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A new species of the catfish genus *Cordylancistrus* (Siluriformes, Loricariidae) from the Magdalena River, Tolima, Colombia

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Abstract

A new species of catfish is described from Colombia, and provisionally assigned to the genus *Cordylancistrus*. The new species is most similar to *C. perijae* and *C. nephelion* from Venezuela. The description is based on ten specimens collected from tributaries of the Magdalena River which drain the eastern slope of the Cordillera Central and the western slope of Cordillera Oriental, in the Department of Tolima. The new species is the first *Cordylancistrus* described from the Magdalena River basin. With this discovery, the number of *Cordylancistrus* species in Colombia increases to three. The geographic distribution of the species suggest that Andean orogenesis played an important role in the diversification of the group.

Key words: Fishes, Catfishes, Taxonomy, Biodiversity, South America

Resumen

Se describe una nueva especie de bagre para Colombia, y provisionalmente, se asigna al género *Cordylancistrus*. La nueva especie es más similar a *C. perijae* y *C. nephelion* de Venezuela. La descripción se basa en diez ejemplares colectados en afluentes del río Magdalena, que drenan la vertiente oriental de la Cordillera Central y la vertiente occidental de la Cordillera Oriental, en el Departamento de Tolima. La nueva especie es el primer *Cordylancistrus* descrito para la cuenca del río Magdalena. Con este hallazgo, el número de especies de *Cordylancistrus*, en Colombia, aumenta a tres. La distribución geográfica de las especies sugiere que la orogenia andina jugó un papel importante en la diversificación del grupo.

Introduction

This article presents the description of a new species, provisionally assigned to the genus *Cordylancistrus*. Species that were originally assigned to the genus *Cordylancistrus* inhabit mountain rivers in Venezuela, Colombia and Ecuador (Isbrücker, 1980; Perez & Provenzano, 1996; Provenzano & Milani, 2006; Tan & Armbruster, 2012). Three species are present in Venezuela: *C. torbesensis* (Schultz, 1944), type species of the genus, Orinoco River basin, *C. perijae* Perez & Provenzano, 1996, Maracaibo Lake basin, and *C. nephelion* Provenzano & Milani, 2006, Caribbean Sea basin. Two species are known from Colombia, *C. daguae* (Eigenmann, 1912), Pacific slope of the Cordillera Occidental, and *C. platyrhynchus* (Fowler, 1943) from the Amazon River basin, Atlantic slope of the Cordillera Oriental. *Cordylancistrus platyrhynchus* was transferred to the genus *Chaetostoma* (Armbruster, 2004). Ecuador had two described species, but recently, Lujan, Meza-Vargas & Barriga-Salazar (2015) proposed two new genera *Andeancistrus* and *Transancistrus* for these species. *Cordylancistrus platycephalus* (Boulenger, 1898), from the Amazon River basin, is now *Andeancistrus platycephalus*, and *Cordylancistrus santarosensis* Tan & Armbruster, 2012, from the Pacific slope, is now *Transancistrus santarosensis*. Lujan, Meza-Vargas & Barriga-Salazar (2015) also assign to *Transancistrus*, the species *Chaetostoma aequinoctiale* Pellegrin, 1909, from the

Pacific slope, and describe a new species *Andeancistrus eschwartzae*, from the Amazon River basin. These results elevate to four the number of species in Ecuador, and to eight or nine the total of species known.

No diagnostic characters have been proposed to define *Cordylancistrus*, and available phylogenetic studies indicate that species assigned to *Cordylancistrus* are polyphyletic. But on the other hand, species belonging to the genera *Andeancistrus*, *Chaetostoma* (including the genera *Lipopterichthys* and *Loraxichthys*), *Cordylancistrus*, *Dolichancistrus*, *Leptoancistrus* and *Transancistrus*, form a well-supported clade, the *Chaetostoma* group (Armbruster, 2004, 2008) or *Chaetostoma* Clade (Lujan *et al.*, 2015a, b). The external morphology of some species of *Cordylancistrus* seems to indicate they are more related to each other than with other species included in *Chaetostoma* group. We agree with Armbruster (2004, 2008) and with Lujan *et al.* (2015a, b), that a comprehensive phylogenetic analysis that includes all species of *Andeancistrus*, *Cordylancistrus*, *Dolichancistrus*, *Leptoancistrus* and *Transancistrus* is needed to establish the status of each genus adequately. In the meantime, and for our diagnosis and comparative analysis, we used the nine species listed above.

Materials and methods

Specimens used in comparisons are listed in material examined. Morphometric and meristic comparisons with other species included in the *Chaetostoma* group were made based on the data available in the literature and specimens at our hand. Measurements were made point to point with dial calipers to the nearest 0.1 mm. Counts and measurements were made on the left side of specimens whenever possible. Standard length is expressed in mm. All other measurements are expressed as percents of standard length. Measurements follow Boeseman (1968), Perez & Provenzano (1996) and Provenzano & Milani (2006). Sex was identified via characters in Rapp Py-Daniel (1991), Ballen (2011) and Lujan, *et al.* (2015b) so that sexually dimorphic characters could be determined. Institutional abbreviations are as listed in Sabaj (2016).

Results

Cordylancistrus pijao, new species

Figure 1, 2 Tables 1, 2

Holotype. CZUT-IC 1292, 114.8 mm SL, Colombia, Departamento de Tolima, Municipio Villarrica, Vereda La Arcadia, Magdalena River basin, Prado River system, Quebrada Aguas Blancas at its mouth in the Cuinde Blanco River, 03°55'29.6"N 74°36'40.8"W, 950 m asl, L.J. García-Melo, 13 November 2004.

Paratypes. All from Colombia. Departamento de Tolima, Magdalena River basin: CZUT-IC 1660, 53.2 mm SL, same data as the holotype. CZUT-IC 1723, 1 C&S, 84.4 mm SL, same data as the holotype. MBUCV-V-32974, 117.6 mm SL, same data as the holotype. CZUT-IC 3999, 41.3 mm SL, Municipio Mariquita, Vereda Flor Azul, Quebrada Aguasal tributary of the Gualí River, 05°12'26.5"N 74°59'0.3"W, F. A. Villa-Navarro and N. Oviedo, 08 April 2010. CZUT-IC 5174, 141.0 mm SL, Municipio San Antonio, Vereda Pringamosal, Saldaña River system, Cucuana River, 04°01'32.7"N 75°28'17.4"W, L. J. García-Melo and N. Oviedo, 18 February 2011. CZUT-IC 7278, 2 ex. 115.9–151.6 mm SL, Municipio San Antonio, Saldaña River system, Cucuana River downstream of the Vereda Florida, 04°02'20.6"N 75°26'29.5"W, 1200 m asl, Y. López Pinto, June 2008. MBUCV-V-35677, 122.8 mm SL, Municipio San Antonio, Vereda Florida Baja, Saldaña River system, Cucuana River, Y. López Pinto, 20 July 2008. MBUCV-V-35678, 147.5 mm SL, Municipio Roncesvalles, Vereda Pringamosal, Saldaña River system, Cucuana River, under the hanging bridge, 04°01'33.1"N 75°28'17.1"W, Y. López Pinto, 01 June 2008.

Diagnosis. *Cordylancistrus pijao* n. sp. lacks a unique distinctive character for accurate identification. Between its congeners is distinguished from *Cordylancistrus torbesensis* by an absence of plates on the ventral border of the snout (*vs.* ventral border of the snout covered with plates), and by the longest movable odontodes not reaching the pectoral-fin origin (*vs.* longest movable odontodes extending beyond the pectoral-fin origin); from *C. platyrhynchus* by the presence of developed and evident evertibles cheek odontodes (*vs.* odontodes vestigial or almost imperceptible); from *C. daguae* by having the adpressed dorsal fin not reaching adipose-fin origin (*vs.* adpressed dorsal fin reaching adipose-fin origin), and by having a greater postdorsal length (26.8%–31.2% SL *vs.* 34.6%–39.8% SL; see Table 2); from *C. nephelion* and *C. perijae* by having a different color pattern: *C. pijao* has

the dorsal and lateral sections of head and body light brown or beige with rounded or elongated dark (black) blotches, sometimes faded or barely visible, without a definite pattern while *C. nephelion* has the dorsal and lateral sections of the head and body blackish to greenish brown with numerous white irregular spots and *C. perijae* has the dorsal surface of head and body uniformly brown. It is distinguished from *Andeancistrus platycephalus* by the absence of spiny keels on the lateral plates of the body (*vs.* lateral plates with spiny keels); from *A. eschwartzae* by the snout covered with bony plates, except at the tip (*vs.* snout completely covered with plates), by a longer posterior body region, narrower body, and shorter dentary (postdorsal length 34.6%–39.8% SL *vs.* 31.3%–34.9% SL; cleithral width 30.3%–37.7% SL *vs.* 37.4%–40.8% SL, dentary length 8.4%–10.2% SL *vs.* 11.6%–12.8% SL; see Table 2); from *Transancistrus santarosensis* and *T. aequinoctiale* by the snout covered with bony plates, except at the tip (*vs.* lateral edges and partial dorsal region of the snout naked).



FIGURE 1. *Cordylancistrus pijao*, CZUT-IC 1292, holotype, 114.8 mm SL.

Description. Morphometric data given in Table 1. Body robust and deep. Caudal peduncle compressed and high. Dorsal profile of body from tip of snout through dorsal-fin origin slightly convex, then gradually descending straight to caudal-fin origin. Ventral profile of body flat and straight. Caudal peduncle with five longitudinal rows of bony plates. Ventral edges of the caudal peduncle slightly angular. Head broad and slightly depressed. In dorsal view, the outline of the head is rounded. Bony plates of body sides without spiny keels. Lateral line bony plates 24–25. Postanal plates 9–10. Interdorsal plates 4–5, the last with slight keel. Ventral surface of head and abdomen naked to anal-fin origin. Urogenital papilla present, located posterior the anus, shows different shape according sex. Snout covered with small bony plates, except tip, larger specimens have naked strip with odontodes on snout edge. Nostrils juxtaposed and closer to eyes than tip of snout. The anterior nostril easy visible but posterior partially covered with flap of skin. Eyes small, located dorsolaterally. Orbits ringed with very small odontodes. Interorbital space flat or gently convex. Posterior edge of supraoccipital without fleshy keel. Interopercular region with visible rosette of numerous hypertrophied evertible odontodes. Area anterior to hypertrophied cheek odontodes not covered by bone plates. Hypertrophied cheek odontodes straight with curved tip, 27–39, increase in number with size; longest, most posterior hypertrophied odontodes do not reach pectoral-fin origin. Mouth wide. Lip surfaces papillose. Papillae of upper lip slightly larger. Posterior lip edge with evident undulations, border of each undulation irregular. Maxillary barbel very short, almost two thirds of length attached to lower lip by fleshy fold. Distal third of the maxillary barbel free. Premaxilla and dentary very wide, almost of same size. Inside mouth, behind teeth, slight fleshy projections present. Numerous teeth, 64–147 teeth in premaxilla and 82–170 teeth in dentary, increase in number with size; teeth thin and elongated, with curved tips towards inside the mouth. Teeth bicuspid with lobes more or less equal; and shovel-shape like. Cusp of each tooth bright yellow, base white.

All fins are well developed. The fin spines (or first ossified unbranched ray of each fin) and branched rays supporting odontodes, in some cases of appreciable size. Dorsal fin i,8. Depressed dorsal fin does not reach adipose-fin origin. In small specimens, dorsal-fin spinelet visible and covered with small odontodes. In large specimens, spinelet often covered by soft tissue. Anal fin with ii,4. The second unbranched ray of the anal fin is attached to the first, and is slightly longer. Caudal fin i,14,i. Its posterior border is obliquely truncated. Pectoral fin i,6. Pectoral-fin spine reaches one third of pelvic spine length. Pelvic fin i,5. Largest specimen >150 mm TL, which is among the largest species of *Chaetostoma* group.

TABLE 1. Morphometric data of *Cordylancistrus pijao*, in % of standard length, n=10.

	Holotype	Average	STD	Min	Max
SL (mm)	114.8			41.3	151.6
Head length	31.5	33.3	1.8	31.3	35.8
Predorsal length	44.3	44.8	1.3	43.1	47.3
Postdorsal length	36.8	36.5	1.7	34.6	39.8
Interdorsal length	16.3	16.4	1.0	14.6	17.9
Preanal length	68.1	70.3	2.1	68.0	74.7
Postanal length	29.3	27.9	0.8	26.9	29.3
Thoracic length	24.8	24.3	1.2	22.0	25.9
Abdominal length	22.3	22.8	1.0	21.3	24.5
Dorsal fin base	22.3	23.2	1.3	21.3	24.9
Dorsal spine length	19.4	21.2	1.8	18.7	23.6
Pectoral spine length	30.6	30.5	4.3	23.0	34.9
Pelvic spine length	22.6	22.7	1.2	21.6	24.7
Cleithral width	33.3	34.8	2.5	30.3	37.7
Caudal peduncle depth	11.0	11.3	0.8	9.5	12.4
Head depth	16.4	17.3	0.7	16.4	18.9
Snout length	21.4	22.8	0.7	21.4	24.0
Interorbital width	8.6	10.2	0.7	8.6	10.8
Orbital diameter	3.1	3.4	0.4	2.7	3.9
Mandibular ramus length	9.7	9.4	0.6	8.4	10.2

Sexual Dimorphism. In large specimens (> 120.0 mm SL) differences in morphology of urogenital papilla, related to sex easy to observe. In females, urogenital papilla present as small fleshy cylinder with truncate end. In males, urogenital papilla present as small fleshy cone with pointed tip. Nuptial male with developed odontodes on snout edge and on spine and first two or three branched rays of pectoral-fin. These odontodes arranged in longitudinal rows, located on dorsal surface. Longest odontodes on distal end of pectoral spine. Also, spine of pelvic-fin with fleshy fold on posterodorsal surface that runs almost its entire length. First three or four branched rays of pelvic-fin with rows of developed odontodes, very similar to that described for pectoral fin. Females have some developed odontodes on spine and first two or three branched rays of pectoral-fin. Differences of urogenital papilla are permanent, but it is unknown if differences of pectoral and pelvic fins are temporary or permanent.

Color. Dorsal and lateral regions of head and body light brown or beige with irregular dark black blotches, sometimes faded or barely visible, without a definite pattern. In larger specimens, blotches seem organized in irregular longitudinal rows. Belly and ventral regions of head whitish. Surface posterior to anus, with same color as dorsal and lateral areas, but lighter. Ventral region of head and body without spots. All fin rays clear yellowish or brown with dark black bands or stripes. Interradial membranes hyaline. Dorsal-fin with four bands; distal edge of dorsal fin without pigment. Pectoral-fin with five to eight bands. Pelvic-fin with four or five bands. Bands observed on supporting elements of pectoral and pelvic fins visible ventrally. Anal fin with two diffuse bands. Caudal-fin with four to five bands. Distal edge of the caudal-fin translucent. In live specimen, fins have reddish tone (Fig. 2).

Geographical distribution. The localities where the specimens of *Co. pijao* were captured include: Cuinde Blanco River, a tributary of the Cunday River, which in turn drains to the Prado River, and the Gualí and Cucuana rivers, which drain to the Saldaña River. All localities are within the Magdalena River basin. The first location is on the western slope of the Eastern Cordillera of Colombia and the last two localities are on the eastern slope of the Cordillera Central (Figure 3).



FIGURE 2. *Cordylancistrus pijao*. Live specimen (Photo by Yesid López-Pinto)

Etymology. The name “pijao” is treated as a noun in apposition and refers to the native indigenous people, symbol of the Tolima department, who preferred to die rather than submit to Spanish monarchy.

Ecological notes. The quebrada Aguas Blancas has a gravel and sand bottom, and in the area of its mouth in the Cuinde Blanco River has mainly moderate-sized rocks that allow the formation of small backwaters. The average temperature is 18° C, with a slightly basic pH (8.1) and moderate conductivity (192.8 µS). The area is characterized by the presence grazing zones and small coffee farms. The original forests have been felled, and zones at different stages of secondary succession are found. At the stream’s mouth, it is possible to observe some large trees (common name caracolí) and some shrubs.

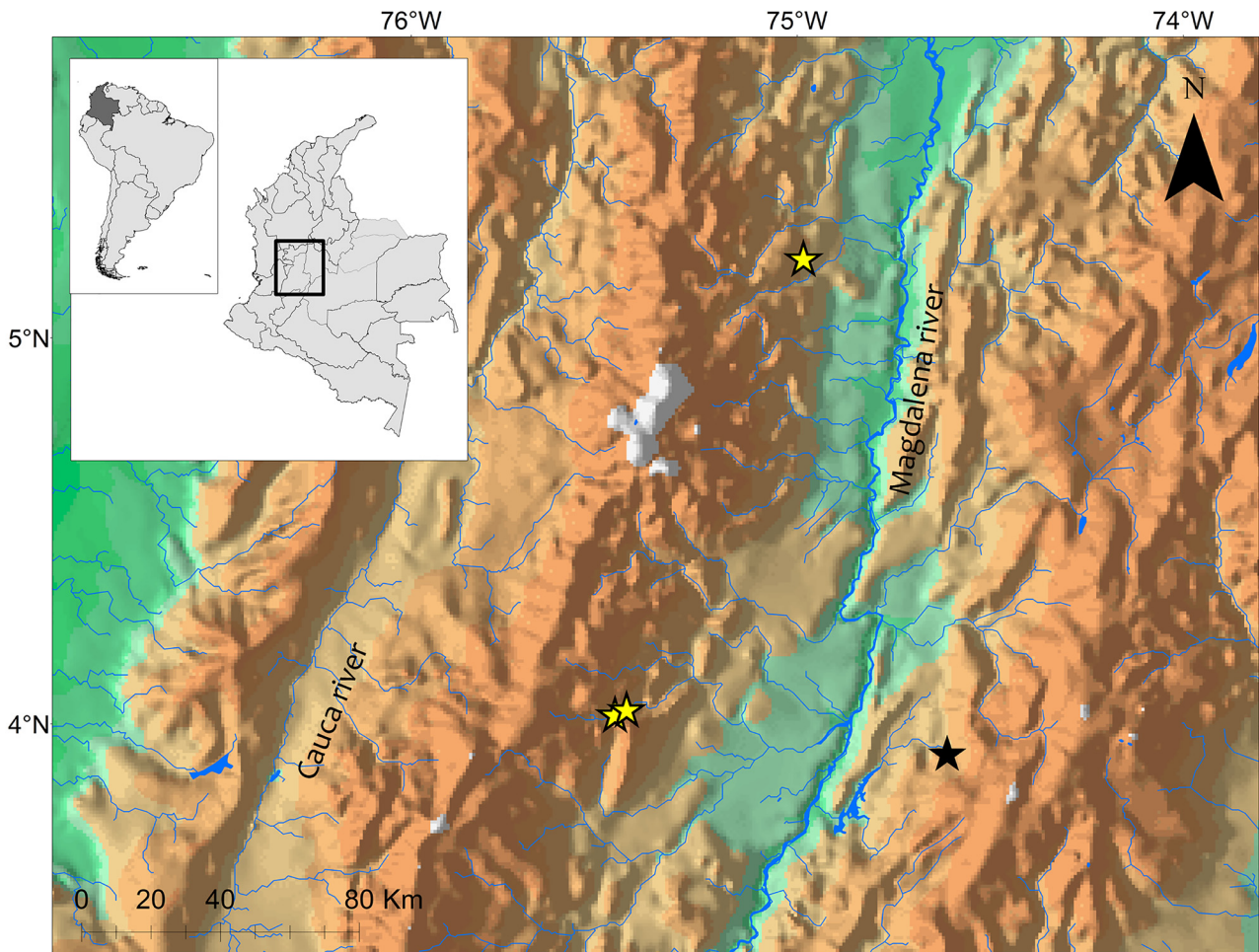


FIGURE 3. Map of Colombia showing the capture localities of *Cordylancistrus pijao*, black star type locality, yellow stars other localities.

Discussion

The external characters and morphology of *C. pijao* unambiguously indicate that the species belongs within the *Chaetostoma* group; dorsal-fin with eight branched rays, dentary very wide, equal or greater than interorbital distance and belly naked. Inside the *Chaetostoma* group, is more similar to some species of *Cordylancistrus*; snout is covered with plates vs. naked snout, in species of *Chaetostoma* and *Transancistrus*; adipose and anal fins present vs. adipose and anal fins absent, in species of *Leptoancistrus*; longest movable cheek odontode no reaching pectoral-fin origin and pectoral-fin spine relatively short, no passing half of length of pelvic-fin spine vs. longest movable cheek odontode passing pectoral-fin origin and pectoral-fin spine relatively long, reaching end of pelvic-fin spine, in species of *Dolichancistrus*. It has some similarities to *Andeancistrus* species, but lacks keels on body side plates vs. keels on body side plates present in *A. platycephalus*, and has significant differences in morphometrics with *A. eschwartzae* (Table 2). Morphologically, *C. pijao* most resembles *C. daguae*, *C. nephelion* and *C. perijae*, but exhibits clear differences with *C. torbesensis* (type species of the genus), and *C. platyrhynchus* as described in the diagnosis. In fact, almost all the species placed in *Cordylancistrus* show differences with *C. torbesensis* and *C. platyrhynchus*. Despite the uncertain status of *Cordylancistrus* (Armbruster, 2004, 2008; Lujan *et al.*, 2015a, b) we consider it most appropriate to tentatively place this new species in *Cordylancistrus*, until an analysis that includes all the species included in it is completed. One of the diagnostic characters of *Andeancistrus* is its lack of cheek odontodes that extend past the opercular flap (Lujan, Meza-Vargas & Barriga-Salazar, 2015). But, *C. daguae*, *C. nephelion*, *C. perijae* and *C. pijao* also lack cheek odontodes that extend past the opercular flap. Between species assigned to *Cordylancistrus*, only *C. torbesensis* has cheek odontodes that extend past the

opercular flap. This character also occurs in species included in *Dolichancistrus* and *Leptoancistrus* (Meek & Hildebrand, 1916; Dahl, 1964; Isbrücker 1980), suggesting that the type species of the genus *Cordylancistrus* is in fact more related to species of the genera *Dolichancistrus* and *Leptoancistrus*, as observed in proposed phylogenetic hypotheses (Armbruster, 2004, 2008; Lujan *et al.*, 2015a, b).

The combination of morphological characters (presence of clearly movable odontodes at the cheek region, and a more robust or deeper body, see Table 2) make it easy to differentiate *C. pijao* from its congeners within Colombia. The geographic distributions of the three species of *Cordylancistrus* that inhabit in Colombia, (*C. daguae* - Pacific versant, *C. pijao* - Magdalena valley, and *C. platyrhynchus* - Amazonas River basin) show that the diversification of the genus is likely related to the evolution of the Andes Mountains of Colombia. This is the first record of a species of *Cordylancistrus* within the Magdalena River basin, but descriptions of one or two more new species from the basin are being prepared.

TABLE 2. Comparative morphometric data in % of standard length, from some species of *Andeancistrus* and *Cordylancistrus*.

	<i>A. platycephalus</i> n=8		<i>A. eschwartzae</i> n=10		<i>C. daguae</i> n=9		<i>C. perijae</i> n=9		<i>C. nephelion</i> n=7		<i>C. pijao</i> n=10	
	Min	Max.	Min	Max.	Min	Max.	Min	Max.	Min	Max.	Min	Max.
Standard length (mm)	75.0	115.4	82.2	141.5	32.3	88.3	33.4	127.3	31.1	129.1	41.3	151.6
Head length	34.4	37.5	34.8	37.6	32.0	38.1	35.9	39.4	34.3	41.2	31.3	35.8
Predorsal length	45.4	50.6	44.3	49.0	44.2	49.3	47.9	51.7	42.9	46.6	43.1	47.3
Postdorsal length	29.4	35.4	31.3	34.9	26.8	31.2	31.9	35.0	35.0	37.7	34.6	39.8
Interdorsal length	12.6	15.5	12.0	15.9	9.2	13.1	14.4	17.8	10.1	15.3	14.6	17.9
Preanal length	68.4	72.8	69.8	72.7	69.6	76.2	68.9	73.4	64.1	69.5	68.0	74.7
Postanal length	22.0	28.6	25.7	28.6	22.5	26.2	23.3	31.5	28.4	35.1	26.9	29.3
Thoracic length	21.5	27.3	22.1	27.5	21.0	26.1	19.8	24.7	20.6	23.4	22.0	25.9
Abdominal length	20.4	23.4	21.1	24.4	21.7	26.1	21.0	23.7	19.6	24.0	21.3	24.5
Dorsal fin base	23.8	26.8	22.8	27.9	23.1	27.0	22.5	25.7	18.5	22.5	21.3	24.9
Dorsal spine length	20.7	25.0	18.4	23.1	18.5	23.5	22.2	25.1	21.3	25.5	18.7	23.6
Pectoral spine length	24.4	29.3	25.7	30.9	24.5	34.1	24.6	36.5	24.8	33.0	23.0	34.9
Pelvic spine length	18.8	21.8	17.4	21.6	20.4	25.8	21.4	24.1	25.0	27.3	21.6	24.7
Cleithral width	35.7	39.3	37.4	40.8	32.5	37.9	34.0	40.8	32.8	36.2	30.3	37.7
Caudal peduncle depth	9.8	11.9	11.1	12.3	9.9	11.8	9.6	11.5	12.5	14.6	9.5	12.4
Head depth	16.5	20.0	17.6	19.8	14.6	17.7	17.4	19.0	17.2	20.2	16.4	18.9
Snout length	23.3	26.2	23.7	26.2	20.8	24.7	24.0	27.3	23.1	25.0	21.4	24.0
Interorbital width	9.1	10.3	8.6	9.9	9.8	13.2	9.8	11.1	9.6	11.3	8.6	10.8
Orbital diameter	3.9	4.9	3.9	5.1	3.8	5.2	4.1	6.3	4.8	6.4	2.7	3.9
Mandibular ramus length	11.1	12.5	11.6	12.8	8.1	10.4	10.0	13.0	9.6	11.1	8.4	10.2

Material examined

Andeancistrus eschwartzae: MEPN-11196, 15 ex., 82.2–141.5 mm SL, Ecuador, Morona Santiago Province, Río Amundal afluente del río Palora, approx. 01°44'45"S 78°02'58" W, N. Lujan, D. Taphorn & R. Barriga, 08 September 2012.

Andeancistrus platycephalus: ANSP-153645, 2 ex., 86.6–115.4 mm SL, Ecuador (S.E.), Chiguaza River, Cutucu mountain, elevation 1075 m, R. M. Peck, 18 June 1984. FMNH-97429, 1 ex., 90.1 mm SL, Ecuador, Zamora-Chinchipec, Zamora River system, Quebrada Tunantza, approx. 04°0'30"S, 78°53'05"W, R. Barriga, M. Ibarra, Lema, 15 March 1979. MEPN-11418, 6 ex., 75.4–96.5 mm SL, Ecuador, Morona Santiago Province, Río

Yungantza near Limón community, approx. 02°58'27"S, 78°26'49"W, D. Taphorn, N. Lujan & R. Barriga, 04 September 2012. MEPN-18597, 3 ex., 109.8–133.5 mm SL, Ecuador, Zamora Province, Rio Blanco, in front house of Andrade family, approx. 03°48'04"S, 78°33'59"W, R. Barriga, J. Sharupe & J. Sandoval, 07 October 2008.

Chaetostomus platycephalus: BMNH-1898.11.4.42, Holotype, 110.3 mm SL, Ecuador (eastern), Bomboiza River, upper Amazon River basin.

Cordylancistrus daguae: IMCN-1285, 3 ex., 66.0–88.3 mm SL, Colombia, Departamento del Valle, Aguacalara River, near the confluence with Anchicayá River, A. Ortega-Lara, 14 July 2002.

Cordylancistrus nephelion: MBUCV-V-21800, Holotype, 129.1 mm SL, Venezuela, Miranda State, Caribbean Sea basin, Tuy River system, Mesia River, tributary of the Guare River, near Village Corocito, approx. 10°10'N, 67°05'W, N. Padilla & H. Camejo, 26 January 1992. MBUCV-V-27872, Paratype, 61.0 mm SL; Venezuela, Caribbean Sea basin, Miranda State, Tuy River system, Mesia River, near El Salado, approx. 10°12'N, 67°03'W, N. Padilla & H. Camejo, 29 May 1994.

Cordylancistrus perijae: MBUCV-V-21747, 7 ex., Paratypes, 32.4–121.3 mm SL, Venezuela, Zulia state, Maracaibo Lake basin, Sierra de Perijá, Caño Colorado, tributary to the Palmar River, 100 meters from the dam site (under construction), approx. 10°37'12"N 72°25'34"W, elevation 150 m, C. Casler, J. Toledo & W. Villalobos, 11 July 1989.

Cordylancistrus platyrhynchus: MBUCV-V-32672, 4 ex., 48.8–67.7 mm SL, Colombia, Putumayo, Mocoa, Sangoyaco River, J. Maldonado, 06 Mar. 2005. IAVH-5252, 1 ex., 74.0 mm SL, Colombia, Putumayo, Mocoa River, Finca La Cascada, J. Maldonado, 07 March 2005.

Cordylancistrus santarosensis MECN-DP-2061, Holotype, 70.8 mm SL: Ecuador, El Oro Province, Santa Rosa River, Limón, Playas, approx. 03°34'10"S, 79°56'34.5"W, Windsor Aguirre, 09 Jul. 2008.

Cordylancistrus torbesensis MBUCV-V-29430 (ex. MCNG-8066), 1 ex., 57.4 mm SL, Venezuela, Táchira State, Torbes River, 5 km before Táriba, approx. 07°50'N 72°10'W, D. Taphorn & C. Lilyestron, 27 May 1982. MBUCV-V-29432 (ex. MCNG-43287), 5 ex., 27.9–67.9 mm SL, Venezuela, Táchira State, Quinimari River, before confluence into Torbes River, approx. 07°37'N 72°10'W, S. Usma & L. Vasquez, 02 November 1999.

Hemiancistrus daguae: FMNH-56052, Holotype, 60.4 mm SL, Colombia, Caldas. FMNH-56053, Paratypes, 3 ex., 32.3–75.8 mm SL, Colombia, Caldas. FMNH-56054, Paratypes 2 ex., 33.6–65.9 mm SL, Colombia, Caldas.

Hemiancistrus platyrhynchus: ANSP-70512, Holotype, 70.7 mm SL, Colombia, Florencia, Ortegusa River basin, Brother Niceforo Maria, 1931. ANSP 70513, Paratype, 67.75 mm SL, Colombia, Florencia, Ortegusa River basin, Brother Niceforo Maria, 1931. MBUCV-V-18376 (ex. ANSP-84570), 3 ex. 37.4–56.1 mm SL, Colombia, Brother Niceforo Maria, 1931.

Pseudancistrus torbesensis: MBUCV-V-18374 (ex. USNM-121002), 5 Paratypes, 23.8–51.8 mm SL, Venezuela, Táchira State, Orinoco River basin, Apure River system, Torbes River, 1 kilometer above Táriba, tributary to Uribante River, approx. 07°50'N 72°20'W, L. P. Schultz, 31 Mar. 1942.

Transancistrus aequinoctiale: MEPN-8805, 3 ex., 79.1–84.1 mm SL, Ecuador, Imbabura Province, Aguas Claras, Altos del Río Guayllabamba, approx. 00°14'05"N 78°48'50"W, M. Olalla, Sep. 1961. MEPN-18600, 3 ex., 83.4–112.7 mm SL, Ecuador, Pichincha Province, Río Pachijal afluente del Guayllabamba, approx. 00°01'10" N 78°47'12" W, M. Olalla, Aug. 1969.

Transancistrus santarosensis: MEPN-11220, 4 ex., 26.3–52.0 mm SL, Ecuador, El Oro Province, Santa Rosa River, near Bado, approx. 03°33'31"S, 79°56'48"W, N. Lujan, D. Taphorn & R. Barriga, 29 Aug. 2012. MBUCV-V-35694, 4 ex. 62.5–94.6 mm SL, Ecuador, Bolívar Province, Guayas River basin, Vinces River system, Caluma river, near Guaranda, Without additional data.

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