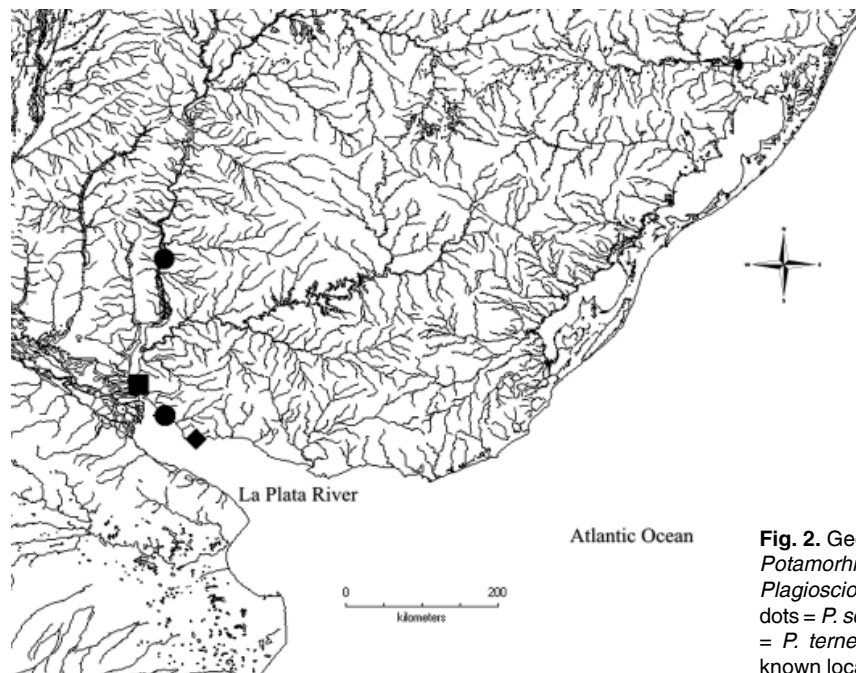


Fig. 2. Geographic distribution of *Potamorhina squamorealevis* and *Plagioscion ternetzi* in Uruguay; dots = *P. squamorealevis*, diamond = *P. ternetzi*, square = previous known locality of *P. ternetzi*.

Uruguay is placed in the intersection of three freshwater ecogeographical regions (Abell *et al.*, 2008) and presents a high freshwater fish diversity with about 230 species, some of them endemic (Teixeira de Mello *et al.*, 2011). The southwestern region of the country (corresponding to the lower and middle Uruguay ecoregion) has high similarity with the Lower Paraná ecoregion (Abell *et al.*, 2008). The presence of shared species could be related with events of heavy water discharges of the Paraná River in Uruguayan coasts (e.g. Achaval *et al.*, 1979). The present records represent new limits in the geographic distribution of this two species in the La Plata River basin. Records of *P. squamoralevis* and *P. ternetzi* in the region are scarce and scattered in space and time, despite the intensive sampling effort carried out by different national and international governmental organisms like CARU (Comisión Administradora del Río Uruguay), DINARA (Dirección Nacional de Recursos Acuáticos) and CARP (Comisión Administradora del Río de la Plata). The absence of records of small juvenile specimens of these species, even in samplings of breeding areas, suggest that their presence in western Uruguayan coasts could be occasional, or the result of migratory behavior as occurs in other species of these genera (Vari, 1984; Díaz-Sarmiento & Alvarez-León, 2003). Besides, the relative low abundances of these species in the area could contribute to their misidentification; *Plagioscion ternetzi* as *Pachyurus bonariensis* and *Potamorhina squamoralevis* as juvenile individuals of *Prochilodus lineatus*.

The knowledge of the distribution patterns of organisms are a remarkable tool in the development of management and conservation strategies. In this way, several new species have been described and other ones have been listed recently for Uruguay (González-Bergonzoni *et al.*, 2010; Zarucki *et al.*, 2010; Loureiro *et al.*, 2011; Serra *et al.*, 2011). These contributions are the combined results between the increase of field sampling effort and the systematic revision of scientific collections, which emphasize the key role of the scientific collections in the development of knowledge of freshwater fishes.

Fieldwork in La Plata River was funded by CARU and CARP.

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Fecha de Recepción: 13 de marzo de 2012
Fecha de Aceptación: 27 de agosto de 2012