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## Notes on the occurrence of *Riama simotera* (Squamata, Gymnophthalmidae) in Colombia

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ABSTRACT - We document for the first time the presence of *Riama simotera* in Colombia. We demonstrate that previous claims about the occurrence of this species in Colombia were based on misidentified specimens or unsubstantiated reports. The new records are from Nariño department, southwestern Colombia, close to previously known records from Ecuador.

O'SHAUGHNESSY (1879) described *Emphrassotis simoterus* on the basis of a single specimen from Intac [=Intag, Imbabura], Ecuador. Boulenger (1885) used the combination *Proctoporus simoterus* for the first time and a century later Ayala (1986) included this species in his list of the lizards of Colombia. Ayala (1986) did not cite specimens to substantiate that claim and among the collections that he listed only the Instituto de Ciencias Naturales (ICN, Universidad Nacional de Colombia) actually includes Colombian specimens of this species in its holdings. The material in all of the other collections Ayala (1986) listed corresponds to another species (SJSP, pers. obs.).

Kizirian & Coloma (1991) and Kizirian (1995) reported additional material from northern Ecuador, and Kizirian (1996) redescribed the species based on the holotype and additional specimens, most of which originate from near the border of Colombia. Kizirian (1996) stated: "all species treated herein are endemic to Ecuador except *Proctoporus simoterus*, which also occurs in Colombia but may comprise more than one species." In his list of specimens examined he

did not include the Colombian material because other workers claimed to be revising the species of Colombia at that time. The revision was not published but this statement was based on three specimens (KU - University of Kansas, Museum of Natural History - 169943-45) from 8 km NE Pasto, Nariño department, Southwestern Colombia (D.A. Kizirian, pers. comm.). Finally, Doan (2003) and Doan & Castoe (2005) included the same KU specimens in the phylogenetic analysis of *Proctoporus sensu lato* and the phylogenetic taxonomy of the Cercosaurini respectively (the former including the new combination *Riama simotera*).

Because Doan (2003) recorded these specimens in her list of examined specimens, we consider this to be the actual "first record" of *Riama simotera* from Colombia. However, our examination of the only specimens associated with such claims (KU 169943-45) lead us to conclude that they represent an undescribed species (Sánchez-Pacheco & Kizirian, in prep.) that is differentiated from *R. simotera* by the following traits (condition of *R. simotera* in parentheses): superciliary series incomplete (complete), postparietals in contact

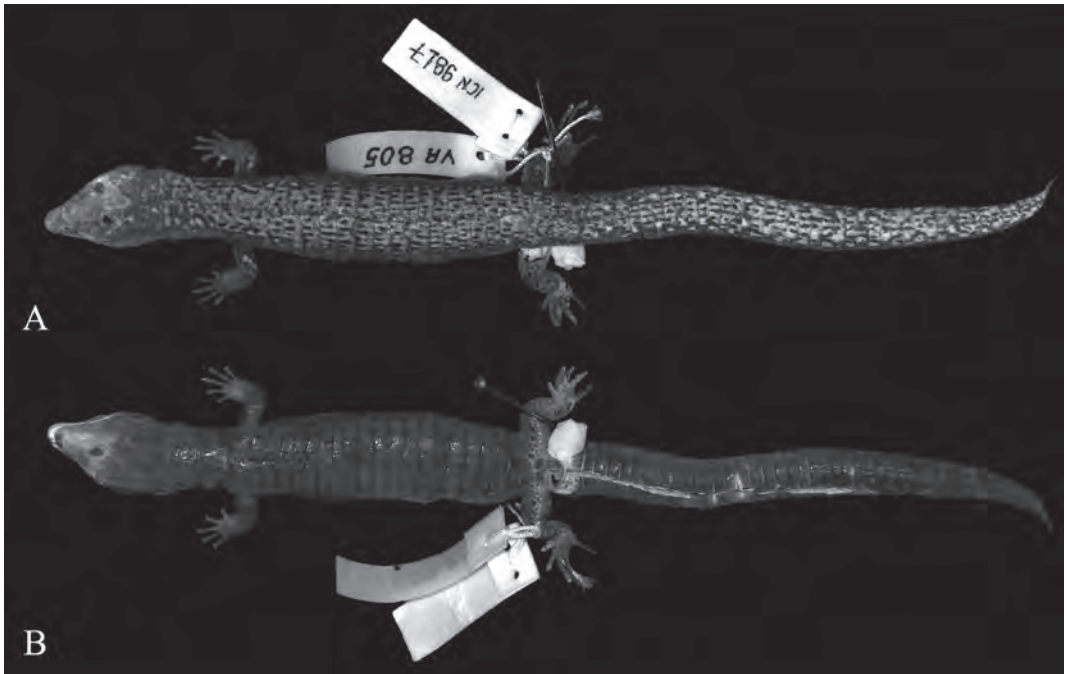


Figure 1. Dorsal (A) and ventral (B) view of a male of *Riama simotera* from Colombia (ICN 9817).

(usually separated by interparietal), dorsal scales keeled (smooth), and femoral pores per hind limb in males nine (6-7).

Specimens that we regard to be the first “true” *Riama simotera* from Colombia include (1) ICN 9818-22, collected on 16 November 1982 by José Vicente Rueda-Almonacid (JVR) at municipio de Cumbal, km 4 Cumbal-volcan Cumbal, departamento de Nariño, Colombia, 3260 m (ca. 0° 54' 40" N, 77° 47' 02" W); (2) ICN 9817 (Fig. 1), a male, collected on 16 November 1982 by JVR at municipio de Tuquerres, km 10 carretera Tuquerres-Guachucal, hacienda Alsacia, departamento de Nariño, Colombia, 3140 m (ca. 1° 04' 13.7" N, 77° 36' 49" W); and (3) Instituto Alexander von Humboldt, Colombia [formerly IND-R] 1553, a female, collected by Felipe Moran and Alirio Fajardo at municipio de Pupiales, departamento de Nariño, Colombia (ca. 0° 52' 12" N, 77° 37' 37" W) (Fig. 2). The characteristics of these specimens agree with those of *R. simotera* as detailed by Kizirian (1996). All the specimens were collected on the shoulder of an unpaved road or in open areas by day, under rocks or fallen trunks, or inside the leaves of fallen frailejones (field notes of JVR).

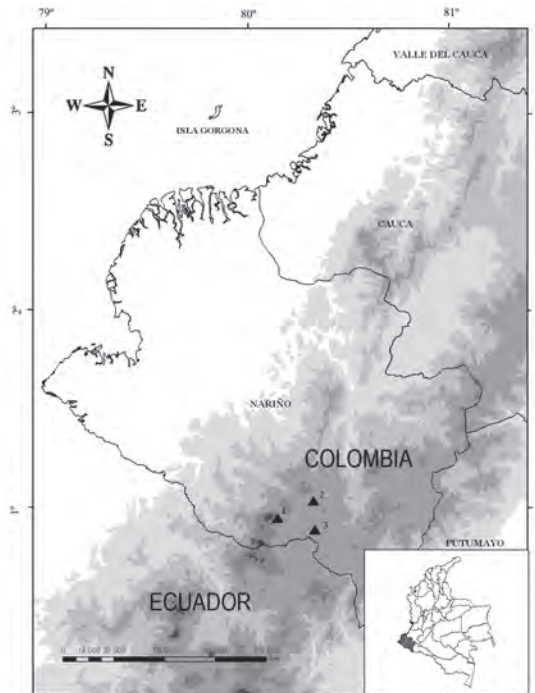


Figure 2. Distribution of *Riama simotera* in Colombia. Map with collection localities (black triangles). Numbers correspond to the localities referenced in the text.

Although this range extension of *R. simotera* is not unexpected, it is noteworthy because of the limited knowledge about distributional range and habitat of several congeners, and suggests that at least four species of *Riama* occur in sympatry near the Colombian-Ecuadorian border (SJSP, pers. obs.).

The re-identification of KU 169943-45 has potential consequences in *Riama systematics*. Doan (2003) used these specimens to score morphological characters for *Riama simotera* in her densely sampled phylogenetic study of *Proctoporus sensu lato*, thus morphological evidence for the relationships of *R. simotera sensu stricto* is lacking. Castoe et al. (2004) included DNA sequences of *R. simotera* in their molecular phylogenetic analysis. However, their study included only five of the 25 currently recognized species of *Riama*. Therefore, although it is possible that *R. simotera* is nested within *Riama* and the precise relationship of it within the genus remains unclear.

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#### APPENDIX

Specimens examined: - *Riama simotera*:  
 ECUADOR: Carchi: 14.6 km NW El Carmelo, 3130m (KU 179478); km 13 carretera a El Carmelo, 3300m (ICN 9823-34); km 16 Tulcan-Tufiño, 3130-3160m (ICN 9835-36); 15.3 km W Tulcan on road to Tufiño, 3080m (QCAZ 915, 918; KU 217208); km 13 desvío carretera Panamericana, El Angel (ICN 9837). COLOMBIA: Nariño: municipio de Pupiales (IAvH [formerly IND-R] 1553); municipio de Tuquerres, km 10 carretera Tuquerres-Guachucal, hacienda Alsacia, 3140m (ICN 9817); municipio de Cumbal, km 4 Cumbal-volcan Cumbal, 3260m (ICN 9818-22). KU 217208. - *Riama* sp.: COLOMBIA: Nariño: 8 km NE Pasto, 3020m (KU 169943-45).