Description of a new species of *Laetacara* Kullander, 1986 from central Brazil and re-description of *Laetacara dorsigera* (Heckel, 1840) (Labroidei: Cichlidae: Cichlasomatinae)

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> Abstract

A new species of *Laetacara* is described from the rio Verde, rio Araguaia basin, São Miguel do Araguaia, Goiás, Brazil; *L. dorsigera* is re-described. The new species from the rio Verde, rio Araguaia differs from all the species of the genus by its low dorsal-fin ray number. It is distinguished from *L. thayeri* by the presence of a caudal-fin peduncle spot and by the presence of cycloid scales on side of head. The new species also differs from *L. fulvipinnis* and *L. flavilabris* by some meristic characters. It differs from *L. dorsigera* by a narrow ectopterygoid and by some meristic characters, and from *L. curviceps* and *L. dorsigera* by the lack of a spot on dorsal fin. *Laetacara dorsigera* differs from *L. curviceps* and the new species from the rio Verde, rio Araguaia basin by a wide ectopterygoid and by some meristic and morphometric characters; it is distinguished from the other species of the genus by some morphometric and meristic characters.

> Resumo

Uma nova espécie de *Laetacara* é descritas do rio Verde, bacia do rio Araguaia, São Miguel do Araguaia, Goiás, Brazil; e *Laetacara dorsigera* é re-descrita. A nova espécie do Araguaia se distingue de todas as espécies do gênero devido seu baixo número de raios da nadadeira dorsal. Também difere de *L. thayeri* por possuir mácula no pedúnculo da nadadeira caudal e possuir escamas ciclóides no lado da cabeça. A nova espécie difere de *L. fulvipinnis* e *L. flavilabris* devido a alguns caracteres merísticos. Difere da nova espécie de *L. dorsigera* por possuir um ectopterigóide fino e por alguns caracteres merísticos, e de *L. curviceps* e *L. dorsigera* por não possuir uma mácula na nadadeira dorsal. *Laetacara dorsigera* difere de *L. curviceps* e da nova espécie do Araguaia por possuir um ectopterigóide mais largo e por alguns caracteres merísticos e morfométricos. *Laetacara dorsigera* difere das demais espécies do gênero devido alguns caracteres morfométricos e merísticos.

> Key words

Cichlidae, Cichlasomatinae, Labroidei, *Laetacara*, *Laetacara dorsigera*, *Laetacara curviceps*, taxonomy.

Introduction

Laetacara Kullander, 1986 is a South American genus created to include four species previously placed in *Aequidens* Eigenmann & Bray, 1894 for several years: *Laetacara flavilabris* (Cope, 1870) (the type species of *Laetacara*), *L. thayeri* (Steindachner, 1875), *L. dorsigera* (Heckel, 1840) and *L. curviceps* (Ahl, 1923) (Kullander, 1986). The species of *Laetacara* are characterized by small size (with maximum size of 110 mm SL), six preopercular and four dentary lateral foramina and only two series of scales on the cheek (Kullander, 1986).

The primary species described is *Laetacara dorsigera*, first named *Acara dorsiger* by Heckel (1840), from the rio Guaporé drainage of the rio Amazon basin, rio Paraguay and middle rio Paraná basins in Argentina, Brazil and Paraguay (Kullander, 1986). Thirty years later, Cope (1870) described *Acara flavilabris* and Cope (1872) described *A. freniferus*, but the latter species was synonymized to *Laetacara flavilabris* by Kullander (1986). *Laetacara flavilabris* occurs in the rio Napo, rio Huallaga, rio Ucayali, rio Amazonas, rio Putumayo, rio Yavarí, upper rio Solimões, and rio Juruá basins, the rio Amazonas basin in Brazil, Ecuador, and Peru. All the material used by Cope (1870, 1872), to describe both species was collected during the

voyage of JAMES HAUXWELL to Pebas, Equador (KULLANDER, 1986). STEINDACHNER (1875) described *Acara thayeri* based on material collected during the THAYER Expedition 1865–1866 (KULLANDER, 1986). *Laetacara thayeri* occurs on the rio Tigre, rio Ucayali, rio Yavarí, rio Solimões, rio Amazonas (to lower rio Trombetas), and lower rio Negro basis in Brazil and Peru (KULLANDER, 1986). AHL (1923) described *Acara curviceps* from the lower tributaries of the rio Amazonas in Brazil. After the creation of *Laetacara* just one species, *L. fulvipinnis* (STAECK & SCHINDLER, 2007) was added to the genus, from drainages of the upper and middle rio Orinoco, rio Casquiare and upper and middle rio Negro basin (SCHINDLER, 1991; RÖMER, 1992; 1994). KULLANDER (1986) redescribed *L. thayer*i and *L. flavilabris*, but *L. curviceps* and *L. dorsigera* remain poorly taxonomically known.

Herein a new species from the rio Verde drainage of the rio Araguaia basin is described and *L. dorsigera* redescribed.

Materials and Methods

Material is deposited in MCP, Museu de Ciências e Tecnologia da Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre; MNRJ, Museu Nacional, Universidade Federal do Rio de Janeiro, Rio de Janeiro and UFRJ, Instituto de Biologia, Universidade Federal do Rio de Janeiro, Rio de Janeiro. Measurements and counts follow OTTONI *et. al*. (2008), with addition of last anal-fin spine length and number of proximal radials of dorsal-fin. Measurements are presented as percentages of standard length (SL), except for those related to head morphology, which are expressed as percentages of head length (HL). Measurements were taken on the left side of each specimen with digital calipers under a binocular microscope. Osteogical studies were made on cleared and counterstained (C&S) specimens prepared according to TAYLOR & VAN DYKE (1985). Vertical bars are numbered from the caudal-fin to the snout. Spots are similarly numbered. Comparisons with *L. thayeri*, *L. fulvipinnis* and *L. flavilabris* were based on literature. Comparisons with *L. curviceps* were based on examined material.

Comparative material. *Laetacara curviceps*: Brazil: Estado Amazonas: UFRJ 4350, 6, 27.2–34.5 mm SL; lago Parananema, Amazonas basin, Município Parintins; C. FIGUEIREDO & C. CODEÇO, 11 Sep. 1996; UFRJ 4358, 11, 20.3–27.3 mm SL; lago Parananema, Amazonas basin, Município Parintins; C. FIGUEIREDO & C. CODEÇO, 11 Sep. 1996; UFRJ 4361, 7, 23.3–29.4 mm SL; lago Parananema, Amazonas basin, Município Parintins; C. FIGUEIREDO & C. CODEÇO, 11 Sep. 1996; UFRJ 7522, 4 C&S, 29.5–25.2 mm SL; lago Parananema, Amazonas basin, Município Parintins; C. FIGUEIREDO & C. CODEÇO, 11 Sep. 1996; UFRJ 4234, 1, 21.1 mm SL; lago Máximo, bacia do rio Amazonas, Município Parintins; C. FIGUEIREDO & C. CODEÇO, 14 Sep. 1996. Estado do Pará: Município de Óbidos: UFRJ 4225, 7, 14.2–32.9 mm SL; lago Paunis, Amazonas basin, near mouth of igarapé Paunis; C. FIGUEIREDO & C. CODEÇO, 07 Sep. 1996.

Key for the *Laetacara* species

1. Caudal fin without basal spot (KULLANDER, 1986: plate XXXIV 2 and 3), ctenoid scales on sides of head. ..... ***L. thayeri***

Caudal fin with basal spot and cycloid scales on sides of head. **2**

2. No dark spot on dorsal fin above trunk bar 5 .... **3**

Dark spot on dorsal fin above trunk bar 5 ..... **5**

3. With less than 15 scales in upper lateral line. ..... ***L. araguaiae***

With 15 ore more scales in upper lateral line ***4***

4. Presence of a dark dot at the edge of each scale on the midlateral portion of the flank (STAECK & SCHINDLER, 2007: fig. 5) ..... ***L. fulvipinnis***

Absence of a dark dot at the edge of each scale on the midlateral portion of the flank (STAECK & SCHINDLER, 2007) ..... ***L. flavilabris***

5. 9–10 dorsal-fin rays, 21–22 scales in longitudinal series, dark spot on dorsal fin above trunk bar 5 in both sexes and a wide ectopterygoid (Fig. 2b) ..... ***L. dorsigera***

8–9 dorsal-fin rays, 22–24 scales in longitudinal series, dark spot on dorsal fin above trunk bar 5 at least in females and a narrow ectopterygoid (Fig. 2a) ..... ***L. curviceps***

Fig. 1. *Laetacara araguaiae* n.spec.; specimen not preserved; Brazil: Goiás: São Miguel do Araguaia: rio Verde basin.

Laetacara araguaiae nov. spec.

Fig. 1 + 5

Holotype. UFRJ 7557, 32.1 mm SL: Brazil: Estado de Goiás: buriti palm near rio Verde, 32 km N of São Miguel do Araguaia, rio Araguaia basin; W. Costa *et. al*., 25 Jul. 1993.

Paratypes. All from the rio Araguaia basin. Brazil: Estado de Goiás: UFRJ 1477, 14, 15.9–34.9 mm SL, 1 C&S, 36.3 mm SL; collected with holotype; UFRJ 7530, 3, 22.1–34.7 mm SL; collected with holotype; MCP 42589, 2, 26.5–28.3; buriti palm near rio Verde, 32 km L of São Miguel do Araguaia; W. Costa *et. al*., 25 Jul. 1993; UFRJ 1447, 8, 19.0–34.0 mm SL; buriti palm 21 km S of São Miguel do Araguaia; W. Costa *et. al*., 28 Jul. 1993; and UFRJ 7552, 4 C&S, 24.3–34.2 mm SL; buriti palm 21 km S of São Miguel do Araguaia; W. Costa *et. al*., 28 Jul. 1993.

Diagnosis. *Laetacara araguaiae* is distinguished from all its congeners by having fewer dorsal-fin rays (7–8 in *L. araguaiae vs*. 9–10 in *L. dorsigera*, *L. fulvipinnis* and *L. thayeri*, 8–9 in *L. curviceps* and 9–11 in *L. flavilabris*). It also differs from *L. dorsigera* by having a narrow ectopterygoid (*vs*. wide; Fig. 2), fewer head depth (80.0–88.7 % mm HL *vs*. 90.2–96.3 % mm HL), a shorter snout (snout length 26.7–32.2 % mm HL *vs*. 33.0–37.9 % mm HL) and more scales on longitudinal serie (23–25 *vs*. 21–22); from *L. curviceps* and *L. dorsigera* by having no spot on dorsal-fin (*vs*. dark spot on dorsal fin above trunk bar 5); from *L. thayeri* by having cycloid scales on the head sides (*vs*. ctenoid scales)and precense of a caudal-fin base spot (*vs*. lack); from *L. flavilabris* by having fewer total vertebrae (24 *vs*. 26) and fewer scales on the upper the lateral line (12–14 *vs*. 15–18); from *L. fulvipinnis* by having fewer scales on the upper lateral line (12–14 *vs*. 15–17), fewer scales on the lower lateral line (6–8 *vs*. 8–9) and lack of a dark dot at the edge of each scale on the midlateral portion of the flank (*vs*. presence).

Description. Morphometric data are summarized in Table 1, meristic data in Table 2. Dorsal profile slightly convex from snout to caudal peduncle origin, leaner between snout and dorsal-fin origin. Ventral profile slightly convex from snout to caudal peduncle origin. Caudal peduncle approximately straight ventrally and dorsally. Body profile elongate, laterally compressed. Lower jaw slightly shorter than upper one. Jaw teeth caniniform. Teeth hyaline, to red at tip. Opercle not serrated. Urogenital papilla externally visible, rounded.

Dorsal fin rounded on anterior portion to pointed on posterior region. Tip of dorsal fin reaching vertical through middle of caudal fin. Anal fin rounded anteriorly, pointed posteriorly. Tip of anal fin reaching vertical through middle of caudal fin. Caudal fin not long, subtruncate. Pectoral fins pointed. Pectoral-fin base on vertical through dorsal-fin origin. Tip of pectoral-fin reaching vertical through vertical trunk-bar 4. Pelvic fin pointed. Pelvic-fin base on vertical through third spine of dorsal fin. Tip of pelvic fin reaching vertical

Tab. 1. Morphometric data of *Laetacara araguaiae* and *Laetacara dorsigera*.

	Laetacara dorsigera		*Laetacara araguaiae*	
	Holotype	Paratypes (n=10)	Holotype	Paratypes (n=10)
Standard length (mm)	31.8	18.1– 36.9	32.1	15.9–34.9
Percents, standard length				
Body depth	47.8	42.5–47.8	43.0	40.0–43.0
Predorsal length	47.5	42.5–47.5	44.5	40.0–45.2
Prepelvic length	44.7	41.5–44.7	45.8	42.5–46.4
Caudal peduncle depth	16.6	16.0–19.4	17.4	16.3–18.2
Caudal peduncle length	8.8	7.8–9.5	11.2	9.4–11.4
Dorsal-fin base length	60.4	56.1–60.4	54.5	54.5–60.3
Anal-fin base length	22.0	19.3–22.0	15.3	15.3–19.8
Pelvic fin spine length	15.4	11.7–15.4	17.1	13.6–17.1
Pelvic-fin length	48.1	32.6–48.1	38.9	24.8–38.9
Last dorsal-fin spine length	17.0	13.5–17.0	16.8	13.4–16.9
Last anal-fin spine length	14.2	13.7–15.4	15.3	13.8–15.4
Caudal-fin length	39.3	32.4–39.3	41.1	31.1–41.1
Pectoral-fin length	28.3	26.3–28.3	29.9	24.4–31.7
Percents, head length				
Head depth	94.8	90.2–96.3	88.7	80.0–88.7
Orbital diameter	38.8	34.9–38.8	32.3	32.3–38.1
Snout length	37.9	33.0–37.9	29.0	26.7–32.2
Head width	58.6	54.1–58.6	58.1	55.2–59.0
Interorbital width	50.0	44.0–50.0	43.6	39.6–47.7
Preorbital depth	62.9	61.9–65.4	63.7	61.4–65.4
Upper jaw length	33.6	28.4–33.6	29.0	26.7–29.9
Lower jaw length	19.8	18.1–20.6	24.2	19.0–24.8

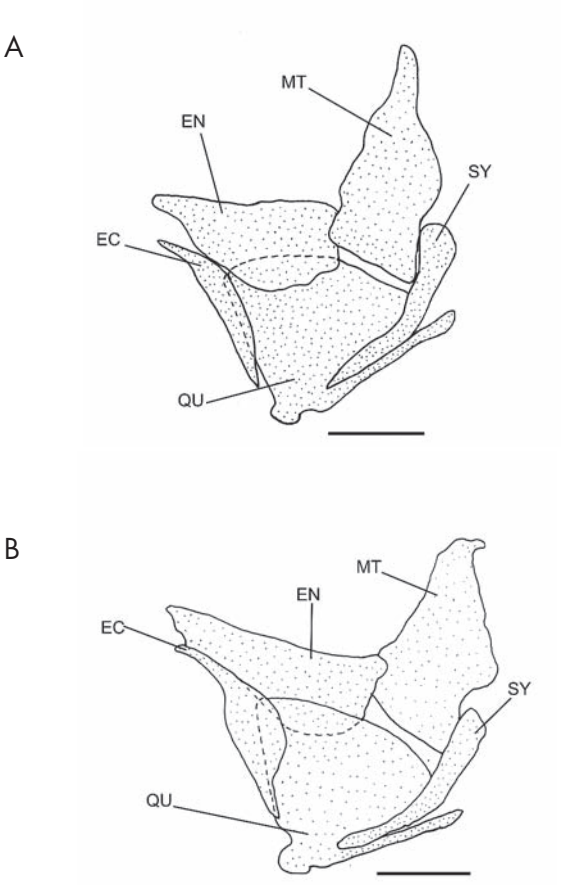

Fig. 2. Suspensório mandibular of (**A**) *L. araguaiae* and *L. curviceps*; and (**B**) *L. dorsigera*. EC, ectopterigoid; EN, entopterygoid; Mt, metapterygoid; QU, quadrate; and SY, sympletic. Scale 1mm.

through base of first spine of anal fin or more. Trunk and caudal peduncle covered with ctenoid scales. Head covered with cycloid scales.

Ceratobranchials without tooth plates. Two supraneurals and a narrow ectopterygoid (Fig. 2).

Ceratobranchial 5 partly sutured and relatively robust, with 6–7 teeth along midline and 21–24 teeth along posterior margin. Posterior teeth usually more compressed. Posterior and medial teeth larger than lateral and anterior teeth. Posterior teeth unicuspid, curved forward. Large laterally compressed teeth bicuspid.

Coloration in alcohol. Side of body light brown with seven dark brown bars between posterior limit of caudal peduncle and posterior margin of opercle. Trunk bars usually forked. Two dark brown spots; first spot elliptical on caudal-fin base, through lower lateral line; second one on junction between longitudinal stripe and trunk bar 5. Interrupted longitudinal stripe brown between trunk bar 1 and margin of opercle, lighter and inconspicuous between bars.

Side of head light brown with darker coloration on opercle.

Dorsal and anal fins light brown, with brown dots on posterior portion of fins. Caudal fin light brown, with brown dots usually between base and middle of caudal fin, darker near base. Pectoral fin hyaline, pelvic fin brown.

Tab. 2. Meristic variation data of *Laetacara araguaiae* and *Laetacara dorsigera*.

	L. araguaiae	*L. dorsigera*
Dorsal-fin spines	14–15	14
Dorsal-fin rays	7–8	9–10
Anal-fin spines	3	3
Anal-fin rays	7–9	8–9
Pelvic-fin spines	1	1
Pelvic-fin rays	5	5
Caudal-fin rays	20–22 (1–3+8+8+3)	22 (3+8+8+3)
Pectoral-fin rays	12–14	11–13
Gill-rakers on first ceratobranchial	2–3+9–13	2–3+9–10
Total vertebrae	24	24
Rib pairs	9	9
Precaudal vertebrae	12	12
Caudal vertebrae	12	12
Scales of upper lateral line serie	12–14	14–15
Scales of lower lateral line serie	6–8	6–8
Scales of longitudinal serie	23–25	21–22
Scales of dorsal fin origin serie	3	3
Scales of anal fin origin serie	7	7
Proximal radial on dorsal-fin base	21	21–23
Proximal radial on anal-fin base	8	8–9

Coloration in vivo (Fig. 1). Side of body light brown with blue iridescence on inferior portion of trunk. Two yellow horizontal stripes on mid-inferior portion of trunk from opercle to caudal-fin base. Dark brown interrupted longitudinal stripe from opercle to base of caudal fin. Seven dark brown interrupted bars. Most posterior bars with yellow iridescence. Caudal peduncle with blue dots and yellow iridescence. Two dark brown spots; first spot elliptical, on caudal-fin base; second one on middle of trunk, on trunk bar 5.

Side of head light brown with blue iridescence on inferior portion, below eyes. Opercle with yellow iridescence and blue dots. Two stripes below eyes and blue dots on snout. Blue dot above orbit.

Dorsal and anal fins yellow with blue dots and blue iridescence on margins. On dorsal fin, dots concentrated posteriorly, near body, and on entire anal fin. Caudal fin yellow, with blue dots on whole fin and blue iridescence on posterior margin. Pectoral fin hyaline. Pelvic fin yellow with blue bars.

Distribution. Rio Verde, rio Araguaia basin, central Brazil (Fig. 3).

Etymology. From Araguaia, refferring to the river basin where the new species was found.

Fig. 3. Distribution of *L. araguaiae*, *L. dorsigera* and *L. minutacara*.

Fig. 4. *Laetacara dorsigera*; specimen not preserved; Central Brazil.

Laetacara dorsigera (Heckel, 1840)

Fig. 4

Acara dosiger Heckel, 1840: 348. Type locality: Sümpfe in der Nähe des Paraguay-Flusses bei Villa Maria. Holotype: NMW 33669.

Material examined. Brazil: Estado do Mato Grosso do Sul: UFRJ 7541, 1, 31.8 mm SL: temporary pool in Estrada do Taboco, 80 km N from Aquidauana, rio Paraguai basin; F. Costa *et. al*., 23 Apr. 1996; MCP 42590, 1, 28.2 mm SL; temporary pool in Estrada do Taboco, 80 km N from Aquidauana, rio Paraguai basin; Costa *et. al*., 23 Apr. 1996; UFRJ 3709, 5, 18.1–21.3 mm SL; temporary pool in Estrada do Taboco, 80 km N from Aquidauana, rio Paraguai basin; Costa *et. al*., 23 Apr. 1996; and UFRJ 3710, 4, 22.3–25.6; Brazil: Estado do Mato Grosso do Sul: Município de Corumbá: UFRJ 1913, 5, 19.8–28.3 mm SL; W.J.E.M. Costa & K. Tanizaki, Sep. 1989; Brazil: Estado do Mato Grosso: UFRJ 3708, 10, 22.3–30.6 mm SL; temporary pool near Casal Vasco, rio Guaporé basin; Costa *et. al*., 29 Apr. 1996; UFRJ 7521, 4 C&S, 23.3–36.9 mm SL; temporary pool near Casal Vasco, rio Guaporé basin; Costa *et. al*., 29 Apr. 1996; UFRJ 3711, 5, 20.9–28.2 mm SL; temporary pool between km 23 and 29 from the street between Casal Vasco and Vila Bela, rio Guaporé basin, Costa *et. al*., 29 Apr. 1996; UFRJ 3714, 2, 23.3–29.3 mm SL; buriti palm 7.7 km from the street between Pontes e Lacerda and Vila Bela, rio Guaporé basin; Costa *et. al*., 28 Apr. 1996; UFRJ 5538, 1, 22.7 mm SL; temporary pool on the street from E.E. Sesc Pantanal, Costa *et. al*., 12 Apr. 2002; UFRJ 3716, 1, 21.9 mm SL; temporary pool on km 16–19 from the street between Santo Antônio do Leverger and Barão de Melgaço, rio Paraguai basin, Costa *et. al*., 26 Apr. 1996; MNRJ 14868, 1, 30.8 mm SL; Cáceres, córrego Carrapato, farm Pantanalzinho; 22 Sep. 1984; MNRJ 14873, 2, 28.2–36.9 mm SL; córrego Sangradourozinho, Exp. Polonoroeste, 3 Jul. 1984; MNRJ 14874, 2, 33.3–36.8 mm SL; rio Vermelho, Município de Rio Branco, Exp. Polonoroeste, 28 Nov. 1984; MNRJ 14885, 10, 28.2– 40.0 mm SL; Cáceres, córrego Carrapato, farm Pantanalzinho, Exp. Polonoroeste, 22 Nov. 1984; MNRJ 14938, 9, 23.7–33.6 mm SL; Cáceres, baia do Campo in the farm Pantanalzinho, Porto Esperidião, Exp. Polonoroeste, 24 Nov. 1984; MNRJ 17450, 2, 26.9–33.6 mm SL; farm Pantanalzinho, Porto Espiridião, Cáceres, Exp. Polonoroeste, 23 and 24 Nov. 1984; and MNRJ 17452, 11, 19.5–25.1 mm SL; lagoon near road Transpantarina, km 110; U. Caramaschi, 06 Out. 1987.

Diagnosis. *Laetacara dorsigera* differs from all species of the genus, except *L. thayeri*, by having fewer scales on the longitudinal series (21–22 in *L. dorsigera vs*. 24 in *L. flavilabris,* 22–24 in *L. curviceps* and 23–25 in *L. fulvipinnis, L. minutacara* and *L. araguaiae*); from its congeners, except from *L. curviceps*, by having a dark spot on dorsal fin above trunk bar 5, and usually above trunk bar 4 (*vs*. no spots on dorsal fin). *Laetacara dorsigera* is distinguished from *L. araguaia* and

Fig. 5. *Laetacara araguaiae* sp. n. in neutral mood in aquarium. Photo: Dr Staeck.

L. curviceps by having higher head depth (head depth 90.2–96.3 % mm HL in *L. dorsigera vs*. 84.6–88.9 % mm HL in *L. curviceps* and 80.0–87.1 % mm HL in *L. araguaia*); from *L. thayeri* by having cycloid scales on head sides (*vs*. ctenoid scales) and more anal-fin rays (8–9 *vs*. 7–8); from *L. flavilabris* by having fewer total vertebrae (24 *vs*. 26) and fewer scales on the upper lateral line (14–15 *vs*. 15–18); from *L. fulvipinnis* by having fewer scales on the upper lateral line (14–15 *vs*. 15–17), fewer scales on the lower lateral line (6–8 *vs*. 8–9) and absence of a dark dot at the edge of each scale on the midlateral portion of the flank (*vs*. presence); from *L. curviceps* by having a wide ectopterygoid (*vs*. a narrow ectopterygoid; Fig. 2) and more dorsal-fin rays (9–10 *vs*. 8–9).

Description. Morphometric data are summarized in Table 1, meristic data in Table 2. Dorsal profile slightly convex from snout to caudal peduncle origin, leaner between snout and dorsal-fin origin. Ventral profile slightly convex from snout to caudal peduncle origin. Caudal peduncle approximately straight ventrally and dorsally. Body profile elongate, laterally compressed. Lower jaw slightly shorter than upper one. Leaner snout (Fig. 3). Jaw teeth caniniform. Teeth hyaline, to red at tip. Opercle not serrated. Urogenital papilla externally visible, rounded.

Dorsal fin rounded on anterior portion to pointed on posterior region. Tip of dorsal fin reaching vertical through middle of caudal fin. Anal fin rounded anteriorly, pointed posteriorly. Tip of anal fin reaching vertical through middle of caudal fin. Caudal fin not long, subtruncate. Pectoral fins pointed. Pectoral-fin base on vertical through dorsal-fin origin. Tip of pectoral-fin reaching vertical through vertical trunk-bar 4. Pelvic fin pointed. Pelvic-fin base on vertical through third spine of dorsal fin. Tip of pelvic fin reaching vertical through base of first spine of anal fin or more. Trunk and caudal peduncle covered with ctenoid scales. Head covered with cycloid scales.

Ceratobranchials without tooth plates. Two supraneurals and a wide ectopterygoid (Fig. 2).

Ceratobranchial 5 partly sutured and relatively robust, with 7 teeth along midline and 21–25 teeth along posterior margin. Posterior teeth usually more compressed. Posterior and medial teeth larger than lateral and anterior teeth. Posterior teeth unicusped, curved forward. Large laterally compressed teeth bicuspid.

Coloration in alcohol. Side of body light brown with seven dark brown bars between posterior limit of caudal peduncle and posterior margin of opercle. Trunk bars usually forked. Two dark spots; first spot elliptical on base of caudal fin, through lower lateral line; second one on junction between longitudinal stripe and vertical trunk bar 5. Interrupted longitudinal stripe brown between trunk bar 1 and margin of opercle, lighter and inconspicuous between bars.

Side of head light brown with darker coloration on opercle.

Dorsal fins with one black spot above trunk bar 5 and usually a spot above trunk bar 4, in both sexes. Dorsal and anal fins light brown, with dots on posterior portion of fins. Caudal fin light brown, with dots

usually between base and middle of caudal fin, darker near caudal peduncle. Pectoral fin hyaline, pelvic fin brown.

Coloration in vivo (Fig. 4)**.** Side of body light grey with seven dark grey trunk bars. Black spot on middle of body in longitudinal strip. A longitudinal strip from caudal peduncle to eyes. Chester red wish.

Side of head light grey with darker coloration on opercle and with dark grey head bars between eyes. Eyes with red wish or yellowish iris. Golden iridescence on opercle.

Dorsal fins with black spot above trunk bar 5 and usually other black spot above trunk bar 4. Dorsal and anal fins light gray, with golden iridescence on margin and invaded by trunk bars. Caudal fin light gray, with golden iridescence on posterior margin. Dorsal, anal and caudal fins with dark grey spots. Pelvic and pectoral fins with golden iridescence.

Distribution. the rio Guaporé drainage of the rio Amazon basin; and rio Paraguay and middle rio Paraná basis of the rio Paraná basin in Argentina, Brazil and Paraguay (Fig. 3).

Discussion

Discussion about phylogenetics can not be presently done, since phylogenetics studies on *Laetacara* are not available yet. *Laetacara* is a component of the tribe Cichlasomatini, subfamily Cichlasomatinae (KULLANDER, 1998).

KULLANDER (1986) suggests the morphology of the hyoid, consisting of a deep notch on the dorsal margin of the anterior ceratohyal (KULLANDER, 1986: fig. 149), as a synapomorphy of the genus *Laetacara*. However, he only examined osteological characters of *L. flavilabris* and *L. curviceps*. The new species from Central Brazil and *L. dorsigera*, examined in this paper, share this character with the other *Laetacara* species, confirming this synapomorphy for the genus.

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References

KULLANDER, S.O. (1986): Cichlid fishes of the Amazon River drainage of Peru. – Departament of Vertebrate Zoology, Research Division, Swedish Museum of Natural History, Stockholm, Sweden, 394p.

KULLANDER, S.O. (1998): A phylogeny and classification of the South American Cichlidae (Teleostei: Perciformes). Pp 461–498. – In: L.R. Malabarba, R.E. Reis, R.P. Vari, Z.M. Lucena e C.A.S. Lucena (Eds.), Phylogeny and Classification of Neotropical Fishes. Editora Universitária-EDIPUCRS, Porto Alegre, Brasil, x + 603 pp.

OTTONI, F.P.; OYAKAWA O.T. & COSTA, W.J.E.M. (2008): A new species of the genus Australoheros from the rio Ribeira do Iguape basin, São Paulo, Brazil (Labroidei: Cichlidae: Cichlasomatinae). – Vertebrate Zoology, **58**(1): 75–81.

RÖMER, U. (1992):Weitere Beobachtungen zur Verbreitung und Ökologie des Orangeflossen"-*Laetacara"* im Gebiet es Rio Negro (NW-Brasilien). *DCG-Inform*., **23**(12): 245–255.

RÖMER, U. (1994): *Laetacara* spec. "Orangeflossen": Ergänzende Beobachtungen zur Verbreitung und Ökologie im Gebiet des Rio Negro (NW-Brasilien). – *DCG-Inform*., **25**(12): 274–88.

SCHINDLER, I. (1991): Der "Orangeflossen-*Laetacara*". Ökologie, Verbreitung, Aquarienhaltung. – *DCG-Inform*., **22**(11): 239–244.

STAECK, W & SCHINDLER, I. (2007): Description of *Laetacara fulvipinnis* sp. n. (Teleostei: Cichlidae) from the upper drainages of rio Orinoco and rio Negro in Venezuela. – *Vertebrate Zoology,* **57**(1): 63–71.

TAYLOR, W.R. & VAN DYKE, G.C. (1985): Revised procedures for staining and clearing small fishes and other vertebrates for bone and cartilage study. – *Cybium,* **9**: 107–109.