

ON THE SOUTHERN DISTRIBUTION OF *HEMILORICARIA LANCEOLATA* (GÜNTHER, 1868) (LORICARIIDAE: LORICARIINAE)

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ABSTRACT.- We report the presence of *Hemiloricaria lanceolata* (Günther) in the Paraná river basin in Argentina. This represents the first record of the species for this river, as well as its southern most known distribution. We provide morphometrical and meristic data for the examined specimens.

KEY WORDS.- Distribution, *Hemiloricaria lanceolata*, Paraná river basin, Argentina

RESUME.- Nous relatons la présence d'*Hemiloricaria lanceolata* (Günther) dans le bassin du Río Paraná en Argentine. Cette donnée correspond à la première citation de l'espèce pour ce fleuve, ainsi qu'à la station la plus méridionale connue. Nous apportons des données morphologiques et numériques pour les spécimens examinés.

MOTS-CLES.- Répartition, *Hemiloricaria lanceolata*, Bassin du Río Paraná, Argentine

GÜNTHER (1868a,b) described *Loricaria lanceolata* (Fig. 1) based upon one specimen from Xeberos in the Upper Amazon, Perú.

ISBRÜCKER (1973), using material collected in Amazon river tributaries from Peru, Ecuador, Bolivia, Guyana and Brazil, made a historical analysis of the species and redescribed it as *Rineloricaria lanceolata*, giving details of coloration pattern and sexual dimorphism. The latter topic was also discussed by ISBRÜCKER and NIJSSEN (1992). Later, ISBRÜCKER (2001) and ISBRÜCKER *et al.* (2001) placed this species within genus *Hemiloricaria* Bleeker, based on external morphological characters. Recently, FERRARIS (2001) added localities from Colombia, Paraguay and Venezuela. The materials studied for this paper come from Paraná river basin in Argentina, and correspond to the first record for the species within this river and its southernmost known distribution (Fig. 2). With the addition of this reference, the geographical range of *H. lanceolata* comprises Upper Amazon, Paraguay/Paraná and Tocantins rivers; thus, this species, along with others which also occur within Argentina's large rivers' basins (such as *Loricaria simillima* Regan and *Loricariichthys platymetopon* Isbrücker & Nijssen) are the species of Loricariinae with the widest geographical range in South America, since they share more than one area of endemism, according to VARI's (1988) proposal. This is also characteristic of species such as *Curimatella dorsalis* (Eigenmann & Eigenmann), *Thoracocharax stellatus* (Kner) and *Otocinclus vittatus* Regan, mentioned by VARI (1988), WEITZMANN (1954) and SCHAEFER (1997) respectively.

The recent occurrence of *H. lanceolata* may be attributed to hydrological modifications related to the regional climatic changes that have occurred during the last decades and have allowed the colonization of new habitats along the Subtropical Potamic Axis (LÓPEZ *et al.*, 2002).

The specimens were collected from the coastal areas of Coronda river (31°46'S 60°51'W), a tributary of Middle Paraná river, and from Upper Paraná river at Corsa-Cué

(approximately 27°30' S 57°50'W), where *H. lanceolata* lives associated with floating aquatic vegetation. It is frequently caught along with specimens of *Sturisoma cf. robustum* (R. Pereira, *pers. comm.*). The species is considered as ornamental fish and caught for the aquarium trade in Argentina.

Morphometrical and meristic data for the analyzed *H. lanceolata* materials appear in Table I.

The examined material is deposited in the following institutions: Instituto de Limnología "Dr. Raúl Ringuelet", Buenos Aires (ILPLA), Museo Argentino de Ciencias Naturales "Bernardino Rivadavia", Buenos Aires (MACN), Museo de La Plata, La Plata (MLP), Museu de Ciência e Tecnologia, Porto Alegre (MCP), British Museum of Natural History, London (BMNH) and Universidade Nacional de Tocantins, Porto Nacional (UNT).

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ADDENDUM: MATERIAL EXAMINED

ARGENTINA:

Corrientes: ILPLA 1334, 1 (83,0) Corsa Cué, coll. Taberner, 1975; MACN 7210, 21 (41,4-79,5) Corsa Cué, coll. Fernández Santos, 20/7/77; MACN 7547, 42 (39,7-82,4); MACN 7586, 4 (35,9-45,4) Paraná river, Corsa Cué, coll. Fernández Santos, 27/07/77.

Santa Fe: ILPLA 1584, 3 (61,5-82,3) Coronda river affluent (Dpto. La Capital), coll. R. Pereira, 03/08/01; MLP 9601: 1 (69,9) Coronda river affluent (Dpto. La Capital), coll. R. Pereira, 06/04/01.

BOLIVIA: MACN 6884: 1 (74,4), Santa María creek (San Javier), coll. Sr. J. A. Cranwell, 20/11/75; MACN 6895, 2 (72,4 and 75,6) Quizer river (Santa Cruz), coll. J. A. Cranwell, 20/11/75.

BRASIL:

Acre: MCP 28850: 1 (57,0), creek by road BR 364, Acre river affluent, coll. Malabarba *et al.*, 06/08/01; MCP 28859: 1 (92,3), creek by road BR 364, Sena Madureira, coll. Malabarba *et al.*, 08/09/01; MCP 28860: 1 (86,2), Quinoá creek, Acre river affluent, coll. Malabarba *et al.*, 06/08/01; MCP 28862: 1 (77,3), Bujari, creek Marizinho, Atimari river affluent, coll. Malabarba *et al.*, 08/08/01.

Tocantins: UNT 2950: 1 (87,7); UNT 2952: 2 (87,8 and 88,0); UNT 2953: 1 (78,5); UNT 2956: 2 (61,3 and 71,6); UNT 2959: 1 (62,3), creek dos Potes, Porto Nacional, coll. NEAMB, 26/09/00.

PERÚ: BMNH 1867.6.13.79, 1 (83,0) (holotype), Xeberos, Upper Amazonas (Perú), coll. Bartlett.

Table I. Morphometrical and meristic data of *Hemiloricaria lanceolata*. Values are given for holotype and measured specimens.

Character	N	Range	Mean	SD	Holotype
Standard length (mm)	27	51,9-83,9	66,6	9,91	83,0
Percent of Standard length					
Predorsal length	27	29,1-33,5	30,9	0,92	30,9
Postanal length	27	48,5-55,8	53,1	1,72	52,7
Dorsal spine length	27	18,4-27,0	24,2	1,99	-
Anal spine length	27	17,5-23,1	21,0	1,43	-
Pectoral spine length	27	15,8-21,1	18,9	1,39	17,1
Ventral spine length	27	15,4-19,8	17,7	1,04	16,0
Upper caudal spine	16	17,6-63,8	38,5	15,20	-
Lower caudal spine	17	15,1-26,6	18,9	3,48	-
Head length	27	17,8-23,0	21,2	1,00	20,5
Thoracic length	27	12,7-17,6	14,5	1,05	14,2
Abdominal length	27	12,2-14,4	13,4	0,64	13,3
Cleithral width	27	14,0-17,4	15,4	0,75	13,8
Body depth	27	8,8-12,4	9,9	0,83	10,5
Caudal peduncle depth	27	1,1-3,0	1,5	0,30	1,3
Percents of head length					
Snout length	27	47,7-61,0	51,4	2,51	55,5
Head depth	27	34,5-47,9	41,7	3,15	35,2
Interorbital width	27	27,3-33,6	30,1	1,49	26,5
Eye diameter	27	11,8-15,0	13,4	0,90	15,2
Maximum orbital diameter	27	14,8-24,3	19,5	1,81	19,0
Rostral border length	27	4,8-9,4	7,4	1,48	5,7
Counts					
Right lateral scutes	27	28-32	30,0	0,92	31
Left lateral scutes	27	29-31	30,1	0,53	31
Right coalesced plates	27	13-18	15,1	1,03	16
Left coalesced plates	27	14-16	15,1	0,62	16
Right thoracic plates	27	8-12	9,7	0,90	11
Left thoracic plates	27	8-12	9,9	1,05	10
Teeth on right premaxilla	27	4-8	5,9	0,89	5
Teeth on left premaxilla	27	5-8	6,0	0,94	7
Teeth on right dentary	27	5-8	6,1	0,68	7
Teeth on left dentary	27	4-7	5,8	0,74	7



Fig. 1. *Hemiloricaria lanceolata*. ILPLA 1584, (70,1 mm sl), Santa Fe, Argentina.

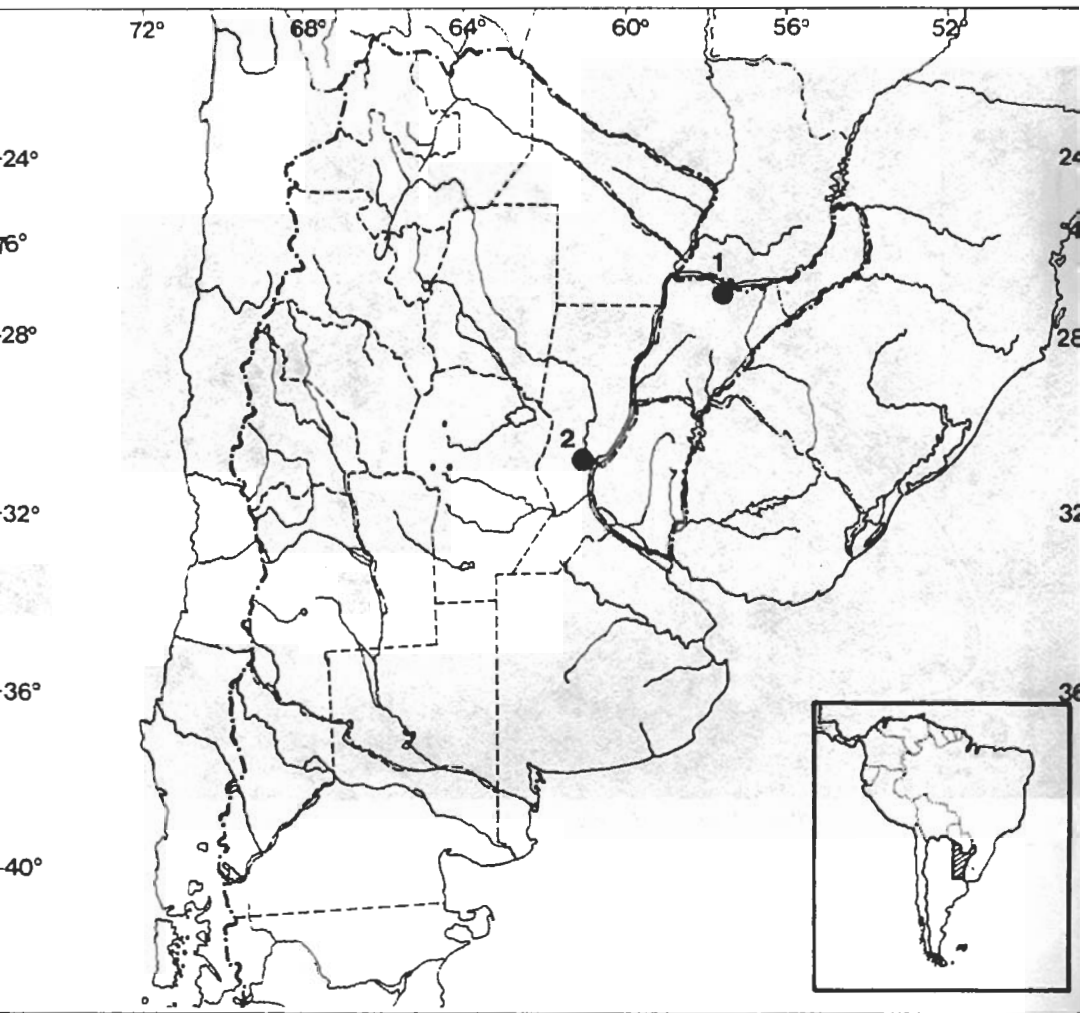


Fig. 2. Localities for *Hemiloricaria lanceolata* in Argentina. 1= Corsa Cué, Corrientes; 2= Coronda river, Santa Fe