

Cistudinella inanis (Boheman, 1854), a new country record from Paraguay (Coleoptera: Chrysomelidae: Cassidinae: Ischyrosomychini)

Cistudinella inanis (Boheman, 1854), un registro nuevo de país para Paraguay (Coleoptera: Chrysomelidae: Cassidinae: Ischyrosomychini)

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Abstract

This note reports Paraguay as a new country record for *Cistudinella inanis* (Boheman, 1854) based on one adult specimen, that is currently deposited in the Larry Bezark collection which eventually reside in the Bohart Museum of Entomology, University of California, Davis, USA.

Resumen

Esta nota reporta un nuevo registro de *Cistudinella inanis* (Boheman, 1854) para Paraguay. El registro está basado en un espécimen adulto, que actualmente se encuentra depositado en la colección Larry Bezark que eventualmente reside en el *Bohart Museum of Entomology, University of California, Davis, EUA*.

Keywords:

New record; distribution; Atlantic Forest; Boraginaceae.

Palabras clave:

Nuevo registro; distribución; bosque Atlántico; Boraginaceae.

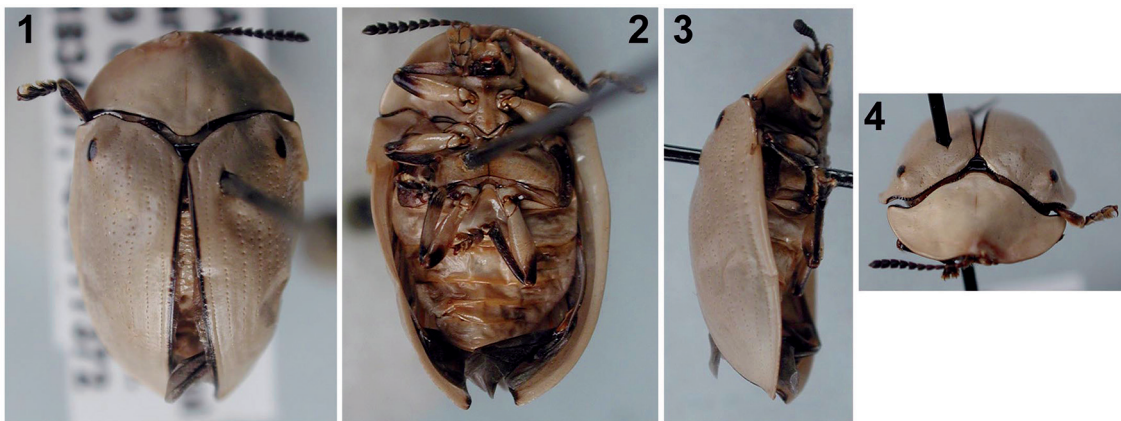
Cistudinella Champion, 1894 (Figs. 1–4) is one of seven genera in the Neotropical tortoise beetle tribe Ischyrosomychini Chapuis, 1875 (Chrysomelidae: Cassidinae). It currently comprises 15 recognized species that range from Costa Rica to Bolivia and Argentina but most species occur in Brazil (Borowiec & Świętojańska 2002–2021). Hosts are documented for just four species and these are shrubs and trees of *Cordia* L. and *Patagonula* L. (Boraginaceae) (Fiebrig 1910; Windsor et al. 1992; Duckett & Moura 2002; Świętojańska & Medeiros 2007; Flinte et al. 2008). Data on juvenile stages are reported for two species: a single illustration of the larva of *Cistudinella obducta* (Boheman, 1854) by Fiebrig (1910) and subsequent larval descriptions by Świętojańska & Medeiros (2007), and the report of an egg mass of 40–60 eggs and larval aggregations for *Cistudinella notata* (Boheman, 1854) (Flinte et al. 2008). The larvae are diagnosed by the 16 lateral scoli (body projections); they are gregarious and together exhibit cycloalectic (ring) defense. Larvae have paired urogomphi and species vary in the materials of the shields they carry: exuviae only in *C. obducta* (Świętojańska & Medeiros 2007: Fig 22; Świętojańska 2009) or with feces in *C. notata* (Flinte et al. 2008:201).

This note reports Paraguay as a new country record for *Cistudinella inanis* (Boheman, 1854) based on one adult specimen (Figs. 1–4) that was collected at: PARAGUAY: Itapua, Encarnacion, Hotel Tirol, -27.183437° -55.777372°, 820 ft elevation [250 m approx.], 24–29 October 2018, MV light, coll. Larry G. Bezark. The species was known before only in Brazil (Borowiec & Świętojańska 2002–2021). The specimen is 9 mm long and was collected under permit #0372, issued by the Museo Nacional de Historia Natural del Paraguay (Inventario Biológico Nacional). It is currently deposited in the first author's collection which will eventually reside in the Richard Bohart collection, University of California, Davis, USA. The specimen keys easily to genus with the online key of Borowiec & Świętojańska (2002–2021). *Cistudinella inanis* is distinct within the genus with the combination of ovoid form (Figs. 1–3), projections of postero-lateral corners of the pronotum (Figs. 1, 4), and color pattern (Fig. 1).

Tortoise beetles are not often collected at lights, suggesting that the host plants may have been very close. The reported specimen was collected at a sheet that was placed behind a wing of hotel rooms facing a small rem-

nant parcel of Atlantic Forest surrounded by agriculture and urban development. Other tortoise beetles collected during the expedition at this site are: *Coptocyclus (Psallidonota) contemta* (Boheman, 1855), *Ctesiella confusa* (Boheman, 1855), *Ctesiella ramosa* Spaeth, 1926, *Ischnocodia annulus* (Fabricius, 1781) (all determined by RW), and a species of *Chelymorphia* Chevrolat, 1836 (determined by Michael Geiser, BMNH).

We report the fourth species of *Cistudinella* reported for Paraguay; the other three species in Paraguay use Boraginaceae hosts (Fiebrig 1910; Flinte et al. 2008). The only other Ischyrosomychini species known from Paraguay is *Eurypedus peltoides* (Boheman, 1854) (Borowiec & Świętojańska 2002–2021) also using Boraginaceae hosts (Silva et al. 1968). Fiebrig (1910) reported on the biology of some Paraguayan species including immatures of *Cistudinella obducta* (Boheman, 1854). Contemporary documentation with new records, new species, range mapping, life cycle rearing, museum study, and especially targeted field collections and online resources (e.g., Barriga-Tuñón 2012–2022) will improve our knowledge of the Cassidinae of Paraguay.



Figures 1–4. *Cistudinella inanis* (Boheman) from Paraguay (photos: L. Bezark). 1. Dorsal view. 2. Ventral view. 3. Lateral view. 4. Frontal view.

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Conflicto de intereses / Competing interests:

The authors declare no conflict of interest.

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LB: Investigation, Writing-review & editing. RW: Investigation, Writing-review & editing. CSC: Conceptualization, Validation, Writing-original draft, Writing-review & editing.

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Aspectos éticos / legales; Ethics / legals:

There are no ethical or legal aspects to declare as the expedition was officially permitted and the specimen will be deposited in a public institutional collection.

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