The monotypic genus *Somuncuria* was erected by Lynch (1978) on the basis of external morphology and osteology of the adults of *Telmatobius somuncurensis* Cei, 1969. In addition, Lynch remarked a general resemblance between *Somuncuria* and *Pleurodema*. The recent phylogenetic analysis by Faivovich et al. (2012) recovered *Somuncuria* nested into *Pleurodema* and closely related to *Pleurodema bufoninum*. According to Faivovich et al. (2012), these species have nearly identical sequences and additional study is required to establish populations identity. *Pleurodema somuncurensis* inhabits thermal springs at mid altitudes (500–800 ma.s.l.) in a restricted geographic range at Meseta de Somuncurá, Río Negro Province, Argentina (Cei, 1969).

The external larval morphology of *Pleurodema somuncurensis* was briefly described by Cei (1970) in the context of a larval morphology account of the genus *Telmatobius*. Later, Lavilla & Scrocchi (1986) and Lavilla (1988) provided additional information of external larval features of *P. somuncurensis*, but in the context of the patagonian genera formerly referred as “Lower Telmatobiinae”.

Recently, we studied a sample of larvae of *Pleurodema somuncurensis* and noticed some inconsistencies with the description by Cei (1970), mainly in regard to the oral disc configuration. The present work describes in detail the external larval morphology of *P. somuncurensis* and discusses its morphological traits in the context of the recently proposed phylogeny of the genus by Faivovich et al. (2012).

Tadpoles of *Pleurodema somuncurensis* were collected at Estancia el Rincón, Río Negro Province, Argentina (4059’27.00”S, 6640’36.30”W – 594 m a.s.l.), fixed in 10% formalin and housed at the herpetological collection of the Centro Nacional Patagónico (CNP). Comparison with *P. bufoninum* tadpole is made throughout the description of *P. somuncurensis* tadpole given their need for additional diagnostic traits (see Faivovich et al., 2012). The tadpoles of other species of the genus *Pleurodema* are compared in the subsequent discussion. Tadpoles of *P. bufoninum* used for comparison were collected near Road N° 12, 50 Km northeast from Gobernador Gregores, Santa Cruz Province, Argentina (4830’30.0”S, 6940’46.6”W – 616 m a.s.l.), fixed in 10% formalin and housed at the herpetological collection of Museo de La Plata (MLP). Ten tadpoles of *P. somuncurensis* (CNP.A-1980) and five of *P. bufoninum* (MLP.A-5261) between Stages 36–39 (Gosner, 1960) were employed to study larval morphology and take morphometric measurements. To compare the eyes features, we used additional tadpoles and adults of *P. somuncurensis* and *P. bufoninum* deposited at CNP collection (detailed in Fig. 1). Tadpoles of both species were reared until metamorphosis and species identification were made by the morphology of lumbar glands. Measurements were taken under a Zeiss Stemi SV11 stereomicroscope with measuring equipment (to the nearest 0.1 mm). Morphological terminology mainly follows that of Altig & McDiarmid (1999). We recorded 24 external morphology measurements: total length (TL), body length (BL), tail length (TaL), maximum tail height (MTH), tail muscle height (TMH), tail muscle width (TMW), internarial distance (IND, with modifications: measured between the internal edges of narial apertures), interorbital distance (IOD, with modifications: measured between the external edges of pupils) (all them from Altig & McDiarmid, 1999); body maximum width (BMW), body width at nostrils (BNW), body width at eye level (BWE), body maximum height (BMH), rostro-spiracular distance (RSD, measured horizontally from the tip of the snout to the posterior edge of the spiracular tube), fronto-nasal distance (FN, from the tip of the snout to the anterior edge of nostrils), eye-nostril distance (END, from the posterior edge of nares to the anterior edge of eyes), nostril major axis (N), eye diameter (E), extra nasal distance (EN, distance between external edges of nares), intraocular distance (IO, distance between interior edges of eyes), oral disc width (OD), and dorsal gap length (DG) (following Lavilla & Scrocchi, 1986); dorsal fin height (DFH) and ventral fin height (VFH), both measured at a position coincident with MTH (after Kolenc et al., 2009) and finally, a variable introduced by