

Notes on some Tiger Beetles from Argentina (Coleoptera: Cicindelidae)

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Summary: A new genus, *Sumlinia* n. gen., is described for *Cicindela (Cylindera) halophila* Sumlin, 1979, a species from Argentina which can not be placed neither in the genus *Cylindera* nor in any of the known genera of subtribe Cicindelina, because of the unusual characters of labral chaetotaxy and the morphology of the inner sac of aedeagus. Collecting data of some other Argentinean species are also provided.

Zusammenfassung: Eine neue Gattung, *Sumlinia* n. gen., wird für *Cicindela (Cylindera) halophila* Sumlin, 1979, etabliert. Diese Art aus Argentinien konnte aufgrund ihrer labralen Borstenstruktur und der Morphologie des Penisinnensacks nicht der Gattung *Cylindera* oder irgend einer anderen bestehenden Gattung im Subtribus Cicindelina zugeordnet werden. Sammlungsdaten einiger anderer argentinischer Arten werden ergänzend angegeben.

Introduction

Argentina is a huge South American country, but due to ecological and climatic reasons it includes a comparatively poor tiger beetle fauna ($\text{km}^2/\text{species}$ ratio: 42,771). While an early checklist by BRUCH (1911) listed 42 species in all, additional information was later provided by MANDL (1963), VIDAL SARMIENTO (1965, 1966), SUMLIN (1979, 1993, 1994), and CASSOLA (1999a). CASSOLA & PEARSON (2000) summarized the present-day knowledge recently and recorded for Argentina a total of 65 species, 13 of which are endemic of the country.

In particular, SUMLIN (1979) described three new species (*Cicindela halophila*, *C. siccalacicola* and *C. hirsutifrons*) from a single locality of

the Cordoba Province (24 mi. E of Recreo), and he ascribed them to the subgenus *Cylindera* Westwood, 1831. In fact, as SUMLIN clearly specified in his paper, he didn't subscribe to RIVALIER's splitting up the New World *Cicindela* in 1954, thus treating RIVALIER's genera as subgenera.

FREITAG & BARNES (1989), following such a statement, also ascribed these species to the genus *Cicindela*, but, unlike SUMLIN, placed them in the subgenus *Plectographa* Rivalier, 1954, a subgeneric taxon that RIVALIER (1954) had created for a number of South American *Cylindera* species, such as *sinuosa* Brullé, 1837, *zischkai* Mandl, 1956, *suturalis* Fabricius, 1798, *apiata* Dejean, 1825, and others. However, as far as *halophila* was concerned, FREITAG & BARNES (1979) correctly remarked that its male genitalia are radically different from those of the *suturalis* species group, and that the species' definitive taxonomic position should be "resolved by careful examination of external and genitalic characters, and the reassessment of character weights". WIESNER (1992), who fully accepted RIVALIER's taxonomy (RIVALIER 1950, 1954, 1957, 1961, 1963, 1971), more correctly listed *halophila*, *siccalacicola* and *hirsutifrons* in the genus *Cylindera*, subgenus *Plectographa*.

Recent field collecting by Mr. Petr ZABRANSKY (Vienna, Austria) in the Cordoba Province of Argentina luckily lead to the collection, among other tiger beetle species, of a few specimens of two of the SUMLIN's species (*halophila* and *siccalacicola*), what made it possible to finally face a deeper study of their taxonomic position. While *siccalacicola* proved to fit perfectly well all the characters given by RIVALIER (1954) for his subgenus *Plectographa*, thus showing itself to be, despite its *Cephalota*-like elytral pattern, a *Cylindera* species belonging to RIVALIER's endemic South American subgenus, the study of a male specimen of *halophila*, which was compared with a female paratype specimen in first author's collection, showed rather unusual body features which seem to impose its separation into a new monospecific genus, described below.

Sumlinia n. gen.

[Type-species: *Cicindela (Cylindera) halophila* Sumlin, 1979]

Description: General aspect of a small *Cylindera* species, having enlarged, coalescent elytral markings of the *Cicindela* type, but distinct because of the testaceous, transverse, 4-haired labrum. Elytra evenly rounded and emarginated at apex near both sexes, with a few fine, most often rubbed-off, short erect hairs on the basal part of the elytral disc and

on the front lateral edge. Elytral punctuation fine, evenly spaciated, green, with a row of 7-8 larger punctures parallel to, but some distance from, the suture. Aedeagus slender, straight, elongate, with a strong beak apically. Inner sac of aedeagus small, occupying less than the distal half of its entire length, and of a completely different kind than those of all other American Cicindeline species, with a simple but rather long flagellum, whose thick basal part describes just one anti-clockwise coil (almost perpendicular to the plane of the sac), and with a number of stylet-shaped, almost straight, longitudinal sclerites, and in addition a small angular basal sclerite on the ventral left side. Such a kind of inner sac has nothing to do with the genus *Cylindera* Westwood, 1831 (in the RIVALIER's sense), as it is somewhat more reminiscent of that of *Cicindela*, subgenus *Pachydelia* [the North-American species *C. (P.) varians* Ljungh, 1799: CASSOLA 1999b], or even more of that of genus *Habroscelimorpha* Dokhtouroff, 1883 (RIVALIER 1954), in such a way that *Sumlinia* nov. could well be considered a South-American extension of such an evolutive stem.

Derivatio nominis: This new genus, which has to be created just for a single, rather aberrant species which cannot be placed in any of the already known American genera or species groups, is so named after the well-known American tiger beetle specialist, our friend and colleague Mr William D. SUMLIN, III (San Antonio, Texas, USA), who first reviewed the tiger beetles of Argentina and who described the species for which the new genus is created.

Remarks

“*Cicindela*” *eugeni* Castelnau, 1835, also described from “Cordova”, and not studied by RIVALIER (1954) in his revision of the American species of *Cicindela* s. auct., could well be a narrow relative of *Sumlinia halophila*. Its elytral markings, as they were figured by HORN (1908–15, pl. 20, fig. 11), are on the whole very similar to those of *halophila*, however lacking the conspicuous expansion of the apical band up to the apical fifth of the suture. SUMLIN, who examined a specimen collected on 16 December 1971 at 50 km NE of Santiago del Estero (from the Snow Museum of the University of Kansas, USA: SUMLIN, pers. comm.), indicated that *eugeni*, although appearing to be closest to *halophila*, differs by slightly different markings, color, elytral lustre, and especially the glabrous, instead of pilose, genae (SUMLIN 1979). SUMLIN ranged *eugeni* too in the “subgenus” *Cylindera*, placing it between *confluentesignata* and

halophila. As to CASTELNAU's description (1835), it does not give much help. "*Cicindela*" *hirsutifrons* could well be one further relative of *Sumlinia halophila*.

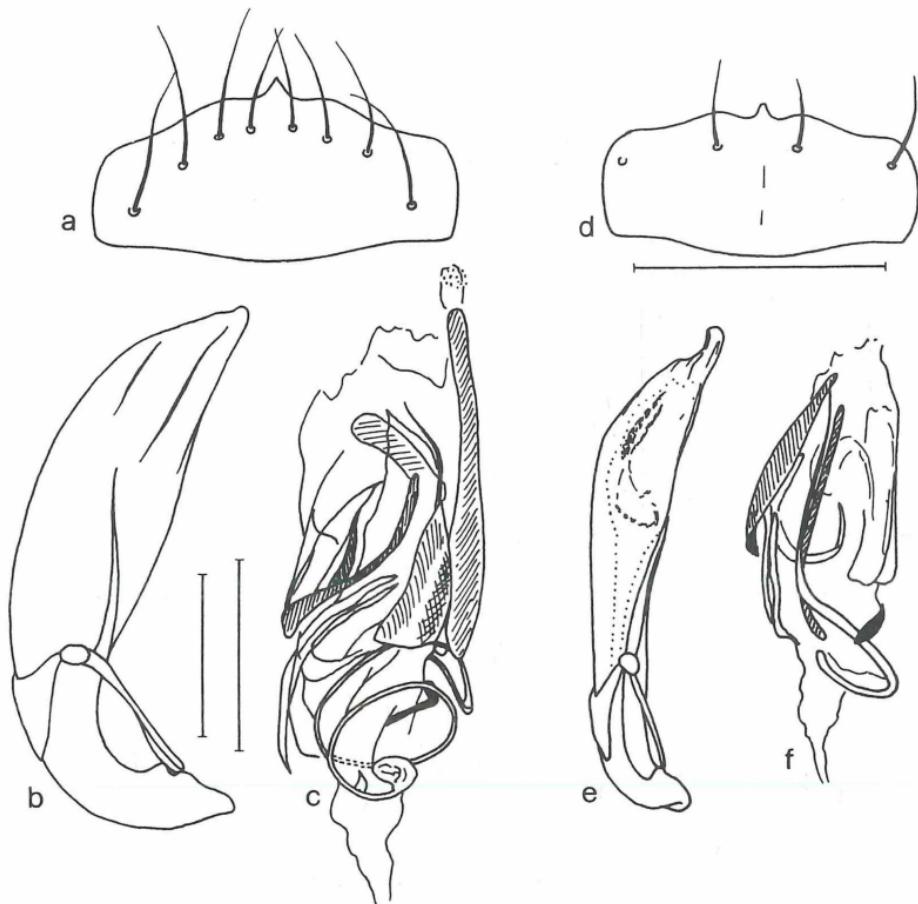


Fig. 1. *Cylindera (Plectographa) siccalacicola* (Sumlin, 1979): labrum (a), aedeagus (b), inner sac of aedeagus (c). *Sumlinia* (n. gen.) *halophila* (Sumlin, 1979): labrum (d), aedeagus (e), inner sac of aedeagus (f). Scale-lines: 1 mm, 0.5 mm.

The tiger beetle material collected by P. ZABRANSKY included seven species in all (FCC: first author's collection; KWC: second author's collection):

Tetracha cf. *biprolongata* (W. Horn, 1937)

Cordoba: Salinas Grandes, 17 km W Serrezuela, 18.-19.XI.1999, P. ZABRANSKY, 1 ♂, 1 ♀ (FCC), 1 ♂ (KWC); Catamarca: W of Salinas

Grandes, 30 km E of La Guardia, 28.–29.XI.1999, P. ZANBRANSKY, 2 ♂♂ (KWC).

Pentacomia (Mesacanthina) reductesignata (W. Horn, 1905)

Cordoba: W of Sierra Grande, 5 km S Nono, Rio de los Sauces, 14.–15.XI.1999, P. ZABRANSKY, 1 ♂ (KWC); Cordoba: betw. Cordoba and Laguna Mar Ciquita, 10 km W Balnearia, riverbank, 2.XII.1999, P. ZABRANSKY, 1 ♂ (FCC); Catamarca: W of Salinas Grandes, 30 km E of La Guardia, 28.–29.XI.1999, P. ZABRANSKY, 1 ♂ (FCC).

Cylinderula (Plectographa) apiata (Dejean, 1825)

Cordoba: betw. Cordoba and Laguna Mar Ciquita, 10 km W Balnearia, riverbank, 2.XII.1999, P. ZABRANSKY, 3 ♂♂, 7 ♀♀ (FCC), 5 ♂♂, 9 ♀♀ (KWC); Cordoba: W of Sierra Grande, 5 km S Nono, Rio de los Sauces, 14.–15.XI.1999, P. ZABRANSKY, 3 ♂♂, 4 ♀♀ (FCC), 5 ♂♂, 1 ♀ (KWC).

Cylinderula (Plectographa) ritsemae (W. Horn, 1895)

Cordoba: betw. Cordoba and Laguna Mar Ciquita, 10 km W Balnearia, riverbank, 2.XII.1999, P. ZABRANSKY, 2 ♂♂, 4 ♀♀ (FCC); 2 ♂♂, 3 ♀♀ (KWC).

Cylinderula (Plectographa) siccalacicola (Sumlin, 1979)

Cordoba: W of Sierra Grande, 5 km S Nono, Rio de los Sauces, 14.–15.XI.1999, P. ZABRANSKY, 2 ♂♂, 1 ♀ (FCC), 4 ♂♂, 1 ♀ (KWC).

Sumlinia halophila (Sumlin, 1979)

Cordoba: Salinas Grandes, 17 km W Serrezuela, 18.–19.XI.1999, P. ZABRANSKY, 1 ♂ (FCC), 1 ♂ (KWC).

Brasiella argentata (Fabricius, 1801)

Cordoba: Salinas Grandes, 17 km W Serrezuela, 18.–19.XI.1999, P. ZABRANSKY, 2 ♂♂, 2 ♀♀ (FCC), 1 ♀ (KWC); Cordoba: betw. Cordoba and Laguna Mar Ciquita, 10 km W Balnearia, riverbank, 2.XII.1999, P. ZABRANSKY, 1 ♂, 2 ♀♀ (FCC), 1 ♂, 1 ♀ (KWC).

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