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SHORT COMMUNICATION

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# First record of Peter´s caecilian *Epicrionops petersi* from Colombia

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On 31st March 2016 in Colombia, one of us (JPL) collected a specimen of the caecilian *Epicrionops petersi* Taylor 1968 (Fig. 1). This was found at about 1200 m a.s.l. at Serranía de La Concepción, Vereda Buenos Aíres, Mpio. Santa Rosa, Dpto. Cauca (01° 24'49.53" N, 76° 26'45.98" W; Fig. 2 & Supplementary Material Table S1) in the water of the El Borrachero stream (Fig. 3). This stream contained much decaying vegetation such as fallen trees and leaf litter; epiphytes were abundant on stones. The vegetation in the area is typical of the rainforest of the Colombian Andean-Amazonian foothills when in good condition. We deposited the specimen at the Amphibian Collection of the Instituto de Ciencias Naturales, Universidad Nacional de Colombia, Bogotá (ICN 55790).

**Figure 1.** Dorsal view in life of *Epicrionops petersi* (ICN 55790), from Serranía de La Concepción, eastern Andes of Colombia

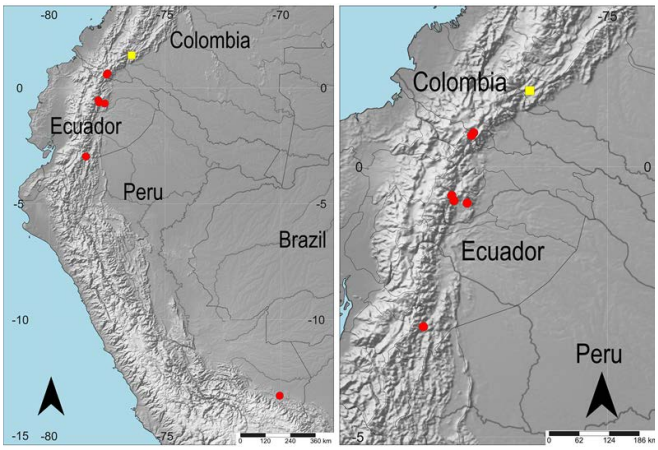


**Figure 2.** Known distribution of *Epicrionops petersi*: red circles - previous records, yellow square- new record in Colombia

**Figure 3.** Habitat and record location of *Epicrionops petersi* in a stream in the Colombian Andean-Amazonian foothills

The caecilian (ICN 55790) was examined under a Zeiss stereoscope using entomological pins to facilitate counting the numerous grooves found throughout the body. The total groove count was made twice by JDF and JDL in order to avoid miscounting. Dentition (i.e. the number of teeth per series) was examined directly with the mouth opened and all counts where made clock-wise from left to right postero-anteriorly; any teeth that were not fully exposed outside the gums were not counted. All meristic data was determined using a Neiko digital calliper rounded to the nearest 0.1 mm with the exception of total body length, which was measured to the nearest mm using a plastic ruler and straightening the body of the specimen.

Our detailed observation, compared with the data available from specimens of *E. petersi* from elsewhere, are presented in Supplementary Material (Table S2). Our specimen had a total body length of 205 mm, a body width of 8.9 mm at mid-body point, a length divided by width (i.e. attenuation index) of 23 times and a mainly dark grey body coloration in preservative (70 % ethanol) (Fig. 4). A total of 271 grooves are along the total body length of the specimen, the last 16 of which are 'postcloacals' that include 5 grooves interrupted by the vent plus 11 grooves posterior to the vent (Table S2). Dentition and the number of teeth per series are smaller than those indicated in the original description by Taylor (1968) but this

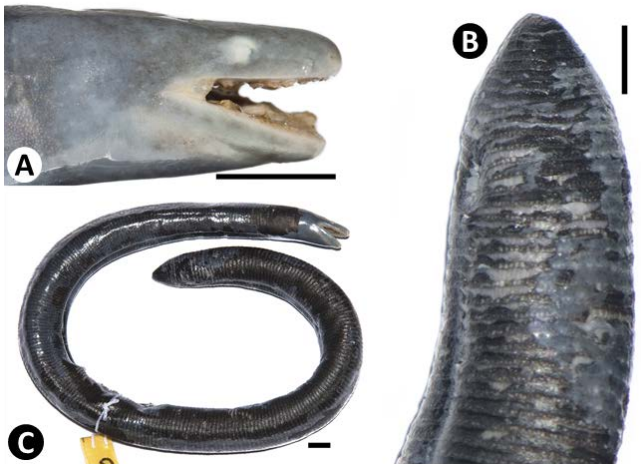


**Figure 4.** *Epicrionops petersi* from Serranía de La Concepción, eastern Andes of Colombia (ICN 55790)- **A.** Lateral view of the head, **B.** Lateral view of the tail, and **C.** General view of the specimen. Scale bars: 4 mm

is to be expected given that this is the smallest size individual known to date and some teeth are missing or concealed by the gums hence were not counted; premaxillary-maxillaries 12 left - 1 medial - 14 right, vomeropalatines 12-1-13, dentaries 10-1-11, and splenials 7-1-7. Taking into account that the meristic data of ICN 55790 falls well within the range provided by Taylor's (1968: 226) original description, we can confirm this is an individual of *Epicrionops petersi*. Before this new record, the caecilian genus *Epicrionops* was represented by three species in Colombia, namely *E. bicolor* Boulenger, 1883 (western Cordillera, also in Ecuador and Peru), *E. columbianus* (Rendahl & Vestergren, 1939) (endemic to the western Cordillera) and *E. parkeri* (Dunn, 1942) (endemic to the Central Cordillera) (Lynch, 2000; IUCN, 2021). This new record increases the number of Colombian caecilian species to 34 (Frost, 2021) and extends the distribution of *E. petersi* by over 150 km northward from the nearest previously known locality in the province of Sucumbios, Ecuador.

Taylor and Peters (1974) reported finding individuals of *E. petersi* in sympatry with *Caecilia orientalis* Taylor, 1968, which were found under a layer of thick moss and detritus growing on the surface of a fallen tree trunk inside a very humid forest where tree logs had fallen and had begun to rot. In 2018, GCP also found a specimen of *C. orientalis* (ICN 58444) in Serranía de la Concepción which suggests that these two species are sympatric and very closely associated along the Amazonian foothills of western Andes of Colombia and neighbouring provinces of Napo and Pastaza, Ecuador. The Andean-Amazonian foothills possess some of the greatest floral and faunal biodiversity in Colombia owing to their structural connectivity to the lowlands of the Amazon basin and Andean region, thus forming a mosaic of landscapes, vegetation and water resources. Consequently, the national government has declared three natural national parks: Serranía de los Churumbelos Auka Wasi NNP, Alto Fragua Indi Wasi NNP and Cueva de los Guacharos and the development of conservation programs and proper use of natural resources (Restrepo & Naranjo, 2007). Sadly, biological surveys and monitoring of amphibian populations have not taken place in these protected areas since their designation as such.

There is an urgent need to design and develop more effective ways to improve the detection of amphibians with fossorial and aquatic habits. This will generate more information about their natural history and increase the collection of voucher specimens that will help to resolve taxonomic uncertainties and identification difficulties (Gower & Wilkinson 2005).

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