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A new genus and new species of the family Issidae (Hemiptera, Fulgoroidea) from Venezuela

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Abstract

Diceroptera humboldti gen. et sp. n. is described from Venezuela. This new genus belongs to the tribe Issini.

Key Words

Issini
Taxonomy
Zoogeography
Neotropics

Introduction

Issid fauna of Venezuela is almost unknown. Only two issid species are authentically known from the country: *Issus longulus* Lethierry, 1890 and *Thionia onerata* Melichar, 1906 (Lethierry 1890; Melichar 1906; Metcalf, 1958). The first species actually belongs to the genus *Colpoptera* Burmeister, 1835 (unpublished). Recently, the generic system of Neotropical Issidae was revised by Gnezdilov & O'Brien (2008). As a result of studying issid specimens in the Zoologisches Museum Hamburg (Germany) a specimen which seems to represent a new genus and species was found. This genus and species is described in this paper. The species is known by only one female specimen collected in Puerto Cabello, a city on the Northern coast of Venezuela (Carabobo State). Nothing is known about its biology.

Material and methods

The terminology of the head follows Emeljanov (1995). Photographs of the specimen were made using a Canon camera 450 D with lens Canon 60 mm MPA with a flash Canon Macro Ring Lite MR–14EX. The plate of photos was prepared using Adobe Photoshop.

The type specimen of the new species is deposited in the Zoologisches Museum Hamburg (Germany).

Results

Family Issidae Spinola, 1839
Tribe Issini Spinola, 1839

***Diceroptera* gen. n.**

Type species. *Diceroptera humboldti* sp. n.

Diagnosis. Metope long, narrow, apical margin acutely angulate, with median carina running through post- and anteclypeus; sublateral carinae distinct only in upper part of metope (Fig. 3). Lateral keels of metope are joined with lateral margins of coryphe at acute angle (in lateral view) (Fig. 1). Metopoclypeal suture convex. Ocelli absent. Macrocoryphe long, narrow, narrowing to acute apex; lateral margins keel-shaped, posterior margin almost straight (Fig. 2). Tegulae large, transverse. Pronotum with convex anterior margin bearing median groove, posterior margin weakly concave. Pronotum hollowed twice medially. Paranotal lobes wide. Mesonotum without carinae. Fore wings wide, not narrowing apically, with long clavus (4/5 of whole wing length), without hypocostal plate. Apex of clavus with a large horn-shaped process (Fig. 1). Radius bifurcate, with short common stem, median tetrafurcate, cubitus anterior simple (R 2 M 4 CuA 1). Hind wings as long

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as fore wings, tri-lobed. Hind tibia with 2 lateral spines distally. First metatarsomere with intire row of 9 intermediate spines arranged in the arc, with pulvilla bearing dense long setae inside of the arc. Hind margin of female sternum VII with median lobe. Female anal tube elongate, narrowing apically. Gonoplacs rounded.

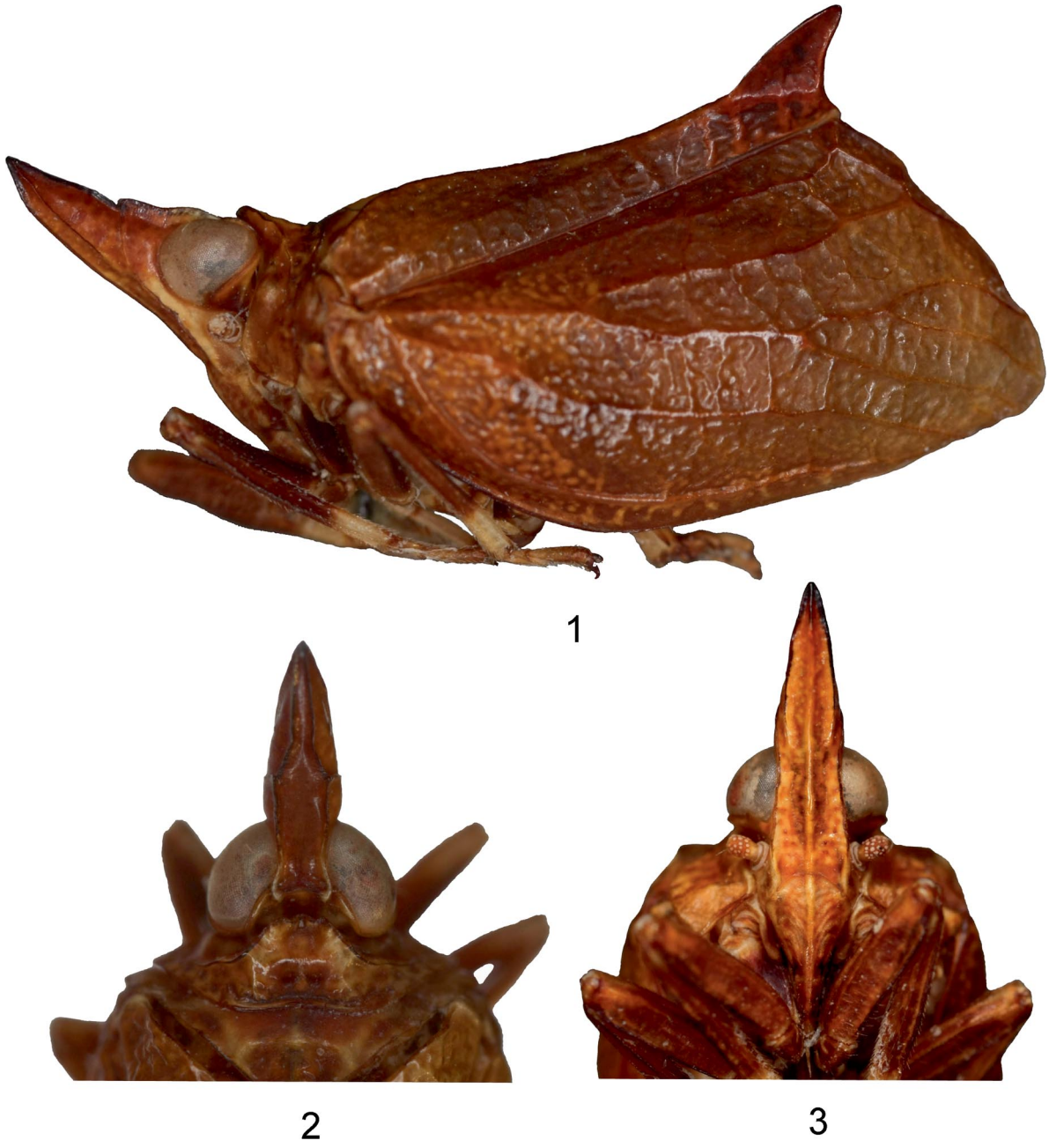
Etymology. The generic name is derived from the combination of Greek "δυο" (two), "κέρασ" (horn), and "πτέρυξ" (wing). Feminine in gender.

Comparison. This new genus clearly differs from all other issid genera by the horn-shaped apices of clavus of fore wings. It looks closer to the genus *Dracela* Signoret, 1861 by its narrow metope with a median carina running through clypeus, by the shape of the pronotum, by the shape and the fore wing venation and by the tri-lobed hind wings; however it differs from the *Dracela* by a long macrocoryphe. The last feature makes this new genus superficially similar to the Oriental genus *Tonga* Kirkaldy, 1900 (Nogodinidae *sensu* Gnezdilov 2007), while the shape of the ovipositor places it clearly into the Issidae.

Diceroptera humboldti sp. n.

Figures 1–3

Type material. Holotype, ♀, [Venezuela], Puerto Cabello, "Geog. Ges. ded.", 6.X.[18]93, Sievers leg.



Figures 1–3. *Diceroptera humboldti* gen. et sp. n. **1.** Lateral view; **2.** Head in dorsal view; **3.** Frontal view.

Description. Morphological characters as mentioned for the genus. General coloration yellowish brown. Hind wings dark brown. Fore and middle coxae and gonoplacs brown. Apices of tibiae and hind margins of abdominal sternites light yellow. Apices of spines black.

Male unknown.

Total length. 10.7 mm.

Etymology. The species is named in honour of Alexander von Humboldt (1769–1859) who is famous for his Natural History research in South America.

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References

Emeljanov, A. F. 1995. On the problem of classification and phylogeny of the family Delphacidae (Homoptera, Cicadina) taking into consideration larval characters. – Entomologicheskoe obozrenie 74 (4): 780–794 [In Russian]. English translation published in Entomological Review 75 (9): 134–150.

Gnezdilov, V. M. 2007. On the systematic positions of the Bladinini Kirkaldy, Tonginae Kirkaldy, and Trienopinae Fennah (Homoptera, Fulgoroidea). – Zoosystematica Rossica 15 (2): 293–297.

Gnezdilov, V. M. & O'Brien, L. B. 2008. New taxa and new combinations in Neotropical Issidae (Hemiptera: Fulgoroidea). – Insecta Mundi 31: 1–26.

Lethierry, L. 1890. Voyage de M. E. Simon au Venezuela (Décembre 1887–Avril 1888). 9^{e} Mémoire (1). Hémiptères Homoptères. – Annales de la Société Entomologique de France (Ser. 6) 10: 147–160.

Melichar, L. 1906. Monographie der Issiden (Homoptera). – Abhandlungen der K. K. Zoologisch-botanischen Gesellschaft in Wien 3 (4): 1–327.

Metcalf, Z. P. 1958. Fulgoroidea. Issidae. General catalogue of the Homoptera. Baltimore, Waverly Press, INC 4 (15): 1–561.

