

New distribution record of *Coelosis biloba* Linnaeus, 1767 (Scarabaeidae: Dynastinae: Oryctini) in Córdoba, northern Colombia

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Abstract. We report *Coelosis biloba* for the rainforest of the buffer zone of Paramillo Natural National Park, south of Córdoba. The specimen was collected at night, in a mist net to catch bats. This represents a new location for the distribution of this species in Córdoba and the sixth record for the northern coast of Colombia. The few records of this species in northern Colombia compared to other regions of the country are due to lack of studies in biodiversity and the absence of entomological collections at universities on the Caribbean coast.

Key words. Scarabaeidae, rainforest, Paramillo Natural National Park

The genus *Coelosis* Hope is composed of seven species and is widely distributed in the new world (ENDRÖDI 1976). Two species have been reported in Colombia; *C. bicornis* (Leske, 1779) and *C. biloba* (Linnaeus, 1767) (SANABRIA et al. 2012). *Coelosis biloba* is the most widely distributed species in the genus, occurring from central México to southern Argentina (ENDRÖDI 1985; RATCLIFFE et al. 2013). The third instar larva and, male and female pupae were described from exemplars collected from Colombia and México (PARDO-LOCARNO et al. 2006). Adults are easy to collect in light traps, and may also be captured in both Malaise traps and flight interception traps (RATCLIFFE 2003). Larvae and adults have been found in the nest chambers of *Atta* sp. (MORÓN et al. 1997; PARDO-LOCARNO et al. 2006; RATCLIFFE et al. 2013). In the Brazilian Amazon, this species is associated with degraded ecosystems, agricultural areas, semi-humid ombrophilous forests, savannahs, and flooded areas (GASCA-ÁLVAREZ et al. 2008). In Colombia *C. biloba* has been collected from sea level to 2600 m elevation although most of the occurrences recorded are concentrated in the Andean region (SANABRIA et al. 2012). Records of *C. biloba* in Colombia are from localities in the departments of Amazonas, Arauca, Boyacá, Caquetá, Casanare, Cauca, Cundinamarca, Huila, Meta, Nariño, Putumayo, Risaralda, Santander, Tolima, Valle del Cauca and Magdalena (GASCA-ÁLVAREZ & AMAT-GARCÍA 2010; SANABRIA et al. 2012). Additional localities from the departments of Antioquia, Cesar, Chocó, Córdoba and Quindío are also recorded in a

study by PARDO-LOCARNO et al. (2006); however, specific collection data from these additional sites are not provided by the authors. Here we report a male of *C. biloba* for the rainforest of the buffer zone of Paramillo Natural National Park, northern Colombia and compiled records published by SANABRIA et al. (2012) and PARDO-LOCARNO et al. (2004) (Fig. 1).

The specimen was captured in a mist net in a nocturnal sampling session to capture bats in a tropical rainforest in the buffer zone in the Paramillo National Natural Park (upper basin of the Sinú River). The mist net was set at the border between a forest fragment and an open rice field. The locality data are: Colombia, Córdoba, Tierralta, Corregimiento Palmira, Vereda “La Plumilla”, Finca El Oriente, 08°03'12.5" N, 076°02'28.5" W, 20-V-2015. Bh-t., elevation 341 m, Y. Martínez collector (Fig. 1). The specimen is deposited in the zoological collection of the Universidad de Córdoba, Colombia (CZUC).

The species can be recognized by the mandibles tridentate, clypeus usually narrow with the apex bidentate, head of male with a horn and two pronotal projections, elytra with distinct rows of punctures and tridentate protibiae (GASCA-ÁLVAREZ & AMAT-GARCÍA 2010; SANABRIA et al. 2012) (Fig. 2). In Colombia two species, *C. biloba* and *C. bicornis*, have been recorded. *Coelosis biloba* can be distinguished from *C. bicornis* by its bifurcate dorsally flattened horn on the posterior half of the pronotum in males (SANABRIA et al. 2012).

The records of *C. biloba* for northern Colombia are scarce when compared to the number of records for the rest of the country. This new record complements the distribution of this species in Colombia and represents the sixth record for the north coast. The Caribbean region of Colombia is one of the least represented in the distribution of this species; only five localities in three of the seven departments that comprise it have been recorded. This region represents about 12% of the territory of Colombia and has elevations from sea level to 5775 m (HERNÁNDEZ 1992). This gradient includes the localities in which this species has been recorded (SANABRIA et al. 2012) and therefore records of this species in this area of the country could be more frequent. However, due to lack of studies in biodiversity in this region compared to others (i.e., Andean region) and the lack of organized zoological collections,

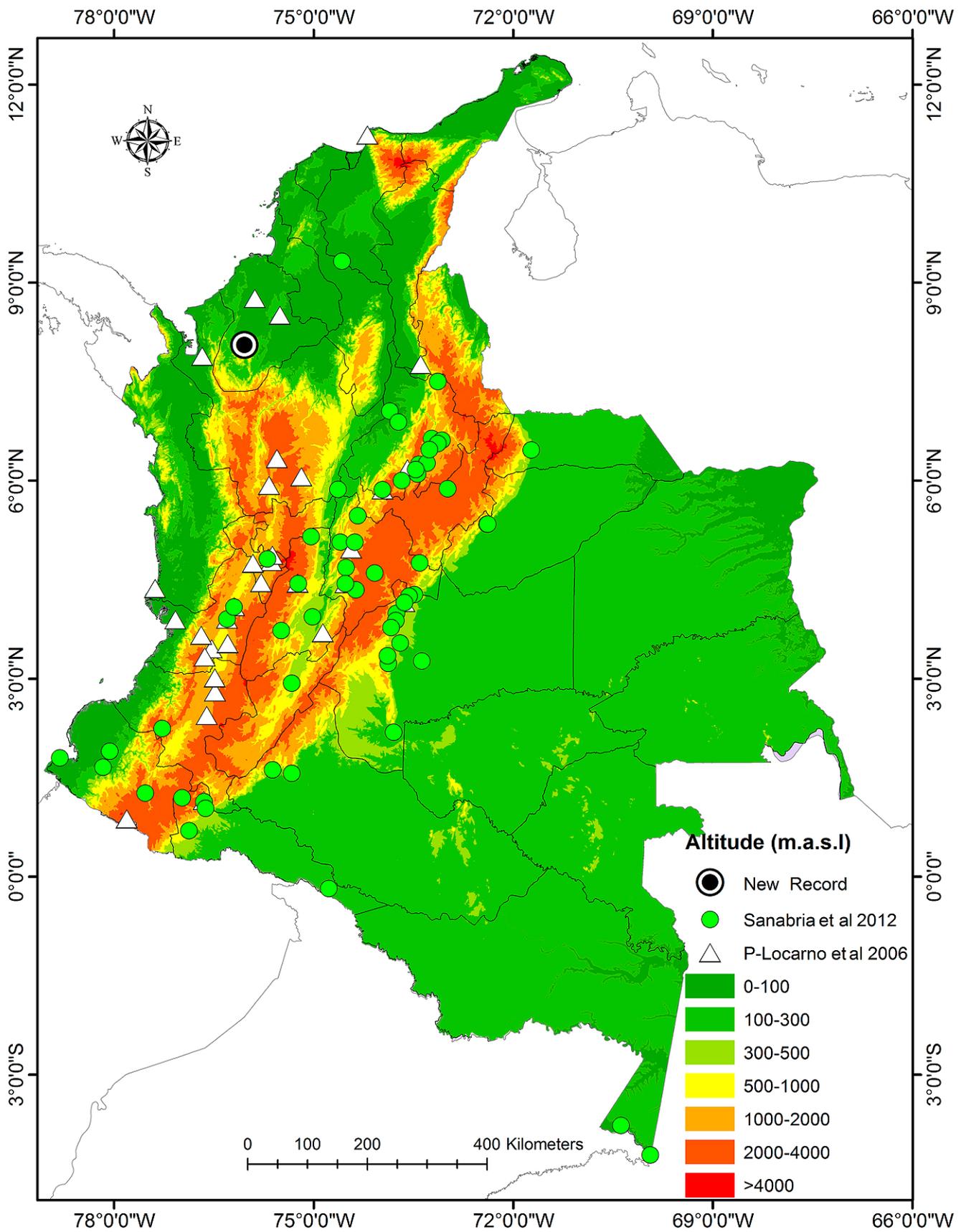


Figure 1. Distribution of *Coelosis biloba* in Colombia. Black dot surrounded by white = new record in Córdoba, northern Colombia; green dots = records compiled in SANABRIA et al. (2012); White triangles = records in PARDO-LOCARNO et al. (2006).



Figure 2. Male of *Coelosis biloba* from Córdoba, Colombia.

especially entomological, from the Colombian Caribbean in universities or other institutions have restricted the documentation of the distribution of many species of phytophagous beetles (Pleurosticti) in the north of the country. According PARDO-LOCARNO et al. (2006) in Córdoba *C. biloba* has been recorded in two municipalities of the middle basin of the Sinú River (MONTERÍA & PUEBLO NUEVO). No specific collection data are given for these records. Besides, these municipalities are in the dry tropical forest zone as classified by HOLDRIDGE (1967) as well as the other locations recorded for the Caribbean coast of Colombia. Here we report a male from a new locality and a new habitat (tropical rainforest) in the south of Córdoba. Greater efforts in other areas in Colombia other than the center of the country to minimize bias in the distribution of this and other Colombian species are required.

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