

Pisces, Atheriniformes, Atherinopsidae, *Odontesthes perugiae* Evermann and Kendall, 1906: Distribution extension, new records and geographic distribution map for the species

Mariela V. Cuello*, Agustín Solari and Mirta L. García

Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET). Museo de La Plata, Departamento Zoología Vertebrados, Paseo del Bosque s/n, CP 1900. La Plata, Argentina.

* Corresponding author e-mail: mcuello@fcnym.unlp.edu.ar

ABSTRACT: In this work, we report the presence of *Odontesthes perugiae* from the Camba Cué lagoon, in the Apipé Island, upper Paraná River. This distribution is the northernmost one for the species.

Odontesthes perugiae Evermann and Kendall, 1906 was described based on a single specimen obtained in Argentina, label lost (Lahille 1929). This species belongs to a very diverse group of species, the *O. perugiae* species complex, also including *Odontesthes orientalis* de Buen, 1950 from the Uruguay and Río de la Plata rivers and their tributaries, and another four species in the Mirim and dos Patos lagoons (*Odontesthes mirinensis* Bemvenuti, 1995) and Río Tramandai system: *Odontesthes bicudo* Malabarba and Dyer, 2002; *Odontesthes ledae* Malabarba and Dyer, 2002; *Odontesthes piquava* Malabarba and Dyer, 2002 (Dyer 2006).

Beheregaray *et al.* (2002) studied patterns of population differentiation and evolutionary relationships in the *O. perugiae* complex concluding that the *O. perugiae* morphotype from the Uruguay River is a genetically divergent taxon that is not phylogenetically associated with the coastal radiation from southern Brazil, meaning that is not involved in the diversification of the coastal lineage.

Odontesthes perugiae occurs in freshwater drainages of the Río de la Plata (Dyer 2003) (Figure 1). It has been reported from the lower Paraná River (Ringuelet *et al.* 1967), from the Uruguay River (Fowler 1943; Ringuelet *et al.* 1967; Delfino *et al.* 1997; Beheregaray *et al.* 2002), from lagoons, small ponds and Salado River in Santa Fé Province (Bonetto 1956) and from the Río de la Plata (Fowler 1943; Dyer 2003; Menni 2004).

Odontesthes perugiae is associated with vegetated areas, “esteros” (local wetlands), “bañados” and lagoons that have permanent or temporary connections with lotic environments. Due to these habits, *O. perugiae* receive the name “juncalero”, alluding to the common littoral plant *Scirpus californicus* (bulrush).

On September 2008, specimens of *O. perugiae* were collected by J. Iwaszkiw at Camba Cué lagoon, a water body in the Apipé Island ($27^{\circ}29'60''$ S, $56^{\circ}53'60''$ W), Corrientes Province, Argentina.

In addition, we examined material from localities of distribution range known for *O. perugiae* (*sensu* Beheregaray

et al. 2002) including material from the Río Negro, Uruguay ($33^{\circ}07'14''$ S, $58^{\circ}01'77''$ W) (ILPLA 1737) and the mentioned by Casciotta *et al.* (2005) sub. *O. bonariensis* from the Esteros del Iberá wetlands ($28^{\circ}41'04''$ S, $57^{\circ}47'46''$ W, Corrientes Province, Argentina), being both new records for the species. Besides, we report here the presence of *O. perugiae* from the Camba Cué lagoon, in the Apipé Island, upper Paraná River. This distribution is the northernmost one for the species.

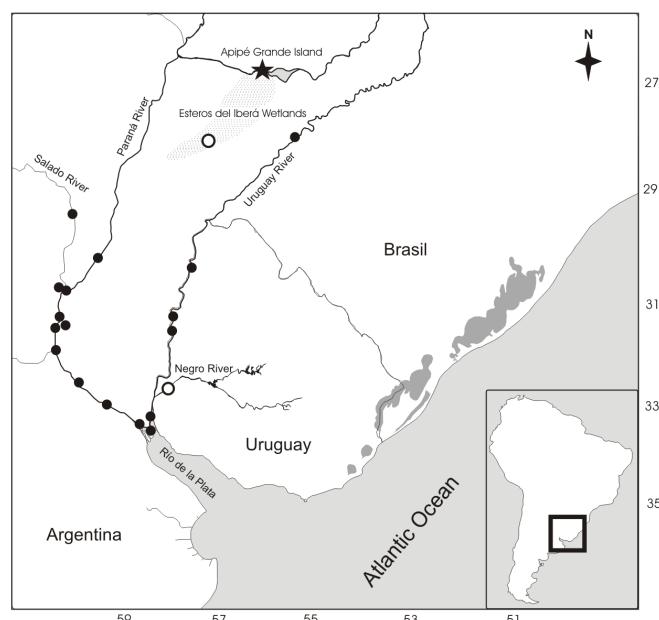


FIGURE 1. Distribution map of *Odontesthes perugiae*. Star: new record, Corrientes Province; white circles: Esteros del Iberá wetlands and Río Negro (Uruguay) localities records; black circles: literature records.

ACKNOWLEDGMENTS: The authors are grateful to R. Menni and J. Mantinian for the critical reading, to A. Almirón for the material from Esteros del Iberá and to the collectors J. Iwaszkiw and F. Firpo for material. This manuscript was improved by the comments of J. Maldonado and one anonymous reviewer.

LITERATURE CITED

- Beheregaray, L.B., P. Sunnucks and D.A. Briscoe. 2002. A rapid fish radiation associated with the last sea level changes in southern Brazil: the silverside *Odontesthes perugiae* complex. *Proceedings of the Royal Society of London B* 269: 65-73.
- Bonetto, A.A. 1956. Notas acerca la reproducción del dorado (*Salminus maxillosus*) en el lago del parque Belgrano de la ciudad de Santa Fé. *Dirección Provincial de Biología Animal y Zootecnia* 1-8.
- Casciotta, J., A. Almirón and J. Bechara. 2005. *Peces del Iberá - Hábitat y diversidad*. Corrientes: Fundación Ecos. 244 p.
- Delfino, R., F. Amestoy, S. Sverlij, M. Spinetti, A. Espinach Ros, R. Foti, G. Chediak and M. Bellagamba. 1997. Estructura de las comunidades de peces; p. 4-14. In: A. Espinach Ros and C. Río Parodi (eds.). *Conservación de la fauna íctica en el Embalse de Salto Grande. Uruguay-Argentina*. Publicación de la Comisión Administradora del Río Uruguay y la Comisión Técnica Mixta de Salto Grande.
- Dyer, B. 2003. Atherinopsidae (Neotropical silversides); p. 515-525. In: R.E. Reis S.O. Kullander and C.J. Ferraris, Jr. (eds.). *Checklist of the Freshwater Fishes of South and Central America*. Porto Alegre: EDIPUCRS.
- Dyer, B. 2006. Systematic revision of the South American silversides (Teleostei, Atheriniformes). *BIOCELL* 30(1): 69-88.
- Fowler, H.W. 1943. Notes and descriptions of new or little known fishes from Uruguay. *Proceedings of the Academy of Natural Sciences of Philadelphia* 95: 311-334.
- Lahille, F. 1929. *El Pejerrey*. Buenos Aires: Ministerio de Agricultura de la Nación. 395 p.
- Menni, R.C. 2004. *Peces y ambientes en la Argentina continental*. Buenos Aires: Museo Argentino de Ciencias Naturales. 316 p.
- Ringuelet, R.A., A.A. de Arámburu, and R.H. Arámburu. 1967. *Los peces argentinos de agua dulce*. Buenos Aires: Comisión de Investigaciones Científicas de la Provincia de Buenos Aires. 602 pp.

RECEIVED: January 2010

REVISED: April 2010

ACCEPTED: May 2010

PUBLISHED ONLINE: June 2010

EDITORIAL RESPONSIBILITY: Javier Maldonado O.