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A new species of *Bryconops* (Characiformes: Iguanodectidae) from Atlantic coastal drainages of Suriname and French Guiana

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A new species of *Bryconops* is described based on its unique caudal-fin color pattern, with a dark blotch occupying the mid-basal region of the caudal-fin dorsal lobe, and a combination of 29–32 branched anal-fin rays, 44–47 perforated scales in the lateral line, six rows of scales above the lateral line, and a deep body (30.3–31.7 % SL). The new species belongs to the subgenus *Bryconops* based on its edentulous and short maxilla, with the posterior extension of that bone not reaching the junction between the second and third infraorbitals. The new species was previously reported in the literature as *B. caudomaculatus*. However, these species differ from each other in morphometric and meristic characters, as well as in color pattern. Comments on distribution of *Bryconops* species in coastal drainages of Suriname and French Guiana additional support for biogeographic hypotheses in this area.

Keywords: *Bryconops caudomaculatus*, *Bryconops melanurus*, Caudal-fin blotch, Maroni River, Taxonomy.

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Uma nova espécie de *Bryconops* é descrita com base no colorido único da nadadeira caudal, com uma mancha escura ocupando a região médio-basal do lobo superior da nadadeira caudal, e uma combinação de 29–32 raios ramificados na nadadeira anal, 44–47 escamas perfuradas na linha lateral, seis séries de escamas acima da linha lateral e corpo alto (30,3–31,7 % CP). A nova espécie pertence ao subgênero *Bryconops* com base na maxila edêntula e curta, com extensão posterior deste osso não atingindo a junção entre segundo e terceiro infraorbitais. A nova espécie foi reportada anteriormente na literatura como *B. caudomaculatus*. Contudo, essas espécies diferem uma da outra em caracteres merísticos e morfométricos, bem como no padrão de coloração. Comentários sobre a distribuição das espécies de *Bryconops* em drenagens costeiras do Suriname e Guiana Francesa fornecem suporte adicional para as hipóteses biogeográficas nesta área.

Palavras-chave: *Bryconops caudomaculatus*, *Bryconops melanurus*, Mancha da nadadeira caudal, Rio Maroni, Taxonomia.

INTRODUCTION

Bryconops Kner, 1858 is the most diverse genus of the characiform family Iguanodectidae with 27 valid species (Silva-Oliveira *et al*., 2020). Species of *Bryconops* are distributed throughout the cis-Andean river basins of South America such as the Orinoco, Amazon (including Tocantins-Araguaia), Paraguay, and São Francisco, as well as smaller Atlantic coastal drainages from Venezuela to the Parnaíba River in Brazil (van der Sleen, Moreira, 2018; Silva-Oliveira, 2020; Fricke *et al*., 2021). Though interspecific relationships within *Bryconops* remain unclear, species are currently grouped into two subgenera: *Bryconops* and *Creatochanes* (see Chernoff, Machado-Allison, 1999).

Much progress has been made on the alpha taxonomy of *Bryconops* in recent years. Machado-Allison *et al.* (1993) reviewed species occurring mainly in the Orinoco basin. Their work facilitated a series of subsequent species descriptions such as: *Bryconops humeralis* Machado-Allison, Chernoff & Buckup, 1996; *B. vibex* Machado-Allison, Chernoff & Buckup, 1996; *B. colaroja* Chernoff & Machado-Allison, 1999; *B. colanegra* Chernoff & Machado-Allison, 1999; *B. imitator* Chernoff & Machado-Allison, 2002; *B. collettei* Chernoff & Machado-Allison, 2005, and *B. magoi* Chernoff & Machado-Allison, 2005.

In the Amazon basin, nine species of *Bryconops* have been described in the past decade. Wingert, Malabarba (2011) described *Bryconops piracolina* from the rio Madeira basin; *B. munduruku* was described from the lower rio Tapajós (Silva-Oliveira *et al*., 2015), and *B. tocantinensis* from the upper rio Tocantins (Guedes *et al*., 2016). In 2018, two new species were described, *B. chernoffi* from the rio Maicurú (Silva-Oliveira *et al*., 2018), and *B. sapezal* from the upper rio Tapajós (Wingert *et al*., 2018). Finally, in the past two years four new species were discovered: *Bryconops allisoni* from the lower rio Tapajós (Silva-Oliveira *et al*., 2019a), *B. rheoruber* from the rio Xingu (Silva-Oliveira *et al*., 2019b), *B. hexalepis* (Guedes *et al*., 2019) from the upper rio Tocantins, and *B. marabaixo* from the rio Jarí (Silva-Oliveira *et al*., 2020).

Despite this progress, species-level diversity within the genus *Bryconops* remains underestimated. In his unpublished doctoral dissertation, Silva-Oliveira (2020) conducted a comprehensive taxonomic review of *Bryconops* and recognized more than a dozen undescribed species inhabiting cis-Andean basins. During the examination of extensive material of *Bryconops*, the senior author identified an undescribed species from Maroni River basin, the Atlantic coastal drainage separating Suriname from French Guiana and considered to be part of Greater Amazonia comprised by the Orinoco, Amazonas and Guianas drainages (*sensu* van der Sleen, Albert, 2018). Thus, the goal of this paper is to describe this new species.

MATERIAL AND METHODS

Counts and measurements were taken on the left side of each specimen using a digital caliper to the nearest 0.1 mm. Methodology followed Fink, Weitzman (1974) and Silva-Oliveira *et al.* (2019a,b). Measurements are expressed as percentages of standard length (SL), with the exception of subunits of the head, which are expressed as percentages of head length (HL).

Counts of vertebrae, supraneurals, pterygiophores, procurrent caudal-fin rays, gill rakers on the first branchial arch, and branchiostegal rays were taken from cleared and stained (c&s) specimens, prepared according to Taylor, Van Dyke (1985), and from X-rays using a Faxitron® LX-60 cabinet. The total number of vertebrae included the Weberian apparatus counted as four elements; and preural centrum 1 plus ural centrum 1 (PU1+U1) counted as a single vertebral element.

In the description, each count is followed by its frequency in parentheses and an asterisk denotes the value for the holotype for variable counts. In the list of comparative material examined, museum abbreviations and catalog numbers are followed by the total number of specimens in each lot, range of standard length, and collecting data. The map was generated using QGis 2.4.0 Chugiak©. Museum abbreviations follow Sabaj (2020).

RESULTS

Bryconops florenceae, new species

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(Figs. 1–2; Tab. 1)

Bryconops caudomaculatus. —Planquette *et al*., 1996:266–67 [photos; in part, specimens from Maroni, Mana and Sinnamary rivers, French Guiana]. —Papa *et al*., 2021:09 [mentioned in fig. 3; photo in BOLD data base].

Holotype. ANSP 207355, 94.5 mm SL. Suriname, Sipalawini, Litanie River at mouth

and confluence with Maroni River, just upstream from settlement of Konya Kondre, 03°17'24"N 54°04'38"W, 21 Apr 2007, J. Lundberg, M. Sabaj, P. Willink, K. Wan & J. Mol.

Paratypes. All from Suriname. ANSP 188700, 33, 80.7–94.7 mm SL; INPA 59652, 9, 79.5–90.2 mm SL, 1 c&s; NZCS 7099, 5, 80.9–93.5 mm SL; collected with the holotype. ANSP 189282, 1, 37.5 mm SL, Sipalawini, Lawa River, large cataract complex, *ca*. 8 km south-southwest of Anapaike, 03°19'52"N 54°4'20" W, 21–24 Apr 2007, J. Lundberg, M. Sabaj, P. Willink, K. Wan & J. Mol.

Diagnosis. *Bryconops florenceae* differs from all congeners by having its caudal-fin coloration dominated by an isolated, dark blotch occupying the sub-basal portion of the dorsal lobe, leaving the distal portion comparatively pale (*vs.* isolated blotch absent or restricted to the distal portion of dorsal lobe in *B. rheoruber*). The new species is further distinguished from its congeners, except *Bryconops alburnoides* Kner, 1858, *B. allisoni*, *B. caudomaculatus* (Günther, 1864), *B. chernoffi*, *B. collettei*, *B. disruptus* Machado-Allison & Chernoff, 1997, *B. durbinae* (Eigenmann, 1908), B. gracilis (Eigenmann, 1908), *B. magoi*, *B. hexalepis*, *B. imitator*, *B. marabaixo*, *B. piracolina*, *B. rheoruber*, and *B. tocantinensis* by having the posterior extension of the maxilla not reaching the junction of the second and third infraorbital bones (*vs.* reaching that junction). *Bryconops florenceae* can be diagnosed from the aforementioned species, except *B. alburnoides*, *B. collettei*, *B. gracilis*, and *B. magoi*, by having 29–32 branched anal-fin rays (*vs.* 18–28). Finally, *Bryconops florenceae* differs from *B. alburnoides*, *B. gracilis*, *B. collettei*, and *B. magoi* by having a deeper body, 30.3–31.7% SL (*vs.* 18.4–25.7% SL). Additionally, it can be distinguished from *B. alburnoides* and *B. gracilis* by possessing 44–47 perforated scales in the lateral line (*vs*. 54–62), and from *B. collettei* and *B. magoi* by having six (rarely 7) series of scales above the lateral line (*vs*. 7–, rarely 8).

Description. Morphometric data presented in Tab. 1. Body compressed, greatest body depth located just anterior to dorsal-fin origin. Dorsal body profile slightly convex from margin of upper lip to end of supraoccipital spine, then slanted posterodorsally to dorsal-fin origin; straight and posteroventrally inclined along dorsal-fin base, slightly convex from end of dorsal-fin base to adipose-fin base, and slightly concave from latter point to anterior dorsal procurrent caudal-fin rays. Ventral profile of head and body convex from lower lip to pelvic-fin origin, then straight to slightly convex from latter point to anal-fin origin and straight, rising more sharply along anal-fin base. Ventral profile of caudal peduncle slightly concave.

Mouth terminal. Posterior extension of maxilla not reaching junction between second and third infraorbital bones, with distal tip finishing near vertical through anterior margin of pupil. Supraorbital bone present, not reaching sixth infraorbital posteriorly. Premaxillary teeth in two rows (Fig. 2), with central cusp more developed than lateral cusps. Outer tooth row not aligned, with 4(1) or 5(9) tri- to pentacuspid teeth; inner tooth row with 5(10) penta- to heptacuspid teeth. Maxilla edentulous (10). Dentary with 5*(7) or 6(4) tri-, penta-, or heptacuspid teeth, followed by 7–10 smaller, conical teeth (Fig. 2).

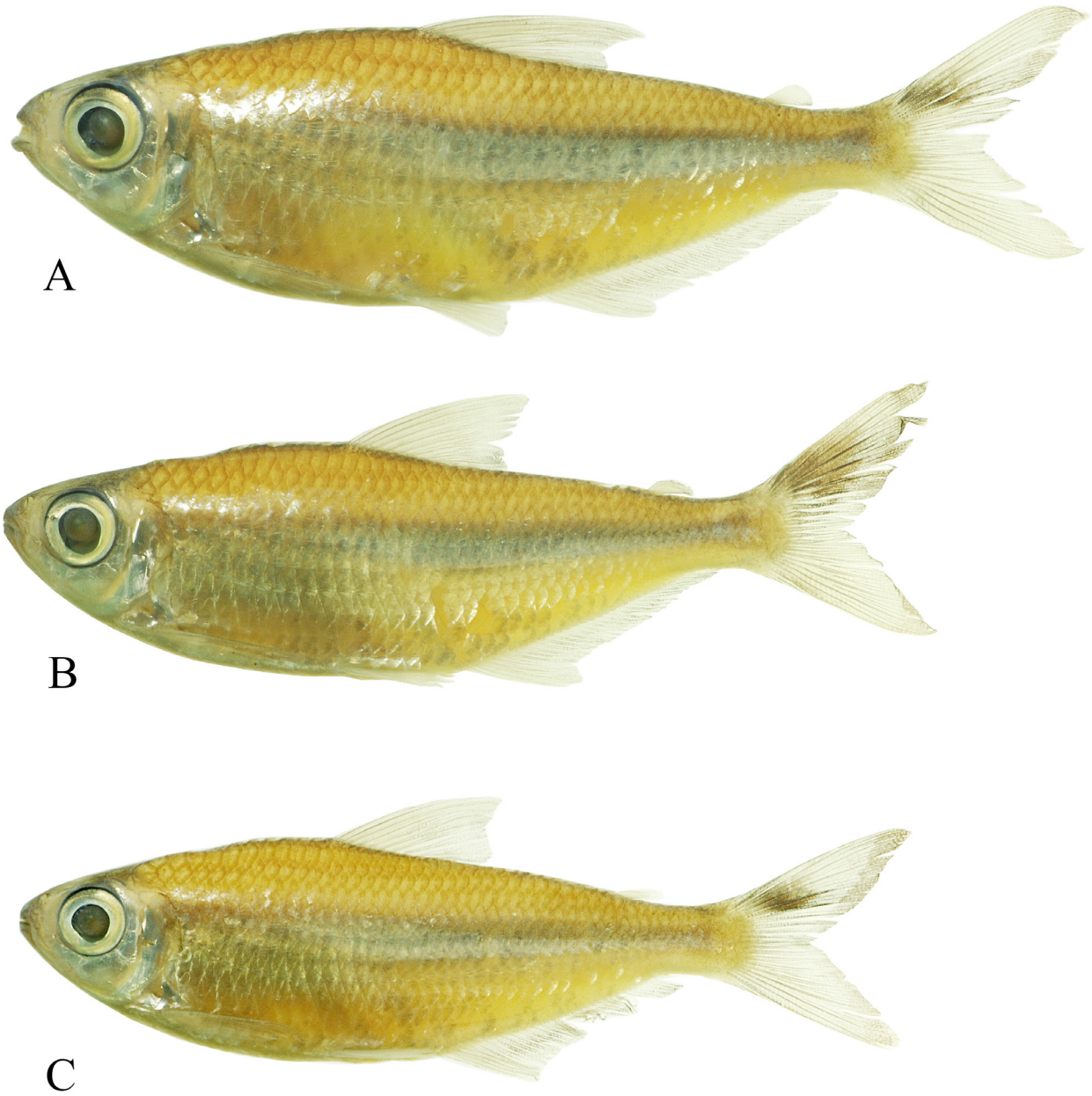

FIGURE 1 | *Bryconops florenceae*: **A.** ANSP 207355, 94.5mm SL, holotype; **B.** INPA 59652, 85.2 mm SL, paratype; **C.** INPA 59652, 80.5 mm SL, paratype. Litanie River, near confluence with Maroni River, Sipalawini, Suriname.

FIGURE 2 | *Bryconops florenceae*: INPA 59652, 85.20 mm SL (c&s), paratype. Left side lateral view of upper and lower jaws. Scale bar = 1 mm.

Dorsal-fin rays ii,9*(10); first unbranched ray about one-half length of second unbranched ray. Dorsal-fin origin situated on vertical through pelvic-fin origin, near middle of body. Posterior margin of dorsal fin straight to slightly concave. Adipose-fin origin approximately at vertical through base of 25th or 26th branched anal-fin ray. Pectoral-fin tip nearly reaching vertical through dorsal-fin origin. Pelvic-fin rays i,7(10). Pelvic-fin origin aligned with dorsal-fin origin. Pelvic-fin tip not reaching anal-fin origin. Anal-fin rays iv, 29(1), 30*(5), 31(3) or 32(1). Anal-fin origin posterior to vertical through base of last dorsal-fin ray. Distal margin of anal fin gently concave with last simple ray and second and third branched rays slightly longer than others. Principal caudal-fin rays 8+9*(10). Caudal fin forked; ventral lobe scarcely longer than dorsal. Dorsal procurrent caudal-fin rays 11(2) or 12*(3); ventral procurrent caudal-fin rays 11(2) or 12*(3).

Scales cycloid, with few (5–7) well-marked *radii*; *circuli* only present anteriorly. Total number of scales in longitudinal series containing lateral-line scales 44(1), 45*(2), 46(6) or 47(1). Scale rows between lateral line and dorsal-fin origin 6*(9) or 7(1); scale rows between lateral line and pelvic-fin origin 3*(9) or 4(1). Predorsal scales 11*(8) or 12(2) in a regular series. Scale rows around caudal peduncle 14(9) or 15(1). Precaudal vertebrae 17*(2) or 18(3); caudal vertebrae 23(3) or 24*(2); total vertebrae 41*(5). Supraneurals 6*(5). First dorsal-fin pterygiophore located between 10th and 11th or 11th and 12th vertebrae.

Gill rakers on first gill arch 18(1): 2(1) on hypobranchial, 8(1) on ceratobranchial, 1(1) on cartilage between ceratobranchial and epibranchial, and 7(1) on epibranchial.

TABLE 1 | Morphometric data of the holotype and nine paratypes of *Bryconops florenceae*. Values of holotype (H) included in the ranges and means. SD = standard deviation.

	H	Range	Mean	SD
Standard length (mm)	94.5	79.5–94.5	85.2	–
Percents of standard length				
Snout to dorsal-fin origin	48.1	45.7–48.1	46.8	0.8
Snout to anal-fin origin	64.7	61.4–65.1	63.1	1.4
Snout to pelvic-fin origin	49.8	46.0–49.8	47.8	1.3
Pelvic-fin length	12.2	12.2–16.1	14.8	1.3
Snout to pectoral-fin origin	25.7	24.0–26.0	24.9	0.7
Pectoral-fin length	20.5	19.4–21.7	20.5	0.7
Dorsal-fin base length	15.0	13.4–15.0	14.2	0.6
Depth at dorsal-fin origin	31.7	30.3–31.7	31.1	0.4
Dorsal-fin terminus- adipose origin	27.3	26.2–28.6	27.5	0.8
Dorsal-fin origin- adipose origin	41.3	40.3–42.5	41.3	0.8
Adipose terminus to hypural plate	13.1	12.6–14.3	13.6	0.6
Anal-fin base length	34.0	32.3–34.5	33.3	0.8
Caudal-peduncle length	9.6	9.6–12.8	11.1	1.1
Caudal-peduncle depth	9.2	8.7–9.3	9.1	0.2
Head length	24.3	22.3–24.3	23.5	0.7
Maxillary length	12.1	11.3–12.2	11.5	0.3
Snout length	6.6	5.7–6.6	6.0	0.3
Horizontal orbit diameter	10.6	9.7–10.8	10.4	0.3
Percents of head length				
Maxillary length	50.0	47.2–50.5	48.9	1.2
Snout length	26.9	23.8–28.0	25.7	1.7
Horizontal orbit diameter	43.4	43.4–45.0	44.3	0.7
Tip of snout to tip of supraoccipital	94.7	94.0–96.9	94.9	1.0
Posterior margin of orbit to end of opercle	32.6	30.2–32.6	31.5	0.9

Gill rakers setiform. Branchiostegal rays 4(1): 3(1) on anterior ceratohyal and 1(1) on posterior ceratohyal.

Coloration in alcohol. Overall color of body yellowish tan. Snout, dorsal region of head, anterior portions of dentary, maxillary, and sixth infraorbital bone dusky with scattered melanophores. Infraorbital bones 1–5, posteromedial portion of maxillary,

opercle and gular region whitish to yellowish, with few scattered melanophores. Humeral blotch absent. Dusky midlateral stripe evident from immediately posterior to dorsal portion of opercle to caudal-fin base; stripe overlaid with silvery iridescence that becomes slightly more conspicuous posteriorly from vertical through dorsal fin. Scales on dorsal and dorsolateral portions of body with melanophores concentrated along posterior margin, forming a slightly reticulate pattern overall. Ventrolateral scales with scattered melanophores, not forming reticulate pattern. Dorsal, adipose, pectoral, pelvic and anal fins hyaline with few scattered melanophores. Caudal fin with dark melanophores outlining rays and their branches; dorsal lobe conspicuously darker with higher concentration of melanophores forming a black, sub-basal blotch on dorsalmost rays (Fig. 1).

Coloration in life. Based on photo presented in Planquette *et al*. (1996:267), body silvery, becoming tan dorsally. Opercle, infraorbital bones, eye, posteromedial region of maxilla and ventral region of head silvery. Dorsal and adipose fins tinted with reddish orange. Pectoral, pelvic and anal fins pale. Caudal fin with small, reddish-orange patch at base of dorsal lobe, proximal to black blotch; both lobes with narrow dark distal margin.

Sexual dimorphism. Mature males of *Bryconops florenceae* possess bony hooks on pelvic- and anal-fin rays. Pelvic-fin rays with 3–4 small hooks. Anal-fin hooks larger and more numerous (4–8 per ray), present from 3rd unbranched ray to 15th branched ray and gradually decreasing in size and number from anterior to posterior. Planquette *et al.* (1996:266) similarly noted the presence of numerous anal-fin ray hooks in males. The specimens we examined were collected in April, which may represent the breeding season for this species in the upper Maroni Basin. It is unknown whether the hooks are permanent or regress after this period.

Etymology. The species is named in honor of Florence de Rapleye Foerderer (1926–1999) whose will granted $7 million each to The Academy of Natural Sciences of Philadelphia, The Philadelphia Zoo and Gallaudet University, a liberal arts college for deaf and hard-of-hearing students. Florence held a great love for animals and her generous bequest continued the Foerderer family's long history of civic involvement and philanthropy in the Philadelphia area (Schmidt, 2001). A patronym.

Conservation status. *Bryconops florenceae* is a widely distributed species in the Maroni, Mana and Sinnamary river basins (see Planquette *et al*., 1996), with an Extent of Occurrence (EOO) of approximately 25,000 km^2, based on the distribution map provided by Planquete *et al*. (1996) and the sampling sites of the type-series. Furthermore, no threats were found that would put it at risk in the near future. Thus, we suggest that *Bryconops florenceae* be classified as Least Concern (LC), according to the International Union for Conservation of Nature (IUCN) categories and criteria (IUCN Standards and Petitions Subcommittee, 2019).

Geographical distribution. *Bryconops florenceae* is known from the Maroni River basin in Suriname and French Guiana (Fig. 3). Planquette *et al.* (1996:266–67) also noted its presence in the Mana and Sinnamary rivers. They commented that the species

frequents areas of rapid current with rocky bottoms in the main channel of the river, such as the collection locality depicted in Fig. 4.

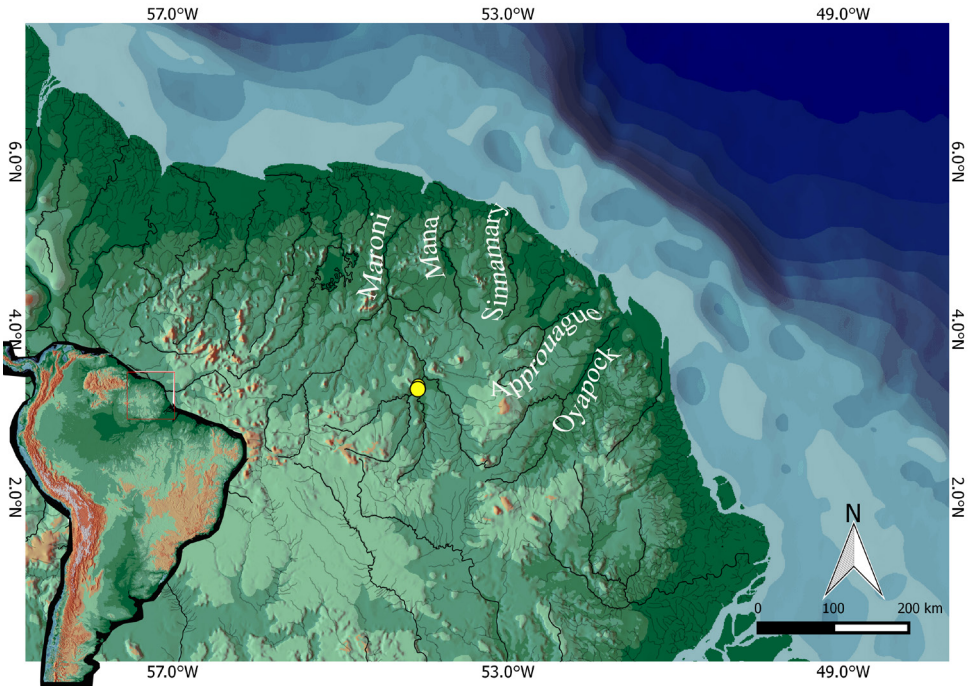

FIGURE 3 | Map of northeastern South America, showing distribution of *Bryconops florenceae*.

FIGURE 4 | Type locality of *Bryconops florenceae*, Litanie River at mouth and confluence with Maroni River, Sipalawini, Suriname.

DISCUSSION

Bryconops florenceae belongs to the subgenus *Bryconops* (*sensu* Chernoff, Machado-Allison, 1999, 2005) based on its possession of a short maxilla with posterior extension not reaching the junction between the second and third infraorbitals; edentulous maxilla; and gill rakers with reduced ossification and denticulation. Among all congeners of the subgenus *Bryconop*s, the new species shares with *B. collettei*, *B. magoi*, *B. alburnoides*, and *B. gracilis* a relatively high number of branched anal-fin rays (see Diagnosis). Among those species, *B. alburnoides* and *B. gracilis* are readily distinguished by having 54–62 lateral-line scales (*vs*. 43–49 in *B. collettei*, *B. florenceae* and *B. magoi*) and 15–17 predorsal scales (*vs.* <15 for other species). The new species is readily separated from *B. collettei* and *B. magoi* by its caudal-fin color pattern comprised of a dark blotch restricted to the mid-basal region of the dorsal lobe (*vs*. scattered melanophores not forming a blotch). Finally, *B. florenceae* is distinguished from all the aforementioned species by having a deeper body, 30.3–31.7% SL (*vs.* 18.4–25.7% SL).

Bryconops florenceae has been recorded in the literature as *Bryconops caudomaculatus* (*e.g*., Planquette *et al*., 1996; Papa *et al*., 2021). Both species share the characters that define the subgenus *Bryconops*, but the new species is separated from *B. caudomaculatus* by having 43–49 perforated scales in the lateral line (*vs*. 38–42), and 29–32 branched anal-fin rays (*vs*. 25–28). Both species also share possession of a basal blotch on the dorsal caudal-fin lobe that is colorful (yellow to red) in life and pale (hyaline) in preservative. This blotch is commonly referred to as an "ocellus" in *Bryconops* literature (*e.g*., Chernoff, Machado-Allison, 1999, 2005; Wingert, Malabarba, 2011; Guedes *et al*., 2016). In cichlids, the term "ocellus" refers to a dark circular blotch surrounded by a lighter area, thereby resembling the eye of a fish (*e.g*., Kullander, Ferreira, 2006). To avoid confusion with the ocellus of cichlids, we refrain from using this term in *Bryconops*.

In their atlas of freshwater fishes of French Guiana, Planquette *et al.* (1996) recognized four nominal species: *Bryconops affinis* (Günther, 1864), *B. caudomaculatus*, *B. cyrtogaster* (Norman, 1926), and *B. melanurus* (Bloch, 1794). They divided *B. caudomaculatus* into two forms with the nominal one distributed in the Maroni, Mana, and Sinnamary rivers; and the another, *Bryconops* aff. *caudomaculatus*, found further east in the Approuague and Oyapock rivers. Based on specimens from the Maroni Basin, our study confirms the distinctiveness of the western form as a new species, *B. florenceae*. Populations from the Mana and Sinnamary basins are likely conspecific based on the observations of Planquette *et al.* (1996) and other studies have shown a biogeographic link between those basins and the Maroni (Cardoso, Montoya-Burgos, 2009; Fisch-Muller *et al*., 2018). Based on specimens analyzed from the Oyapock river, *B. florenceae* is absent from this basin. The *Bryconops* aff. *caudomaculatus* of Planquette *et al*. (1996) remains under investigation.

In their study of the diversity and distribution patters of Amazonian fishes, Dagosta, de Pinna (2017) recognized the Oyapock as a distinct basin and grouped its western neighbor, the Approuague with the Maroni basin further west. The distribution patterns of *Bryconops melanurus* (Approuague west to Maroni; Silva-Oliveira, 2020) and *B. cyrtogaster* (Oyapock) support their hypothesis. In contrast, a number of previous studies (*e.g*., Boujard *et al*., 1990a,b; Renno *et al*., 1990; Géry *et al*., 1991; Planquette *et al*., 1996; Cardoso, Montoya-Burgos, 2009; Fisch-Muller *et al*., 2018) identified a bipartition

in the fish faunas between eastern French Guiana (*e.g.*, Approuague and Oyapock) and western French Guiana (*e.g.*, Mana and Maroni). The distribution patterns of *B. florenceae* and *Bryconops* aff. *caudomaculatus* (*sensu* Planquette *et al.*, 1996) support this latter hypothesis. Lemopoulos, Covain (2019) found a similar bipartition and considered the small coastal drainages between the Mana and Approuague (*e.g.*, Kourou, Iracoubo and Sinnamary rivers) to represent a third biogeographical region they called Central French Guiana. Further studies of *Bryconops* inhabiting the coastal drainages of French Guiana may help resolve such questions.

Comparative material examined. *Bryconops affinis*: **Guyana:** BMNH 1969.12.13.1, holotype. ZUEC 6557, 10, 69.0–95.0 mm SL. *Bryconops alburnoides*: **Brazil:** NMW 5994, 89.0 mm SL, syntype. INPA 12316, 1, 107.5 mm SL. INPA 30701, 1, 145.7 mm SL. INPA 37794, 1, 81.1 mm SL. INPA 36079, 6, 112.3–115.1 mm SL. MZUSP 17586, 7, 92.9–119.0 mm SL. MZUSP 72877, 1, 124.7 mm SL. ZUEC 9836, 1, 49.5 mm SL. ZUEC 12563, 1, 123.6 mm SL. ZUEC 13388, 1, 84.9 mm SL. *Bryconops allisoni*: **Brazil:** INPA 56754, 72.5 mm SL, holotype. INPA 56755, 15, 27.6–68.6 mm SL, paratypes. *Bryconops caudomaculatus*: **South America:** BMNH 1852.9.13.74, 54.5 mm SL, holotype. **Brazil:** INPA 14301, 5, 61.5–66.0 mm SL. MZUSP 107705, 3, 62.0–68.0 mm SL. **Venezuela:** ANSP 190936, 16, 36.3–53.1 mm SL. ANSP 159756, 31, 50.0–79.1 mm SL. ANSP 159768, 100, 54.0–67.5 mm SL. *Bryconops chernoffi*: **Brazil:** ZUEC 14796, 59.6 mm SL, holotype. INPA 56753, 5, 39.9–69.1 mm SL, paratypes. *Bryconops colanegra*: **Brazil:** INPA 10699, 4, 95.9–105.8 mm SL. LBP 21170, 42, 31.6–94.7 mm SL. *Bryconops colaroja*: **Venezuela:** ANSP 168005, 10 of 43, 21.3–31.6 mm SL, paratypes. *Bryconops cyrtogaster*: **French Guiana:** BMNH 1926.515–524, 10, 48.0–48.5 mm SL, syntypes. *Bryconops disruptus*: **Brazil:** INPA 42819, 14, 30.9–48.6 mm SL. *Bryconops durbinae*: **Brazil:** UFOPA 337, 109, 18.2–61.0 mm SL. *Bryconops giacopinii*: **Brazil:** INPA 32636, 7, 57.1–67.7 mm SL. MZUSP 92299, 1, 111.3 mm SL. MZUSP 112372, 2, 24.4–67.5 mm SL. *Bryconops hexalepis*: **Brazil:** INPA 11240, 10, 71.5–76.7 mm SL. *Bryconops humeralis*: **Venezuela:** ANSP 159752, 10 of 60, 35.9–48.6 mm SL, paratypes. **Brazil:** INPA 19638, 3, 49.8–66.3 mm SL. INPA 19634, 6, 53.8–83.5 mm SL. INPA 19636, 7, 31.3–79.6 mm SL. MZUSP 99439, 1, 94.9 mm SL. *Bryconops inpai*: **Brazil:** INPA 13249, 3, 63.2–72.9 mm SL. INPA 29524, 1, 66.7 mm SL. *Bryconops magoi*: **Venezuela:** ANSP 190886, 5, 79.7–80.9 mm SL. *Bryconops marabaixo*: **Brazil:** MZUSP 125767, 61.7 mm SL, holotype. MZUSP 101562, 5, 50.4–60.9 mm SL, paratypes. *Bryconops melanurus*: **Suriname:** ANSP 189268, 41.8–76.3 mm SL. ANSP 188687, 21, 27.8–65.9 mm SL. *Bryconops munduruku*: **Brazil:** INPA 46510, 76.6 mm SL, holotype. MCP 48315, 5, 34.0–79.6 mm SL, paratypes. *Bryconops piracolina*: **Brazil:** MZUSP 105731, 2, 32.9–40.1 mm SL, paratypes. MCP 44796, 69.0 mm SL, holotype. UFRO 22726, 69, 24.2–59.9 mm SL. UFRO 22731, 64, 29.0–70.1 mm SL. *Bryconops sapezal*: **Brazil:** UFRO-I 022680, 20 of 60, 55.6–65.4 mm SL. *Bryconops rheoruber*: **Brazil:** INPA 57879, 49.7 mm SL, hotype. INPA 47456, 24, 46.1–54.9 mm SL, paratypes. *Bryconops tocantinensis*: **Brazil:** MCP 49199, 53.7 mm SL, holotype. MNRJ 44220, 20, 28.8–53.9 mm SL, paratypes. *Bryconops transitorius*: **Guyana:** NMW 68532, 4, 57.1–79.2 mm SL, syntypes.

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