

NOTE**FIRST RECORDS OF *DORMITATOR MACULATUS* (ELEOTRIDAE) AND *CTENOGOBIOUS SHUFELDTI* (GOBIIDAE) IN URUGUAY (ACTINOPTERYGII: GOBIIFORMES)****Alejandro Duarte^{1*}, Wilson S. Serra^{2, 1}, Matías Zarucki¹, Marcelo Loureiro^{1, 2}**

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ABSTRACT

Based on National Ichthyological Collections revision, the first record of the eleotrid *Dormitator maculatus* and the gobiid *Ctenogobius shufeldti* in Uruguay are presented, being the southernmost locality for the first species.

Key words: *Dormitator maculatus*, *Ctenogobius shufeldti*, Uruguay, first records, freshwater

RESUMEN

Primeros registros de *Dormitator maculatus* (Eleotridae) y *Ctenogobius shufeldti* (Gobiidae) en Uruguay. Basado en la revisión de las colecciones ictiológicas nacionales, se presentan los primeros registros del Eleótrido *Dormitator maculatus* y del Góbido *Ctenogobius shufeldti* en Uruguay, constituyendo el registro más austral para la primer especie.

Palabras clave: *Dormitator maculatus*, *Ctenogobius shufeldti*, Uruguay, primeros registros, aguas continentales.

The family Eleotridae comprises about 35 genera and 155 species that inhabit the tropical and subtropical regions of the world, in marine, brackish and freshwater environments (Nelson, 2006). The Fat Sleeper *Dormitator maculatus* (BLOCH, 1792) reaches about 145 mm of Total Length (TL) and occurs along the Atlantic slope from North Carolina (USA) to Brazil (Eschmeyer & Fricke, 2011; Volcan *et al.*, 2010). This species differs from the other genera in the area by the presence of 7 spines in the first dorsal fin and 25-35 scales in the longitudinal series (Soares *et al.*, 2012; Thacker *et al.*, 2006; Murdy & Hoese, 2003). *Dormitator maculatus* can be distinguished from other species of the genus by the following combination of characters: scales in longitudinal series 31 to 35; scales between the origin of second dorsal fin and the anal fin 8 to 11; eye with dark and sinuous lines radiating from it; dorsal fins with three or four rows of dark spots; anal fin with dark pigment on the base (Bussing, 2002).

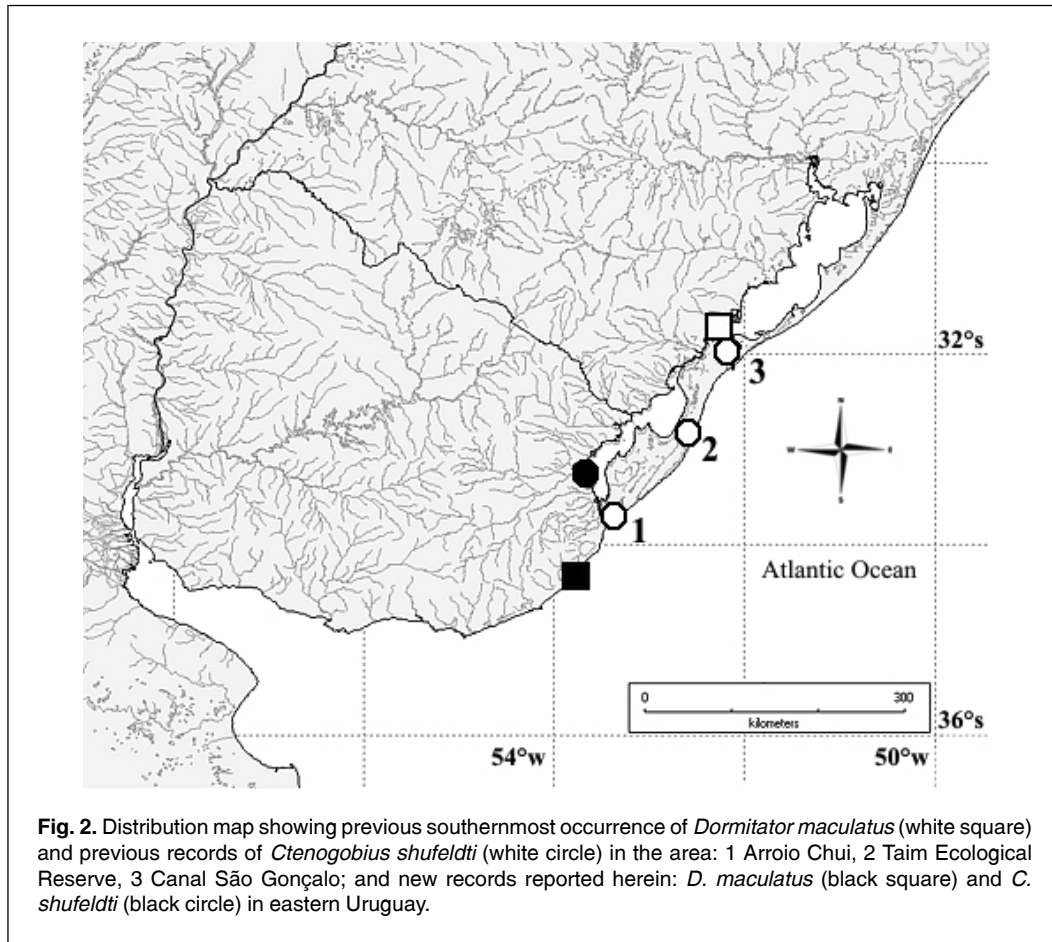
One specimen of *D. maculatus* (fig. 1), collected by a hobbyist in a pond near the brackish stream Arroyo Valizas, an effluent of Atlantic Ocean, Rocha, Uruguay (34°20'S, 53°47'W), in January 2008, was donated to the fish collection of Facultad de Ciencias de la UdelaR (ZVC-P). The specimen (ZVC-P 7687, 87.6 mm of Standard Length (SL)), represents the southernmost record for the species, extending its distribution 300 km from its previously southernmost known locality at Pontal da Barra, Rio Grande do Sul, Brazil (Volcan *et al.*, 2010) (fig. 2).

The family Gobiidae contains about 210 genera of fishes with at least 1,950 species in five subfamilies found in marine, brackish and freshwater habitats, most in tropical and subtropical areas (Nelson, 2006). Gobiids usually have an adhesive disk formed by the fusion of the pelvic fins; the spinous dorsal fin, when present, is separate from the soft dorsal fin (Nelson, 2006). *Ctenogobius shufeldti* (JORDAN & EIGENMANN, 1887) has been reported from North Carolina to Brazil in freshwater, brackish and marine habitats (Eschmeyer & Fricke, 2011). Other four species of *Ctenogobius* have been recorded in southern South American Atlantic shores: *C. boleosoma* (JORDAN & GILBERT, 1882), *C. saepepallens* (GILBERT & RANDALL, 1968), *C. smaragdus* (VALENCIENNES, 1837) and *C. stigmaticus* (POEY, 1860) (Macieira & Joyeux, 2011; Pezold, 2004). According to Murdy & Hoese (2002), *C. shufeldti* can be distinguished from the other species of the genus by the following combination of characters: total elements in second dorsal fin 12, total elements in anal fin 13, and cheek without dark vertical bars.

Through the systematic revision of the ichthyological collection of Facultad de Ciencias made during the project PDT (71/08), one specimen of *Ctenogobius shufeldti* (ZVC-P 8039, 26.3 mm SL) (fig. 1) was found from Arroyo Barrita de Juan Maria (33°14'S, 53°38'W), an effluent of Laguna Merín in Rocha Department, Uruguay, representing the first record of this species in Uruguayan freshwaters systems. Other records for the species in the area are from Arroio Chui



Fig.1. *Dormitator maculatus* (ZVC-P 7687, 87.6 mm SL) specimen captured near Arroyo Valizas Stream, an effluent of Atlantic Ocean, Rocha, Uruguay (a). *Ctenogobius shufeldti* (ZVC-P 8039, 26.3 mm SL) captured in Arroyo Barrita de Juan Maria, an effluent of Laguna Merín, Rocha, Uruguay (b).



(Pereira *et al.*, 1998), the Taim Ecological Reserve (Artioli *et al.*, 2009; Garcia *et al.*, 2006), and canal São Gonçalo (Cheffe *et al.*, 2010), in Brazil.

Whether or not *Dormitator maculatus* and *Ctenogobius shufeldti* specimens from Uruguay represent strays or are more common is unknown. Possibly they have gone unnoticed at their southern distributional limits until now due to selective collecting methods, misidentification, insufficient sampling of habitat, low population abundance, and their cryptic habits (Burns *et al.*, 2010; Cheffe *et al.*, 2010). Delimiting the geographical borders of species distributions is important in ecological, evolutionary and conservation studies (Holt & Keitt., 2005). Regarding both species here reported, the determination if they are permanent residents that spend their entire life cycle in Uruguayan waters or if they just occur occasionally should be a priority issue in country conservation programs.

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