

## Nota científica

## First record of the damselfly genus *Anisagrion* (Odonata: Coenagrionidae) from Colombia

Primer registro del género de caballitos del diablo *Anisagrion* (Odonata: Coenagrionidae) para Colombia

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**Abstract:** The genus *Anisagrion* and the species *Anisagrion inornatum* are reported for the first time from Colombia. Currently the genus is known from Central America, Venezuela, and Ecuador.

**Key words:** Damselfly. Andes. Biodiversity.

**Resumen:** El género *Anisagrion* y la especie *Anisagrion inornatum* se registran por primera vez para Colombia. Hasta el momento el género era conocido de América Central, Venezuela y Ecuador.

**Palabras clave:** Caballitos del diablo, Andes, Biodiversidad.

### Introduction

Coenagrionidae is a cosmopolitan family and the largest in the order Odonata with about 1100 described species. However *Anisagrion* is a genus with only four species: *Anisagrion allopterum* Selys, 1876, *A. inornatum* (Selys, 1876), *A. kennedyi* Leonard, 1937, and *A. truncatipenne* Calvert, 1902, with a distribution range from Mexico south to Panama, Venezuela and southern Ecuador (Garrison *et al.* 2010). *Anisagrion* is a coenagrionid genus of medium body size. Its most common color pattern is as follows: head, thorax, and dorsum of abdomen black with pale areas blue, yellow, or light green. Male cerci of *Anisagrion* are unique by their entire dorsal surface forming an oval membranous depression (von Ellenrieder and Garrison 2009), and additional diagnostic characters for the genus are found in Garrison *et al.* (2010).

The genus *Anisagrion* was erected by Selys in 1876 with *A. allopterum* as the type and the variety *A. allopterum rubicundum* as a doubtful form. However, this form was subsequently synonymized with *A. allopterum* by Calvert (1901-1908) because the coloration pattern of the abdomen, a difference proposed by Selys, may be simply a consequence of the age of the specimen. Later Leonard (1937) described *A. kennedyi* from Panama. In 2005 De Marmels and Garrison transferred *Leptagrion?* [sic] *inornatum* Selys, 1876 to the genus *Anisagrion* and synonymized *Leptagrion?* [sic] *rufum* with *A. inornatum*. *Leptagrion?* [sic] *rufum* was questionably assigned to *Leptagrion* by Selys (Costa and Garrison 2001).

*A. inornatum* differs from the other species of the genus by the following characters (characters for other species are described in parenthesis): shape of the apices of both wings equal (apex of forewing truncated in *A. truncatipenne*); distal lobes of male genital ligula without internal projection (with internal projection in *A. allopterum*); and cerci oval with apices much wider than their bases (rounded in *A. allopterum*).

*A. inornatum* is here registered for Colombia for the first time, being this also the first record of the genus for the country. The specimens were collected in the northeast of the

Andes in a tropical forest in Boyacá Department. They are deposited in the insect collection of the Instituto de Ciencias Naturales of the National University of Colombia. This species was previously known from Venezuela (Aragua, Miranda, Lara, Táchira, and Trujillo States) and Ecuador (Loja Prov.) (De Marmels and Garrison 2005; Rácenis 1953, 1958).

Given its geographical position and diversity of ecosystems, Colombia has been considered a mega-diverse country. Nevertheless, biodiversity of some insects groups in Colombia has been poorly studied, as is the case with dragonflies and damselflies; Odonata knowledge is poor in Colombia compared with that in other South American countries (Rojas-R and Sánchez 2009). According with Paulson (2004), Colombia has had little progress since the study by Santos (1981). The first checklist to be published for Colombia is underway (Pérez and Palacino submitted) and includes 330 species, representing 90 genera. Considering the new record of *Gomphomacromia fallax* (Corduliidae) (Bota-Sierra *et al.* 2010) and the present record of the *Anisagrion inornatum*, the diversity of Odonata for Colombia is increased to 332 species and 92 genera.

**Material studied:** 3 ♂ *Anisagrion inornatum* (Selys, 1876): COLOMBIA. Boyacá Department. Santa María. Icacuye. 4°53'42,8"N 73°16'43"W. 843 m.a.s.l. 28-dec-2008. A. Penagos & F. Palacino. Insect Collection of the Instituto de Ciencias Naturales [ICN 043490, 043491, 043494].

The examined specimens differ from the original description in their color pattern as follows (characters from original description translated from the French by Costa and Garrison 2001 in parenthesis): head black dull dorsally (orangish russet); prothorax black with lateral edges green pale (russet); pterothorax black dorsally with green pale antehumeral stripe present (russet, a little darker dorsally); abdomen shiny black dorsally (orangish russet dorsally), olive green ventrally (yellow). According to Garrison *et al.* 2010, these differences in color pattern are due to ontogenetic variability, with immature specimens being mostly orange or yellow.

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