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### Una nueva especie de *Iralunelus* Štys, 1974 (Hemiptera: Heteroptera: Aradidae) de Colombia

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#### RESUMEN

Una especie nueva del género *Iralunelus* Štys, 1974: *I. zipaquirensis* sp. n. Contreras, Neder y Coscarón de Zipaquirá, Colombia es descrita e ilustrada. Esta especie es cercana a *I. sahlbergi* (Bergroth, 1886) y a *I. simulans* (Walker, 1873) por la presencia de una callosidad oval en el escutelo y por los ángulos anterolaterales del pronoto redondeados; pero puede distinguirse de estas por los siguientes caracteres: escutelo con una callosidad redondeada grande sobre la mitad anterior; conexivo delgado; paratergitos VIII del macho rectangulares con el ápice truncado, y ubicados oblicuamente a la longitud del pigóforo. Se ofrecen ilustraciones de la genitalia de la nueva especie.

**Palabras clave:** Aneurinae, Colombia, taxonomía, Zipaquirá.

#### ABSTRACT

A new species of genus *Iralunelus* Štys, 1974: *I. zipaquirensis* Contreras, Neder and Coscarón sp. n. from Zipaquirá, Colombia, is described and illustrated. This new species is close to *I. sahlbergi* (Bergroth, 1886) and *I. simulans* (Walker, 1873) for the presence of a callus on the scutellum and the anterolateral angles of pronotum rounded, but can be distinguished by the following characters: scutellum with a large rounded callus on anterior half; connexiva narrow; male paratergites VIII rectangular with truncated apex, reaching half the length of pygophore. Figures of the genitalia of the new species are provided.

**Key words:** Aneurinae, Colombia, taxonomy, Zipaquirá.

The genus *Iralunelus* Štys belongs to the Aneurinae subfamily and is distributed in the Neotropical, Nearctic and Palearctic regions. Initially it was proposed as a subgenus of *Aneurus* by Štys (1974) base on the presence of a split abdominal segment VII. Kormilev and Froeschner (1987) promoted it to full generic rank, and included 20 species of which 18 are distributed in the Neotropical Region: *Iralunelus aibonitensis* (Kormilev, 1968b), *I. bergi* (Kormilev, 1980), *I. bispinosus* (Kormilev, 1960a), *I. bolivianus* (Kormilev, 1960b), *I. carioca* (Kormilev, 1968a), *I. costaricensis* (Kormilev, 1982), *I. flavomaculatus* (Distant, 1893), *I. fritzi* (Kormilev, 1960b), *I. leptocerus* (Hussey, 1957), *I. longicornis* (Kormilev, 1982), *I. marginalis* (Walker, 1873), *I. monrosi* (Kormilev, 1980), *I. plaumanni* (Kormilev, 1965), *I. sahlbergi* (Bergroth, 1886), *I. simulans* (Walker, 1873), *I. subdipterus* (Burmeister, 1835), *I. tenuis* (Champion, 1898), *I. wygodzinskyi* (Picchi, 1977), one in the Nearctic Region *Iralunelus politus* (Say, 1832) and one in the Palearctic Region: *I. gallicus* (Štys, 1974). Subsequently, the records by Coscarón and Contreras (2012, 2015) extended the distribution of *I. politus* into the Neotropics. The present work describes a new species of *Iralunelus* from Colombia.

#### MATERIALS AND METHODS

The description is based on three males and two females provided by the American Museum of Natural History, New

York, United States of America (AMNH). Measurements are given in millimeters and morphological characters were analyzed using optical instruments EZ4 Leica and camera Sony DSC-P200.

#### RESULTS

##### TAXONOMY

Aradidae Brullé, 1836

Aneurinae Douglas and Scott, 1865

*Iralunelus* Štys, 1974

***Iralunelus zipaquirensis* sp. nov.**

Figures 1 A-C

<http://zoobank.org/6EF591BF-17BB-436D-907B-EB4EB88698B4>

**Diagnosis.** *I. zipaquirensis* presents the following characters: scutellum with a large, rounded callus on the anterior half (Fig. 1A); connexiva narrow (Fig. 1A); male paratergites VIII rectangular with truncate apex, half the length of pygophore (Fig. 1C). Parameres shaped, dentate at middle, with long setae in the distal portion.

**Description. Holotype male** (Fig. 1A) Small. Total length 4.70 mm, body oval, surface rugose; head, pronotum, scutellum and basal portion of hemelytra dark brown; labium, coxa, connexiva and abdominals sterna reddish brown.

Head. Almost as long as wide across eyes (1: 1.05).

Clypeus conical, exceeding the antennal segment I; genae poorly developed and barely visible dorsally. Antennae about twice the width of the head (1: 1.98), antenniferous lobes subrectangular anterolaterally rounded; antennal segment I suboval, II basally narrowed, III cylindrical of the same length as II, IV fusiform, distal portion of the III and IV beset with hairs. Relative length of segments I:II:III:IV= 1:1.53:1.53:3.11, eyes moderately large, protruding; postocular tubercles (pt) short, not reaching the outer margin of the eyes; vertex transversely striate with two ovate callosities; labium reaching the posterior margin of eyes.

**Pronotum.** Length less than half of maximum width (1: 2.14); anterior margin concave at middle, anterolateral angles rounded, not extending beyond the collar, neither exceeding the neck; lateral margins of anterior lobe converging anteriorly, subsequently diverging and with deep lateral cleft; fore disk with four callosities; hind disk granulate anteriorly, and with an elongated depression in the posterior half, followed by transverse striations posteriorly; posterior margin slightly curved in the middle.

**Scutellum.** Semicircular, shorter than basal width (1: 1.61); fore disc depressed with a large spot (ss) that exceeds half length of scutellum; hind disc with semicircular striations.

**Abdomen.** Ovate, longer than wide across segment IV (1: 0.69); connexiva narrow (c) with smooth lateral margins; postero-exterior angles not protruding; tergum VII with two triangular paratergites (pa VII); spiracles II and VII located laterally and visible from above; those of III-VI more ventrally, far from outer margin of connexivum; VIII terminal. Hemelytra distally surpassing half of tergum VII, corium longer than half length of scutellum (1: 0.6); membrane finely wrinkled.

**Legs.** Femora and tibiae striated and pilose.

**Genital structures.** (Fig. 1C): pygophore piriform and as long as wide (1: 1); paratergites VIII (pa VIII) rectangular with truncate apex, half the length of pygophore. Parameres blade shaped, dentate at middle, apically with long setae (sp).

**Female.** (Fig. 1B): paratergites of segment VIII subtriangular, not surpassing the segment.

**Measurements. Holotype male.** Total length: 4.70 mm. Head length: 0.62 mm., width: 0.65 mm. Antennal segments length I: 0.17, II: 0.26, III: 0.26, IV: 0.53. Pronotum length: 0.69 mm., width: 1.48 mm. Scutellum length: 0.65 mm., width: 1.05 mm. Abdomen length: 2.69 mm., width 1.86 mm. Pygophore length: 0.40 mm., width: 0.40 mm. **Allotype female.** Total length: 5.18 mm. Head length: 0.67 mm., width: 0.73 mm. Antennal segments length I: 0.21, II: 0.26, III: 0.28, IV: 0.60. Pronotum length: 0.74 mm., width: 1.55 mm. Scutellum length: 0.63 mm., width: 1.12 mm. Abdomen length: 3.10 mm., width 2.10 mm.

**Paratypes.** Total length: ♀ 5.1; ♂ 4.45-4.92-5.10. Head length: ♀ 0.65; ♂ 0.51-0.64-0.66., width: ♀ 0.70; ♂ 0.54-0.66-0.67. Antennal segments length I: ♀ 0.19, ♂ 0.17-

0.19-0.19, II: ♀ 0.24; ♂ 0.23-0.26-0.27 III: ♀ 0.29; ♂ 0.25-0.25-0.26; IV: ♀ 0.62; ♂ 0.51-0.56-0.57. Pronotum length: ♀ 0.71; ♂ 0.64-0.67-0.69., width: ♀ 1.51; ♂ 1.46-1.49-1.51. Scutellum length: ♀ 0.60; ♂ 0.62-0.69-0.70., width: ♀ 1.17; ♂ 1.01-1.06-1.08. Abdomen length: ♀ 3.10; ♂ 2.55-2.86-3.12, width: ♀ 2.07; ♂ 1.89-1.98-2.03. Pygophore length: 0.39-0.43-0.44., width: 0.40-0.43-0.44.

**Material examined: Holotype.** ♂, Colombia, Cundinamarca, Road Zipaquirá to Pacho, 3400 m, 5° 03' 51.55'' N, 74° 02' 22.66'' W, 22-VII, 1967, P & B. Wygodzinsky, (AMNH). **Allotype.** ♀, Colombia, Cundinamarca, Road Zipaquirá to Pacho, 3400 m, 5° 03' 51.55'' N, 74° 02' 22.66'' W, 22-VII, 1967, P & B. Wygodzinsky (AMNH).

**Paratypes.** 1 ♀ and 3 ♂, same data (AMNH).

**Etymology.** The specific epithet refers to the type locality (Zipaquirá).

**Distribución.** Cundinamarca, Colombia.

**Natural history.** Unknown, except that the habitat in which this species was collected is located at an altitude of 3400 m.

**Comentary.** The most similar species to *I. zipaquirensis* are *I. sahlbergi* (Bergroth, 1886) and *I. simulans* (Walker, 1873) for the presence of a callus on the scutellum and the rounded anterolateral angles of pronotum. However, *I. sahlbergi* differs by the poorly marked pronotal callosities and dark body coloration. In *Iralunelus sahlbergi* and *I. simulans* the pygophore is longer than wide and the apex of paratergites VIII are rounded.

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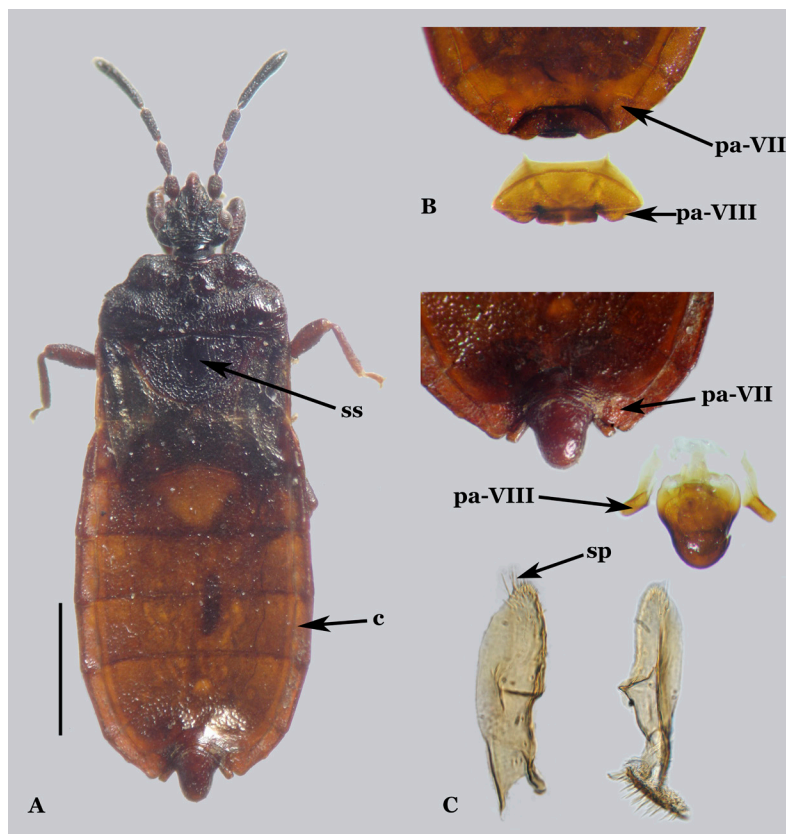
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**Figure 1 (A-C).** *Iralunelus zipaquirensis* sp. n. (A) Male holotype, spot on scutellum (ss), connexivum (c), dorsal view; (B) Female allotype, terminal segments VI-IX, paratergites of segment VII (pa-VII), paratergites of segment VIII (pa-VIII), dorsal view; (C) Male holotype, terminal segments VI-VIII, paratergites of segment VII (pa-VII), paratergites of segment VIII (pa-VIII), setae of paramere (sp), dorsal view.