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A NEW *LIMNOCY THERE* SPECIES IN THE PAMPEAN REGION  
(BUENOS AIRES, ARGENTINA)

Multiproxy paleolimnological research which includes the use of ostracods is in progress in several small lakes (lagunas) in the central plains of Buenos Aires province. Despite the great potential of ostracod-based reconstructions of past hydrological variations, such studies are still scarce. At least two syngamic species of *Limnocythere* have recently been recovered from Pampean Holocene lacustrine sedimentary cores. Correct identification of these species is of critical importance for the paleoenvironmental interpretation of the ostracod assemblages; however, the taxonomic status of the limnocytherids reported from Holocene sediments in the area is far from clear.

BERTELS & MARTÍNEZ (1990) mentioned two species of *Limnocythere* left in open nomenclature from Pampean sediments. CUSMINSKY & WHATLEY (1996) described some new species, including *L. rionegroensis*, from Patagonia and synonymized *L. aff. L. bradburyi* figured by BERTELS & MARTÍNEZ (1990) with this new species. FERRERO (1996) reported *L. staplini* from marginal marine deposits from Buenos Aires. BERTELS & MARTÍNEZ (1997) published a paper including the same two taxa of their previous work, without changes in their identification. CUSMINSKY *et al.* (2005) assigned *L. aff. L. bradburyi* of BERTELS & MARTÍNEZ (1990, 1997) to *L. rionegroensis*. LAPRIDA (2006) reported two extant limnocytherids, *Limnocythere* sp. and *L. aff. L. staplini*, and subsequently found them in sedimentary cores from Pampean lagunas (LAPRIDA & VALERO-GARCÉS, 2009). This account attests to the need of taxonomic revision of this genus in the area.

In order to clarify its taxonomic status, we present the valve and soft

parts description of *L. aff. L. staplini* (*sensu* LAPRIDA, 2006) based on individuals newly collected from Arroyo Chico stream (37° 23'S- 57° 9'W). Lateral view: carapace fairly symmetrical; maximum length (ML) ~ 0.67 mm; maximum height ~ 0.28 – 0.30 mm, occurring at ~1/3 ML. Dorsal view: anterior end beak shaped, posterior end rounded with left valve (LV) overlapping right valve (RV). Valve external ornamentation weak, presenting light reticulation over the whole surface. A sulcus and two or three poorly developed tubercles occur slightly anteriorly of mid-length. Internal view: lophodont hinge of LV consisting of anterior and posterior teeth sockets flanking a central smooth bar; RV with corresponding smooth teeth and central groove. Marginal denticles absent. Marginal zone more developed anteriorly, with few straight, unbranched marginal pore canals. The four anteriormost appendages as for the genus; A2 lacks flagellated claws. Two setae on anterodistal edge of basal segment of the first walking leg (T1), one seta in the corresponding position of second and third walking legs (T2 and T3). Sexual dimorphism pronounced. Female: Dorsal margin rounded. Terminal claw of T1 about ¼ shorter than those of T2 and T3 (with T2 ≈ T3). Male: More elongated than female, carapace reniform, dorsal margin straight. T1 ≈ T2 in length, terminal claw of T3 ≈ 2.5 as long as terminal claws of T2 and T3.

This species differs from *L. staplini* and *L. bradburyi* in the hinge (smooth vs crenulated elements); from both and *L. rionegroensis* in the slope of the valve dorsal margin of the female and valve shape of the male; and from *L. staplini* further in the sexual dimorphism in thoracopod size vs thoracopod size equal for both sexes (DELORME, 1971). The above combination of features is unique to this taxon, thus warranting the erection of a new species, *Limnocythere* sp. nov.

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