

## A new species of *Stolonis* Motschulsky, 1866 (Coleoptera: Carabidae) from Argentina

## Новый вид рода *Stolonis* Motschulsky, 1866 (Coleoptera: Carabidae) из Аргентины

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КЮЧЕВЫЕ СЛОВА: Carabidae, *Stolonis*, новый вид.

ABSTRACT. A new species, *Stolonis charrua* Anichtchenko, **sp.n.**, type locality Libig, Argentina, is described. A comparative diagnosis and changes to the existing key to *Stolonis* species are provided.

РЕЗЮМЕ. Из Аргентины (типовое местонахождение — Libig) описан новый вид, *Stolonis charrua* Anichtchenko, **sp.n.** Приведены сравнительные замечания и изменения определительной таблицы рода *Stolonis*.

### Introduction

*Stolonis* Motschulsky, 1866 is a genus of Loxandriini sensu Erwin and Sims [1984] with species widely distributed in the Neotropics. The taxonomic and phylogenetic position of loxandriines within Harpalinae remains uncertain. However, recognition of the tribe as distinct from Pterostichini has been suggested by the study of defensive chemicals in some Australian species [Moore & Wallbank, 1968; Moore, 1979], adult morphological characters [Allen & Ball, 1980] and eye reduction in larvae [Bousquet, 1985; Arndt 1988]. Straneo [1991] suggested arguments against the removal of *Loxandrus* LeConte, 1852, and by implication closely related genera, from Pterostichini. Broader sampling of species for defensive compounds [Will et al., 2000; Will, unpublished] and larvae [Will, 2008; Will, unpublished] suggests that these character systems do not provide evidence for the placement of the tribe within or separate from Pterostichini. However and complex of adult morphological characters and DNA sequence data do support the monophyly of the tribe as separate from Pterostichini and the placement of *Stolonis* well within the tribe [Will, unpublished].

*Stolonis* presently includes 18 described species distributed from the southern United States to Argentina. The majority of the species are known from central South

America. Many new species await description from throughout the range of the genus [Will, 2005]. A review of the genera and subgenera and justification for currently recognizing *Stolonis* was presented by Will [2005].

### Materials and Methods

Measurements were made using an ocular micrometer. Measurements reported are as follows: total body length (from posterior margin of clypeus to apex of elytra along suture), length of pronotum (along midline), width of pronotum (at widest point), length of elytra (from base to apex along suture), and width of elytra (at widest point). Confidently identified material and holotype images held by KWW were the basis of comparison.

### Taxonomy

#### *Stolonis charrua* Anichtchenko, **sp. n.**

MATERIAL. Holotype, ♂ — Argentina, Entre Rios Prov., depart. Colon, Liebig vill., XII.1987 L. Ratel leg. Approximate coordinates 32°09'S 58°11'W based on map georeferencing. Deposited in Instituto Argentino de Investigaciones de Zonas Áridas, Mendoza, Argentina (IADIZA).

DESCRIPTION. Total body length 6 mm. (Fig. 1). Dorsal surface black, shiny, iridescent. Antennomeres 1–2 brunneous, 3 brunneous at base and black at apex, 4–11 black. Mouthparts brunneous and legs flavotestaceous with coxae darker, concolorous with ventral surface.

Form of head average build; eyes moderately prominent; frontal impressions not well marked posteriorly, short crescent-form, nearly punctiform, length less than half distance from base of clypeus to anterior supraorbital setae; frons between eyes shiny, not iridescent, microlines not evident.

Width of pronotum 1.24 times length (W — 1.6 mm, L — 1.3 mm), narrowly constricted at base; anterior submarginal sulcus deep and complete; basal impressions small and deep, nearly punctiform but slightly longer than wide, 1/6 length of



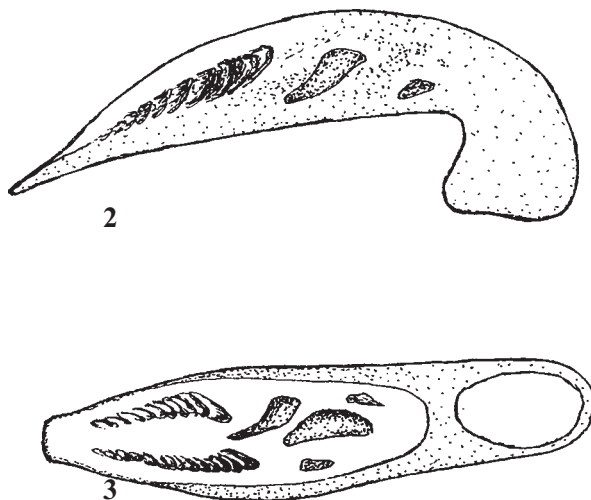
Fig. 1. *Stolonis charrua* Anichtchenko, **sp.n.**, holotype.  
Рис. 1. *Stolonis charrua* Anichtchenko, **sp.n.**, голотип.

pronotum. Lateral margins broadly rounded and explanate medially, narrowed apically and basally, maximal width near anterior pore. Base and basal impressions impunctate. Hind angle obtuse and rounded at apex. Basal submarginal sulcus narrow and complete.

Elytra, almost parallel sided, length 3.7 mm, width 1.9 mm. Dorsal surface iridescent. Apical third of elytral interval 1 paler. Humeri obtusely rounded. Elytral striae with moderately deep, small, dense punctures in basal third, punctures less evident to lacking apically. Intervals broad, nearly flat. Elytron with single dorsal setigerous puncture on interval 3.

Legs, slender; meso- and metatarsi with shallow external sulcus; fifth tarsomeres ventrally glabrous. Protibial spur not serrulate along its edge. Ventral surface of body shiny, clearly iridescent. Mesosternum with 15 deep, small punctures, metasternum impunctate.

Base of sterna IV–VII without evident coarse irregular microsculpture, sterna IV–VII in male with one pair paramedial setae.



Figs 2–3. *Stolonis charrua* Anichtchenko, **sp.n.**, holotype, aedeagus: 2 — latera view; 3 — dorsal view.

Рис. 2–3. *Stolonis charrua* Anichtchenko, **sp.n.**, голотип, эдеагус: 2 — сбоку, 3 — сверху.

Aedeagus (Figs 2–3) with median lobe bluntly rounded symmetrical tip, ostium dorsal and large, ventral surface broadly membranous medially. In repose endophallus with clearly defined two scale fields on each side of midline from near apex to almost 1/2 length of median lobe, best visible in ventral view. Other spines arranged as in figures (Figs 2–3).

DIAGNOSIS. Differ from all described *Stolonis* species by darkly coloured antennomeres 4–11. The impunctate base of the pronotum in *S. charrua* is also known from *S. spinosus* Will, 2005 (Ecuador) and *S. laevicollis* Bates, 1871 (Brazil). *Stolonis charrua* can be separate from specimens of *S. spinosus*, *S. laevicollis* and all of the species by combination of dark coloured antennomeres 4–11, base and basal impressions of pronotum impunctate, immaculate and almost parallel sided elytra. The median lobe and endophallus structure of the aedeagus is diagnostic for males.

ETYMOLOGY. The specific epithet is a noun in apposition in the nominative case derived from the Charrúa, the name of an indigenous nomadic peoples living near Uruguay River region where this new species was collected.

#### CHANGING IN KEY TO *STOLONIS*

In the key to *Stolonis* by Will [2005] couplet 1 must be changed as follows:

1. Pronotum and elytra densely pubescent. Pronotum elongate-oval, lateral margins without or with a short straight section near the slightly obtuse hind angles. Protibial spur smooth edged (*Oxycrepis* Reiche)..... 2
- 1'. Pronotum and elytra glabrous except for one to nine elongate setae on interval 3 or on 3, 5 and 7. Pronotum distinctly narrowed basally. Base produced beyond the baso-lateral setae in most species. Protibial spur serrulate or smooth along edge (*Stolonis* Motschulsky)..... 5

From this couplet specimens will trace to couplet 12. To accommodate the character states found in *S. charrua* this couplet should be replaced and augmented as follows:

- 12(8'). Some antennomeres white ..... 12a  
12'. All antennomeres brunneous or black, none white .....  
..... *Stolonis charrua* Anichtchenko, **sp. n.**

12a(8). Antennomeres 10–11 infuscated to blackish .....	13
12a'. Antennomere 10 white, 11 white, lightly infuscated or black .....	14

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