

A new species of *Anchoviella* Fowler, 1911 (Clupeiformes: Engraulidae) from the Amazon basin, Brazil

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Anchoviella juruasanga is described from the drainages of rios Negro, Madeira, Tapajós, Trombetas, Tocantins, and Jari, in the Amazon basin, Brazil. The new species is distinguished from its congeners by having a short upper jaw, with its posterior tip extending between the verticals through anterior and posterior margins of the pupil (*vs.* posterior tip of upper jaw extending beyond the vertical through posterior margin of the pupil). *Anchoviella juruasanga* is also distinct from other strictly freshwater Amazonian species of the genus by the distance from tip of snout to posterior end of upper jaw between 8 and 11% in standard length (*vs.* 14% or more in *A. alleni*, *A. carrikeri*, *A. guianensis*, and *A. jamesi*). The anal-fin origin slightly posterior to or at the vertical through the base of the last dorsal-fin ray further distinguishes the new species from *A. alleni* (anal-fin origin posterior to the vertical through the last anal-fin ray by at least 14% of head length) and *A. jamesi* (anal-fin origin anterior to the vertical through the last anal-fin ray). An identification key for the Amazonian species of *Anchoviella*, including marine and estuarine species known to occur in the lower portion of the basin, is presented.

Anchoviella juruasanga é descrita das drenagens dos rios Negro, Madeira, Tapajós, Trombetas, Tocantins e Jari, na bacia Amazônica, Brasil. A nova espécie distingue-se de suas congêneres pela presença da maxila superior curta, com sua extremidade posterior estendendo-se entre as verticais que passam pelas margens anterior e posterior da pupila (*vs.* extremidade posterior da maxila superior estendendo-se além da vertical que passa pela margem posterior da pupila). *Anchoviella juruasanga* também distingue-se das demais espécies Amazônicas estritamente dulcícolas do gênero pela distância da ponta do focinho à extremidade posterior da maxila superior entre 8 e 11% do comprimento padrão (*vs.* 14% ou mais em *A. alleni*, *A. carrikeri*, *A. guianensis* e *A. jamesi*). A origem da nadadeira anal em uma região ligeiramente posterior ou na vertical que passa pela base do último raio da nadadeira dorsal também distingue a nova espécie de *A. alleni* (origem da nadadeira anal posterior à vertical que passa pelo último raio da nadadeira anal por no máximo 14% do comprimento da cabeça) e *A. jamesi* (origem da nadadeira anal anterior à vertical que passa pelo último raio da nadadeira anal). É apresentada uma chave de identificação para as espécies Amazônicas de *Anchoviella*, incluindo espécies marinhas e estuarinas conhecidas por ocorrer nas porções baixas da bacia.

Key words: Anchovies, Engraulinae, Freshwater fish, Systematics, Taxonomy.

Introduction

Anchoviella Fowler, 1911 comprises small to medium sized fishes (3-14 cm standard length) of marine, estuarine, or freshwater habits distributed in South, Central, and North America. According to Whitehead *et al.* (1988) the genus is distinguished in the Engraulidae by a body slightly compressed, the presence of numerous elongate gill rakers (usually more than 15 on the lower branch of the first gill arch) and a short upper jaw (not extending posteriorly to the vertical through the anterior margin of the opercle). Members of the Engraulidae, which includes approximately 140 species, are typically schooling coastal fishes commonly known as anchovies (English) or “manjubas” in the Brazilian Portuguese (Nelson, 2006; Di Dario, 2009).

Jordan & Seale (1926) recognized 18 valid species of *Anchoviella*. *Anchoviella jamesi* (Jordan & Seale, 1926) and *A. balboae* (Jordan & Seale, 1926), which are species of anchovies with a small mouth and a rounded posterior end of the upper jaw, were included in the genus *Amplova* by Jordan & Seale (1926). Hildebrand (1943) concluded that Jordan & Seale’s (1925) classification was unsatisfactory. He combined *Amplova* and *Anchoviella* in an expanded genus *Anchoviella*. *Anchoviella manamensis* Cervigón, 1982 and *A. perezii* Cervigón, 1987, both from rio Orinoco in Venezuela (Cervigón, 1982), are the most recently described valid species of the genus.

Anchoviella has not been thoroughly reviewed for more than 50 years, and the number of currently valid species of the genus is still debatable. Whitehead *et al.* (1988), which

presented the most recent comprehensive review of the Engraulidae, recognized 15 valid species of *Anchoviella*. Eschmeyer & Fricke (2012), on the other hand, recognized 18 valid species of the genus. In spite of discrepancies in those numbers, Whitehead *et al.* (1988) and Eschmeyer & Fricke (2012) recognized the validity of four strictly freshwater Amazonian species of *Anchoviella*: *A. alleni* (Myers, 1940), *A. carrikeri* Fowler, 1941, *A. guianensis* (Eigenmann, 1912), and *A. jamesi* (Jordan & Seale, 1926). *Anchoviella nattereri* (Steindachner, 1880), which supposedly inhabits the lower (probably estuarine) portion of the Amazon basin, is known only from the original description (Whitehead *et al.*, 1988). The species is sometimes recognized as valid (*e.g.* Kullander & Ferraris, 2003; Eschmeyer & Fricke, 2012; Menezes & Figueiredo, 2003), but Whitehead *et al.* (1988: 337) considered it as a possible senior synonym of the marine and estuarine *A. lepidentostole* (Fowler, 1911). Recently, Loeb (2009) considered *A. nattereri* as a *nomen dubium*.

During a recent review of the South American freshwater species of *Anchoviella* (Loeb, 2009), new species from the Amazon basin were discovered. One of those species is described herein. An identification key for the Amazonian species of *Anchoviella*, including coastal species known to occur in the lower portion of the basin, is also presented.

Material and Methods

Measurements and counts were taken according to Whitehead (1985) with the following modifications: caudal peduncle depth, measured at the origin of caudal fin; pelvic-fin length, measured from the base of the fin to the posterior tip of the longest pelvic-fin ray; prepelvic, prepectoral and preanal length, measured from tip of snout to the origin of the respective fin; pupil diameter, measured as the horizontal distance between pupil margins; lower jaw length, measured as the distance between anterior and posterior margins of the lower jaw; interorbital width, corresponding to the shortest distance between the orbits in dorsal view; length of pectoral and pelvic axillary scales, measured as the distance between the anterior and posterior margins of the axillary scale. Measurements and counts were taken in 41 type specimens (including holotype) on the left side of the specimen. Standard Length (SL) is expressed in mm and other measurements are expressed as either percentage of SL or Head Length (HL). Vertebral counts, presented in Table 1, are based on two cleared and stained specimens prepared according to Taylor & van Dyke (1985). Comparative material examined of the genus includes *Anchoviella alleni*, *A. carrikeri*, *A. guianensis*, and *A. jamesi* (the four valid Amazonian freshwater species of *Anchoviella*), two recently recognized but yet undescribed Amazonian species of *Anchoviella* (Loeb, 2009), and also *A. vaillanti* (Steindachner, 1908), from the São Francisco basin (Whitehead *et al.*, 1988). *Anchoviella brevirostris* (Günther, 1868), *A. cayenensis* (Puyo, 1946), and *A. lepidentostole*, which are coastal marine species known to occur in the lower portion of the Amazon basin, were also examined.

Institutional abbreviations are ANSP, Academy of Natural Sciences, Philadelphia, PA; INPA, Instituto Nacional de Pesquisas da Amazônia, Manaus, AM; MZUSP, Museu de Zoologia da Universidade de São Paulo, SP; MNRJ, Museu Nacional, Universidade Federal do Rio de Janeiro, RJ; MPEG, Museu Paraense Emílio Goeldi, Belém, PA.

Results

Anchoviella juruasanga, new species

Figs. 1-2

Holotype. MZUSP 109249, 42.4 mm SL. Brazil, Pará, rio Trombetas, upstream from mouth of Lago do Jacaré at Reserva Biológica de Trombetas, 01°20'S 56°51'W, 2 Aug 1979, R. M. C. Castro.

Paratypes. ANSP 192138 (20, 42.7-48.1 mm SL), MNRJ 39086 (20, 42.0-49.8 mm SL), MPEG 22814 (20, 44.0-48.5 mm SL), MZUSP 15831 (243, 42.0-52.8 mm SL), all collected with holotype. INPA 7104 (30, 26.1-42.3 mm SL), Pará, rio Tapajós, near mouth of rio Cupari, 03°36'22.79"S 55°19'13.76"W, 26 Oct 1991, L. Rapp Py-Daniel & J. Zuanon. MZUSP 31422 (1, 39.2 mm SL), Rondônia, rio Madeira at Calama, 08°03'S 62°53'W, 9 Dec 1980, M. Goulding. MZUSP 52015 (2, 23.1-26.7 mm SL), Rondônia, rio Machado near its mouth, 08°04'S 62°4'W, 21 Nov 1970, Expedição Permanente à Amazônia. MZUSP 85397 (5, 21.90-25.80 mm SL), Rondônia, rio Machado near its mouth, 21 Nov 1975, Expedição Permanente à Amazônia.

Non-type specimens examined. MZUSP 8554 (1, 33.73 mm SL), Pará, Santarém, rio Tapajós, 02°25'S, 54°44'W, Dec 1967, Expedição Permanente à Amazônia. MZUSP 9228 (2, 19.77-19.87 mm SL), Pará, Santarém, rio Maicá, 02°35'S 54°22'W, 19-27 Oct 1971, Expedição Permanente à Amazônia. MZUSP 9420 (5, 38.69-40.83 mm SL), Pará, Santarém, rio Tapajós, 02°25'S 54°44'W, 10 Jan 1968, Expedição Permanente à Amazônia. MZUSP 18155 (3, 37.47-39.96 mm SL), Pará, Jatobal, rio Tocantins, 04°34'S 49°39'W, 17 Nov 1970, Expedição Permanente à Amazônia. MZUSP 28049 (2, 12.42-23.27 mm SL) Amazonas, Ayrão Velho, rio Negro, north of ecological reserve of Anavilhanas, 06 Nov 1982, L. P. S. Portugal. MZUSP 29096 (5, 21.82-23.8 mm SL), Roraima, Marará, rio Branco, 01°30'S 61°16'W, 26 Oct 1979, M. Goulding. MZUSP 29121 (19, 24.29-30.86 mm SL), and MZUSP 29122 (88, 73, 20.22-26.12 mm SL), Roraima, Marará, rio Branco, 01°30'S 61°16'W, 26 Oct 1979, M. Goulding. MZUSP 29123 (253, 24.33-32.41 mm SL), Rondônia, rio Madeira, at the junction with rio Machado, 08°04'S, 62°54'W, 15 Dec 1980, M. Goulding. MZUSP 73533 (1, 19.22 mm SL), Roraima, Marará, rio Branco, 01°30'S 61°16'W, 28 Oct 1979, M. Goulding. MZUSP 74315 (57, 18.94-22.21 mm SL), Roraima, Caracará, rio Branco near its mouth, 01°20'S 61°50'W, 12 Nov 1979, L. P. S. Portugal. MZUSP 85218 (3, 21.81-28.99 mm SL), Rondônia, rio Machado near its mouth, 08°04'S 62°54'W, 21 Nov 1975, Expedição Permanente à Amazônia. MZUSP 93487 (202, 18.79-26.9 mm SL), Pará, Pimental, rio Tapajós, 04°34'15"S, 56°15'39"W, 11 Nov 2006, L. M. Sousa & J. L. Birindelli. MZUSP 97302 (36, 21.70-30.20 mm SL), Pará, Novo Progresso, rio Jamanxim, near Vila Mil, 23 Oct 2007, J. L. Birindelli *et al.* MZUSP 97431 (78, 26.20-29.40 mm SL), Pará, Novo Progresso, rio Jamanxim, 07°43'51"S 55°16'36"W, 23 Oct 2007, J. L. Birindelli *et al.* MZUSP 102330 (105, 24.10-50.60 mm SL), Amapá, rio Jari, downstream of Cachoeira Santo Antônio, 00°46'54"S, 52°31'48"W, 11 Oct 2007, M. Carvalho *et al.*



Fig. 1. *Anchoviella juruasanga*, holotype, MZUSP 15831, 42.4 mm SL, rio Trombetas, Trombetas, Pará State.

Diagnosis. *Anchoviella juruasanga* is distinguished from its congeners by having a short upper jaw, with its posterior tip extending between the verticals through anterior and posterior margins of the pupil (vs. posterior tip of upper jaw extending beyond the vertical through posterior margin of the pupil). *Anchoviella juruasanga* is also distinct from other strictly freshwater Amazonian species of the genus by the distance from tip of snout to posterior end of upper jaw between 8 and 11% in SL (vs. 14% or more in *A. alleni*, *A. carrikeri*, *A. guianensis*, and *A. jamesi*). The anal-fin origin slightly posterior to or at the vertical through the base of the last dorsal-fin ray further distinguishes the new species from *A. alleni* (anal-fin origin posterior to the vertical through the last anal-fin ray by at least 14% of HL) and *A. jamesi* (anal-fin origin anterior to the vertical through the last anal-fin ray).

Description. Morphometric data of holotype and 40 paratypes is presented in Table 1. Body elongated, compressed laterally; greatest body depth at dorsal-fin origin. Dorsal body profile convex from snout tip to nostril, gently convex from nostril to dorsal-fin origin, approximately straight from latter point to caudal peduncle. Ventral body profile convex from anterior tip of lower jaw to posterior margin of orbit, gently convex from vertical through posterior margin of orbit to the posterior end of anal-fin base, nearly straight from latter point to the

origin of lower caudal fin lobe. Caudal peduncle longer than deep. Vertebrae 39-40 (2 specimens examined).

Mouth inclined relative to body axis, sub-terminal, posterior tip of upper jaw rounded. Snout long, pointed in lateral view. Anterior tip of upper jaw distant from tip of snout by about 7.3 to 8.8% of HL. Posterior margin of upper jaw rounded, its posterior tip extending between the verticals through anterior and posterior margins of the pupil. Teeth pointed, small, slender, slightly recurved posteriorly, arranged in a single row in the premaxilla, maxilla and lower jaw.

Eye lateral on head, located dorsal to horizontal through pectoral-fin insertion; eye visible in dorsal and ventral views. Two confluent nostrils on each side of the head, the anterior elliptical and the posterior larger crescent-shaped. Lateral line absent.

Dorsal-fin rays ii-iii+11-12, origin closer to base of caudal fin than to tip of snout, not reaching the latter by 2.0 to 6.2% of SL, distal margin approximately straight. Anal-fin rays ii-iii+12-13, its origin at vertical through base of last dorsal-fin ray, anterior rays longer. Pectoral-fin rays i+11-13, distal tip of longest pectoral-fin ray not reaching pelvic-fin origin by 6.0 to 13.0% of SL, distal margin slightly convex. Pectoral-fin axillary scale absent in most specimens, probably lost during collecting or storage. Pelvic fin-rays i+6, distal tip of longest pelvic-fin ray not reaching anal-fin origin by 4.0 to



Fig. 2. *Anchoviella juruasanga*, freshly preserved specimen, MZUSP 103314, 46.0 mm SL, rio Jari, Monte Dourado, Pará State. Photo by J. L. Birindelli (MZUSP).

9.9% of SL, distal margin slightly convex. Pelvic-fin axillary scale absent in most specimens, probably lost during collecting or storage. Base of anteriormost pelvic-fin ray closer to anal-fin origin than to base of anteriormost pectoral-fin ray, failing to reach the latter by about 2.6 to 4.8% of SL. Caudal fin forked, upper and lower lobes equally developed. Caudal-fin rays 5,10/10,5.

Pseudobranchia present, shorter than eye, approximately 18 to 23% of HL. Gill rakers long and thin in the first branchial arch, 8-12 on the upper branch, 16-22 on the lower branch, 25 to 34 in total. Length of raker inserted in the angle of first gill arch between 14-17% of HL.

Coloration in alcohol. Body coloration pale to light yellowish or brownish. Longitudinal stripe pale to silver, absent in most preserved specimens, when present extending from posterior margin of head to caudal peduncle; width of the stripe 10-20% of HL at vertical through pectoral-fin origin, increasing posteriorly to 20-35% of HL at vertical through anal-fin origin. Dark spots present above and below the lateral stripe in some specimens, on top of the head, along the dorsum from origin of dorsal fin to caudal fin, along the ventrum, from origin of anal fin to caudal fin; also present along base of dorsal, anal, and caudal fins, and arranged in two vertical parallel stripes at caudal fin. Orbit and middle portion of the postorbital region in the head translucent to silver.

Coloration of freshly preserved specimens. Description of the coloration of freshly preserved specimens is based on a single specimen (MZUSP 103314, paratype, 46 mm SL; Fig. 2). Dorsum from the vertical through opercle to caudal fin above the longitudinal stripe translucent with dark spots; ventrum translucent from the vertical through opercle to caudal fin above the longitudinal stripe; posteriormost portion of upper and lower jaw and posteriormost portion of preorbital region also translucent. Dark spots present above the longitudinal stripe along body, on top of the head, along base of dorsal, anal and caudal fins, and also arranged in two vertical parallel stripes at caudal fin. Tip of upper and lower jaw, top of the head, base of dorsal and anal fins, above the longitudinal stripe, along the dorsum at caudal peduncle and at the anteriormost portion of caudal fin light yellowish. Postorbital region and longitudinal stripe along body silver, width of the stripe 25% of HL at vertical through pectoral-fin origin, increasing posteriorly to 30% of HL at vertical through anal-fin origin.

Etymology. In the Tupi language “juru” means mouth and “a-sanga” means short. The epithet *juruasanga*, thus, refers to the short maxilla, a diagnostic character of the species among congeners.

Distribution. *Anchoviella juruasanga* is known from tributaries of the middle and lower Amazon basin, Brazil, including rio Tapajós, rio Negro, rio Branco, rio Madeira, rio Trombetas, rio Tocantins, rio Maicá, and rio Jari (Fig. 3).

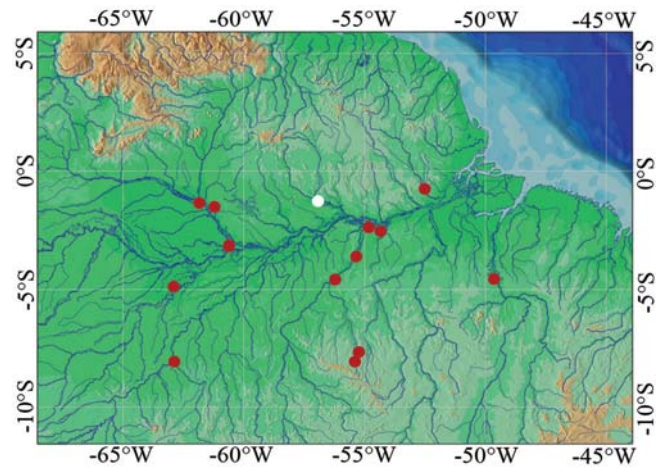


Fig. 3. Distribution map of *Anchoviella juruasanga*. Holotype indicated by white circle; paratypes and non-type material indicated by red circles.

Remarks. *Anchoviella juruasanga* is similar in terms of external morphology to *A. jamesi* and *Amazonsprattus scintilla* Roberts, 1984, which are pedomorphic engraulids known to co-occur with *A. juruasanga* in some rivers of the Amazon basin, such as the rio Jari. These three species share a short upper jaw, which, nevertheless, differs in terms of relative lengths. In *A. jamesi* the posterior tip of the upper jaw extends beyond the vertical through the posterior margin of the orbit by about ¼ the orbit diameter. The upper jaw of *A. juruasanga* is shorter than that of *A. jamesi*, with its posterior tip extending between the verticals through anterior and posterior margins of the pupil. In *Amazonsprattus scintilla* the upper jaw is extremely short compared to the condition typically present in the Engraulidae, and its posterior tip is located in a region anterior to the vertical through the anterior margin of the orbit (Whitehead *et al.*, 1988). Another morphological difference between these three species is the relative position of the fins: in *A. juruasanga* the anal-fin origin is located in a region immediately posterior to the vertical through the base of the last dorsal-fin ray, whereas in *Amazonsprattus scintilla* and in *A. jamesi* the anal-fin origin is located at the vertical through the anterior quarter of the dorsal-fin base. The non-type material listed in the description was used in the color diagnosis, and also for inferring the distribution of the species.

Identification key of *Anchoviella* from the Amazon basin.

- 1a. Anal-fin origin at the vertical through base of last dorsal-fin ray or posterior to it 2
- 1b. Anal-fin origin anterior to the vertical through base of last dorsal-fin ray.....6
- 2a. Posterior margin of upper jaw extending between the verticals through anterior and posterior margins of the pupil *Anchoviella juruasanga*

- 2b. Posterior margin of upper jaw extending beyond the vertical through posterior margin of the pupil 3
- 3a. Number of rakers in the lower branch of first branchial arch 29-35; anal-fin rays 15-17 *Anchoviella cayenensis*
- 3b. Number of rakers in the lower branch of first branchial arch 19-25; anal-fin rays 17-22 4
- 4a. Anal-fin origin posterior to the vertical through base of last dorsal-fin ray by 14% or more of HL; upper jaw extending posteriorly beyond the posterior margin of the orbit by about 10 to 15% of HL *Anchoviella alleni*
- 4b. Anal-fin origin at vertical through base of last dorsal-fin ray or posterior to it by less than 10% of HL; upper jaw extending posteriorly beyond the posterior margin of the orbit by 7 to 11% or by 18 to 25% of HL 5
- 5a. Posterior margin of upper jaw extending beyond the vertical through posterior margin of orbit by 18-25% of HL *Anchoviella carrikeri*
- 5b. Posterior margin of upper jaw extending beyond the vertical through posterior margin of orbit by 7-11% of HL *Anchoviella guianensis*
- 6a. Anal-fin origin at the vertical through midpoint of dorsal-fin base, or anterior to it 7
- 6b. Anal-fin origin posterior to the vertical through midpoint of dorsal-fin base 8
- 7a. Number of rakers in the lower branch of first branchial arch 12-16; posterior margin of upper jaw extending beyond the vertical through posterior margin of orbit by 14-16% of HL *Anchoviella* sp. A
- 7b. Number of rakers in the lower branch of first branchial arch 18-25; posterior margin of upper jaw extending beyond the vertical through posterior margin of orbit by 16-21% of HL *Anchoviella lepidentostole*
- 8a. Lower jaw longer than upper jaw *Anchoviella brevirostris*
- 8b. Upper jaw longer than lower jaw 9
- 9a. Posterior margin of upper jaw extending under the vertical through posterior margin of orbit; number of rakers in the lower branch of first branchial arch 15-21 *Anchoviella jamesi*
- 9b. Posterior margin of upper jaw extending beyond the vertical through posterior margin of orbit by 7-11% of HL; number of rakers in the lower branch of first branchial arch 12-15 *Anchoviella* sp. B

Comparative material. *Amazonsprattus scintilla*: MZUSP 92908 (71, 21.3-25.1 mm SL), Amazonas, Igarapé Castanha, downstream Santa Rosa community, 00°05'26"S 69°39'57"W, 28 Nov 2006, F. Lima. *Anchoviella alleni*: MZUSP 18485 (5, 68.3-75.35 mm

Table 1. Morphometrics and meristics of *Anchoviella juruasanga*. n = number of examined specimens, SD = Standard Deviation (frequency in parenthesis).

	Holotype	n	Range		Mean	SD
Standard length, SL (mm)	42.4	41	19.3	51.5	34.00	10.00
Head length, HL (mm)	10.8	41	5.2	12.4	8.37	2.22
Percentages of standard length						
Body depth	16.37	41	10.47	16.56	13.82	1.88
Caudal peduncle depth	8.36	41	7.05	9.13	8.03	0.57
Dorsal-fin base length	11.21	41	11.01	14.81	12.57	1.10
Anal-fin base length	11.50	41	11.08	15.98	13.09	1.31
Pelvic fin length	10.81	41	8.81	13.13	10.79	1.06
Pectoral fin length	14.42	41	9.73	14.99	13.06	1.45
Predorsal length	53.38	41	49.42	55.43	52.21	1.63
Preanal length	65.26	41	61.23	68.60	64.54	1.81
Prepelvic length	44.47	41	42.47	47.90	45.07	1.43
Prepectoral length	24.13	41	22.14	27.85	24.47	1.42
Pectoral-fin axillary scale length	8.36	30	3.45	11.31	6.93	2.19
Pelvic-fin axillary scale length	4.03	16	2.70	6.64	4.03	1.09
Head length	24.36	41	22.43	28.07	24.82	1.37
Percentages of head length						
Snout length	22.13	41	17.25	24.98	21.30	2.47
Orbital diameter	32.96	41	29.20	36.66	31.49	2.18
Upper Jaw length	46.92	41	40.24	47.95	44.01	2.73
Lower Jaw length	46.00	41	43.33	49.93	46.93	2.13
Interorbital width	22.31	41	19.04	26.55	22.48	2.47
Meristics						
	Holotype	n	Range			
Total dorsal-fin rays	15	40	13(4),14(26),15(10)			
Total anal-fin rays	15	38	14(7),15(15),16(16)			
Total pectoral-fin rays	13	37	12(8),13(24),14(5)			
Total pelvic-fin rays	7	20	7(20)			
Vertebrae	-	2	39(1),40(1)			
Gill rakers on 1 st gill arch						
Upper branch	11		8(1),9(7),10(5),11(7),12(9)			
Lower branch	21		16(2),17(4),18(3),19(7),20(7),21(5),22(1)			
Total	32		25(3),26(2),27(3),28(2),29(2),30(4),31(4),32(4),33(4),34(1)			

SL), Peru, rio Ucayali, Masisea, 24 Sep 1974, H. Ortega. *Anchoviella brevirostris*: MZUSP 11574 (1, 68.6 mm SL), Bahia, rio Paraguassú, Maragogipe, 13 Oct 1971, A.V. Alcântara. *Anchoviella carrikeri*: MZUSP 29114 (36, 18.03-26.34), Amazonas, rio Negro, Barcelos, AM, 9 Feb 1980, M. Goulding. *Anchoviella cayenensis*: MZUSP 11579 (1, 86.4 mm SL), Sergipe, Aracaju, Jul 1961, N. Menezes. *Anchoviella guianensis*: MZUSP 29113 (3, 50.06- 55.05), Roraima, Rio Branco, 01°30'S 61°16'W, 28 Oct 1979, M. Goulding. *Anchoviella jamesi*: MZUSP 29093 (4, 47.68-50.20 mm SL), Amazonas, rio Tefé, Jurupari, 03°22'S 64°43'W, 1 Aug 1979, M. Goulding. *Anchoviella lepidentostole*: MZUSP 11576 (2, 39.30-47.10 mm SL), Bahia, Ilhéus, Malhado and Malhadinho Beach, 25-26 Oct 1971, A.V. Alcântara.

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