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SHORT COMMUNICATION

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On the geographic distribution of the caecilians *Caecilia goweri* and *Caecilia occidentalis*

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In the mid-1960s, Edward H. Taylor visited Colombia, hoping to examine the available caecilians (Amphibia: Gymnophonia) deposited at Museo La Salle (MLS), Universidad de La Salle, Bogotá, which, at the time, was the only herpetological collection in the country. During his visit, he was able to examine various Gymnophiona (*Caecilia*, *Microcaecilia*, *Oscaecilia*, *Siphonops* and *Typhlonectes*) to include them in his book 'The Caecilians of the World', published in 1968. Among the specimens that Taylor examined was a series (MLS 27, 45–46, 48–53) from Altiplano de Medellín, Antioquia, Colombia, that he identified as *Caecilia pachynema*, most likely based on colour pattern.

In 1998, the junior author undertook a taxonomic revision of the caecilians of Colombia, which required that he examined the material housed at MLS, which Taylor had studied during his brief stay in Bogotá. Prior to Lynch (2000), MLS 45 (Fig. 1) had been identified by Taylor as *C. pachynema*, but Lynch (2000) begged to differ, given its high counts of 179 primary grooves and 14 secondary grooves, which he considered to be diagnostic of *Caecilia occidentalis* instead. Thus, MLS 45 represented the first record of *C. occidentalis* from departamento Antioquia, and its distribution range was increased 428 km to the north (in a straight line), from Pance, Valle del Cauca (UVC 6567), to Yarumal, Antioquia. A re-examination of these caecilians led the senior author to re-consider the identification given by the junior author in 2000, and is now regarded as a conspecific of *Caecilia goweri*, (Fernández-Roldán & Lynch, 2021), and whose measurements and meristics are given in Table 1S (see Supplementary Material) along with those of the type series, which provides further insight into intraspecific variation.

Caecilia goweri (MLS 45) was examined under a Leica stereoscope using entomological pins to facilitate the counting of primary and secondary grooves. The total grooves count was made twice by the senior author in order to avoid miscalculation. A small incision to the commissure of the mouth was made in order to access dentition (i.e. the number of teeth per series), and all observed teeth were examined directly with the mouth opened. All dental counts were made clockwise from left to right postero-anteriorly; teeth that were not fully exposed outside the gums were not counted. A small, ventral longitudinal incision was made to search for sexual organs. All measurements were taken using a Neiko digital calliper rounded to the nearest 0.1 mm with the exception of total body length, which was determined using a measuring tape (in centimetres) and placed along the body length of the specimen.

Figure 1. General view of the body of *Caecilia goweri* (MLS 45) from Yarumal, Antioquia, Colombia

We identified MLS 45 as *C. goweri* because it has the following morphological characteristics, meristics, and measurements. An adult male with a total body length of 585 mm, body width of 6.2 mm at mid-body point, an attenuation index (i.e. length divided by width) of 94.3 times (the highest value known for the species), and in preservative (70 % ethanol) a mainly brown coloured body with a cream 'ventrolateral stripe' (see Fernández-Roldán & Lynch, 2021). This individual has 179 primary grooves and 14 secondary grooves, the last 12 fully encircled the posterior end of the body. Dentition and the number of teeth per series are arranged as follows: premaxillary-maxillaries 5-1-4, vomeropalatines 6-1-7, dentaries 8-8, and inner mandibulars 3-1. Dermal scales begin at the 37th primary groove and end at the last one, where these are circular in shape and thicker at the margin of inception with the pocket (Table 1S). Furthermore, this specimen (MLS 45) was collected in Yarumal, Antioquia at 1800 m a.s.l., in January 1963, not far from the previously known records of *C. goweri* (Fig. 2).

Caecilia occidentalis remains a poorly known species that has been found close to the towns of Moscopán and Popayán, in departamento del Cauca, (Pubenza Valley), and Pance, Valle del Cauca (i.e. on the eastern slopes of the Cordillera Occidental), from 1350–1800 m a.s.l. (Fig. 2). Recently, a photograph of a caecilian being eaten 'head first' by the coral snake *Micrurus mipartitus* was published by Vera-Pérez et al. (2019), depicting a black-ish caecilian - allegedly *C. occidentalis* - which would confirm Lynch's (2000)

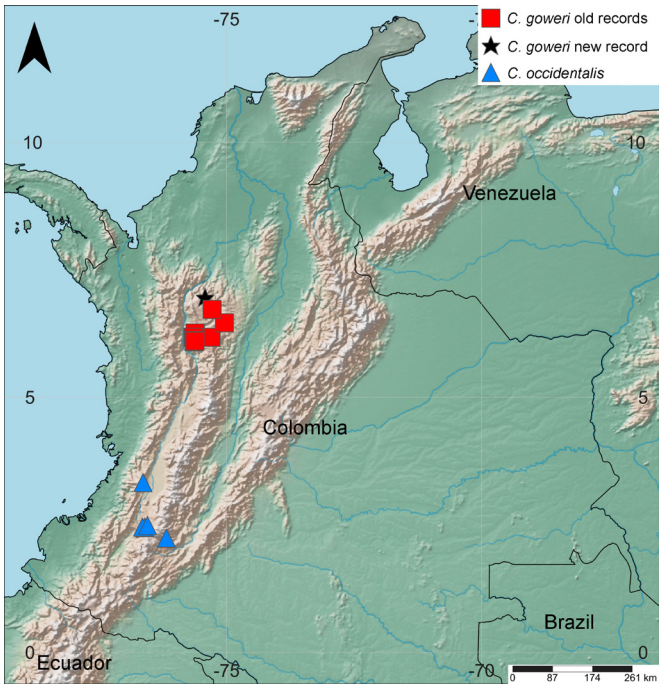

Figure 2. Map of Colombia showing the geographic distributions of *Caecilia goweri* (red squares), the new record of *C. goweri* from Yarumal (black star), and *C. occidentalis* (blue triangles)

observation of this species having a black colouration in life. Aside from a publication by Taylor (1969) commenting on the morphological variation, cranial osteology, and distribution of *C. occidentalis*, not much is left for us to report apart from the fact that three additional specimens (MHUC 93–95) - all from the town of Popayán (or from its surroundings) - are housed in the herpetological museum at Universidad del Cauca, Popayán, but only the most basics of meristics and measurements are available. Their primary grooves range from 186–201, their secondary grooves range from 2–7, their total length from 547–681 mm, and their attenuation index from 55–85 times.

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