

A new species of *Heptapterus* Bleeker 1858 (Siluriformes, Heptapteridae) from the Río Salí basin, north-western Argentina

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A revision of fish specimens previously identified as *Heptapterus mustelinus* from the endorheic Río Salí Basin, Tucumán, Argentina, reveals that they present several morphological differences from that species. This paper describes *Heptapterus qenqo* sp. nov. from the Río Salí Basin. The new species is diagnosed by a combination of the following characters: presence of small serrae on the anterior proximal margin of the first pectoral-fin ray; anal-fin rays iv-v, 11–13 (15–17 total anal-fin rays); adipose-fin base 40.9–47.4% standard length; small eyes (7.4–14.2% head length); adipose-fin confluent to caudal fin and maxillary barbel not reaching pectoral-fin base in adults, and reaching or scarcely surpassing the first pectoral-fin ray in small juveniles. © 2010 The Authors

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Key words: endorheic basin; *Heptapterus qenqo*; Ostariophysi; Tucumán.

INTRODUCTION

The catfish genus *Heptapterus* includes eight species and one species *inquirenda* (Ferraris, 2007) distributed in South America from Suriname to Buenos Aires, Argentina, and along the Andean region of Argentina, Bolivia and Peru. Mees (1974) diagnosed the genus by a combination of several characters such as an elongated body with depressed head, without spines in dorsal and pectoral fins, the head showing no exposed bones, the short length of the barbels, the presence of teeth bands in both jaws, the long adipose fin that may or may not be connected to the caudal fin, and the earth-brown colouration. Buckup (1988) rejected this definition considering those characters as uninformative or with doubtful phylogenetic utility, but did not propose a new diagnosis for the genus and described *Heptapterus sympterygium* Buckup within *Heptapterus* based on the characters proposed by Mees (1974). Currently, the genus remains unsatisfactorily diagnosed and a phylogenetic revision is needed, as for many other genera of Heptapteridae. The presence of *Heptapterus mustelinus* (= *Pimelodus mustelinus* Valenciennes, the type species of the genus and

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the family Heptapteridae) in the Río Salí Basin has long been reported (Ringuelet *et al.*, 1967; Miquelarena *et al.*, 1990; Butí & Cancino, 2005), but a detailed revision of the specimens assigned to this species from the Río Salí drainage revealed several differences with *H. mustelinus*. The aim of this paper is to describe a new species assignable to *Heptapterus* given its similarity to *H. mustelinus* and the current definition of the genus.

MATERIALS AND METHODS

The fish were sampled by hand-nets from several point stations on the Río Salí Basin, and after immersion in an anaesthetic solution (0.1% 2-phenoxyethanol) were fixed in a 10% formalin solution and preserved in 70% alcohol. Specimens were cleared and counterstained (C&S) following Taylor & Van Dyke (1985). Measurements are straight distances taken with callipers at 0.02 mm precision and rounded to 0.1 on proportions. The following measurements were taken: standard length (L_S): from snout tip to posterior margin of hypural plate; predorsal distance: from snout tip to anterior point in advance of anteriormost dorsal-fin ray; preadipose distance: from snout tip to beginning of adipose fin; prepectoral distance: from snout tip to base of first pectoral-fin ray; prepelvic distance: from snout tip to base of first pelvic-fin ray; preanal distance: from snout tip to base of anteriormost anal-fin ray; body depth: at vertical through dorsal-fin origin; peduncle depth: depth of peduncle at shallowest point; peduncle length: from posterior-most anal-fin ray to posterior margin of hypural plate; body width: between pectoral-fin bases; dorsal-fin base: from insertion of anterior to posterior-most dorsal-fin rays; anal-fin base: from insertion of anterior to posterior-most anal-fin rays; pectoral-, pelvic- and dorsal-fin lengths: longest branched ray on pectoral, pelvic and dorsal fins; unbranched dorsal and pectoral-fin rays length: length of the longest unbranched rays on those fins; pectoral–pelvic distance: from pectoral-fin base to pelvic-fin base; pelvic–anal origin distance: from pelvic-fin base to anal-fin base; adipose-fin depth: maximum depth of adipose-fin; adipose-fin base length: along adipose-fin base from origin to first upper procurrent ray; interdorsal length: from last dorsal-fin ray to adipose-fin origin; head length L_H : from snout tip to opercular flap; dorsal-fin origin–hypural plate: from anteriormost dorsal-fin ray to posterior margin of hypural plate; pelvic-fin origin–hypural plate: from pelvic-fin base to posterior margin of hypural plate; anal-fin origin–hypural plate: from anteriormost anal-fin ray to posterior margin of hypural plate; snout length: from snout tip to anterior margin of eye; orbital diameter: measured horizontally from anterior to posterior margins of eye; head width: maximum width at opercle; mouth width: distance between left and right commissures of mouth; upper prognathism: straight longitudinal distance from upper to lower jaw anterior margins; postorbital distance: from posterior eye margin to posterior opercular flap; interorbital width: shortest distance between orbits; snout to anterior nostril distance: from snout tip to fleshy rim of anterior nostril; internarial length: distance between fleshy rims of anterior and posterior nostrils; posterior nostril to orbit: from fleshy rim of posterior nostril to anterior margin of eye; head depth: at supraoccipital.

Counts were made under a stereomicroscope; numbers in parentheses following the counts are the number of specimens with that particular count. Holotype counts are indicated (*). The following counts were only done in C&S material: number of vertebrae (including all free vertebrae posterior to the Weberian complex; the compound caudal complex is counted as a single element), branchiostegal rays, gill rakers, procurrent rays and principal caudal-fin rays. Nomenclature of infraorbital bones follows Bockmann & Miquelarena (2008). Nomenclature of the laterosensory cephalic system follows Arratia & Huaquín (1995) and Schaefer & Aquino (2000). Comparative data of the species of *Heptapterus* are taken, in addition to personal observations, from Ihering (1907), Haseman (1911), Miranda Ribeiro (1911), Boeseman (1953), Mees (1967) and Buckup (1988).

Abbreviations for institutions where the material used in this paper is deposited: Asociación Ictiológica, La Plata (AI); Facultad de Ciencias Naturales y Museo, La Plata (MLP); Fundación Miguel Lillo, Tucumán (CI-FML); Departamento de Zoología Vertebrados, Facultad de Ciencias, Montevideo (ZVC-P).

Comparative material: *Heptapterus mustelinus*: CI-FML 187, one specimen, 187 mm L_S , Argentina, Tucumán, Chicligasta, Río Cochuna, Río Salí Basin; CI-FML 608, 21 specimens, 38.1–104.5 mm L_S , Argentina, Tucumán, Trancas, Las Juntas, Río Salí Basin; CI-FML 2041 (formerly IML 564), 10 specimens, 84.7–188.4 mm L_S , Argentina, Tucumán, Trancas, La Encrucijada, Río Salí Basin; CI-FML 3311, one specimen, 116.3 mm L_S , Argentina, Salta, Oran, El Oculito, Río Blanco, Río Bermejo Basin; CI-FML 3963, four specimens, 86.3–130.3 mm L_S , Argentina, Salta, Oran, El Oculito, Río Blanco, Río Bermejo Basin; CI-FML 3964, one specimen C&S, 57.5 mm L_S , Argentina, Salta, Oran, El Oculito, Río Blanco, Río Bermejo Basin; CI-FML 10091, two specimens, 57.7–88.3 mm L_S , Argentina, Salta, El Galpón, Río Juramento Basin; ZVC-P304, two specimens, 146.0–169.0 mm L_S , Uruguay, Departamento Canelones, Río Mosquito; ZVC-P 3422, two specimens, 118–144.8 mm L_S , Uruguay, Departamento Florida, Río Santa Lucía, Arroyo Milano; ZVC-P 5633, four specimens, 116.2–128.6 mm L_S , Uruguay, Departamento Montevideo, Río Santa Lucía, Río de las Piedras; AI 247, six specimens, 88–135.3 mm L_S , Argentina, Misiones, Arroyo Azul, headwaters of Arroyo Garuhapé.

RESULTS

HEPTAPTERUS QENQO SP. NOV.

Holotype

CI-FML 3954, 183.5 mm L_S , Argentina, Tucumán, Trancas, Río Rearte, Río Salí Basin, 26° 22' 52.1" S, 65° 31' 35.8" W (Figs. 1 and 2), coll. G. Aguilera, M. J. Salica, R. Moreno, April 2007.

Paratypes

CI-FML 3955, one specimen, 213.1 mm L_S , Argentina, Tucumán, Monteros, Río Los Sosa, Río Salí Basin, 27° 04' 06.4" S; 65° 39' 58.3" W, August 2006; CI-FML 3958, two specimens, 95.0–107.0 mm L_S , Argentina, Tucumán, Burruyacu, Río Medina, Río Salí Basin, 26° 33' 56.1" S; 65° 01' 13.9" W, March 2006; CI-FML 3959, two specimens, 123.1–140.2 mm L_S , Argentina, Tucumán, Trancas, Río Choromoro, Río Salí Basin, 26° 23' 14.0" S; 65° 27' 56.8" W, July 2006; CI-FML 3960, one specimen, 106.6 mm L_S , Argentina, Tucumán, Trancas, Río Choromoro, Río Salí Basin, 26° 23' 14.0" S; 65° 27' 56.8" W, April 2007; CI-FML 3961, one specimen, 123.5 mm L_S , Argentina, Tucumán, Chicligasta, Río Cochuna, Río Salí Basin, August 2006; CI-FML 3962, one specimen, Argentina, Tucumán, Trancas, Río Vípos, Río Salí, March 2006; CI-FML 3957, three specimens, 87.3–167.3 mm L_S , Argentina, Tucumán, Burruyacu, Río Medina, Río Salí Basin, 26° 33' 56.1" S, 65° 01' 13.9" W, July 2005; AI 252, three specimens, 107.3–178.9 mm L_S , Argentina, Tucumán, Trancas, Río Vípos, Río Salí Basin, August 2006; CI-FML 3956, one specimen C&S, 168.9 mm L_S , Argentina, Tucumán, Burruyacu, Río Medina, Río Salí Basin, 26° 33' 56.1" S; 65° 01' 13.9" W, April, 2004; AI 248, one specimen, C&S, 121.8 mm L_S , Argentina, Tucumán, Juan Bautista Alberdi, Río Chavarria, August 2008.

DIAGNOSIS

The new species described here presents several characters which, according to Mees (1974), define *Heptapterus*: a very elongate (eel-like) body form, with



FIG. 1. *Heptapterus qenqo* sp. nov., CI-FML 3954, holotype, 183.5 mm standard length, lateral, dorsal and ventral views.

depressed head; the absence of exposed bones on the head; the short barbels; the small eyes; the absence of spines in dorsal and pectoral fins; the high number of anal-fin rays; the long adipose-fin base, confluent to caudal fin; the earth-brown colouration. Thus, it is appropriate to describe this new species within *Heptapterus* rather than in any other existing or new genus.

The new species is diagnosable by a combination of the following characters: presence of small serrae on the anterior proximal margin of first pectoral-fin ray (Fig. 3); anal-fin rays iv-v, 11–13 (15–17 total anal-fin rays); adipose-fin base relatively short (40.9–47.4% L_S); small eyes (7.4–14.2% L_H); adipose fin confluent to caudal fin; maxillary barbel not reaching pectoral-fin base in adults and reaching or scarcely surpassing first pectoral-fin ray in small juveniles.

Heptapterus qenqo is distinguished from *H. bleekeri* Boeseman, *H. fissipinnis* Miranda Ribeiro, *H. multiradiatus* Ihering, *H. ornaticeps* Ahl, *H. stewarti* Hase-man and *H. sympterygium* by having 15–17 total anal-fin rays v. 20–22, 23, 36, 19, 30 and 22–29, respectively. The shorter adipose-fin base distinguishes *H. qenqo* from *H. mustelinus* (40.9–47.4% L_S , mean 43.9% L_S v. 51.5–59.6% L_S). The eye diameter of *H. qenqo* is smaller (7.4–14.2% L_H , mean 11.8% L_H) than that of *H. ornaticeps* (18.2% L_H), *H. fissipinnis* (18.2% L_H) and *H. mustelinus* (15.0–19.9% L_H). The adipose fin confluent to the caudal fin distinguishes *H. qenqo* from *Heptapterus tapanahoniensis* Mees, which has the adipose fin separated from the caudal

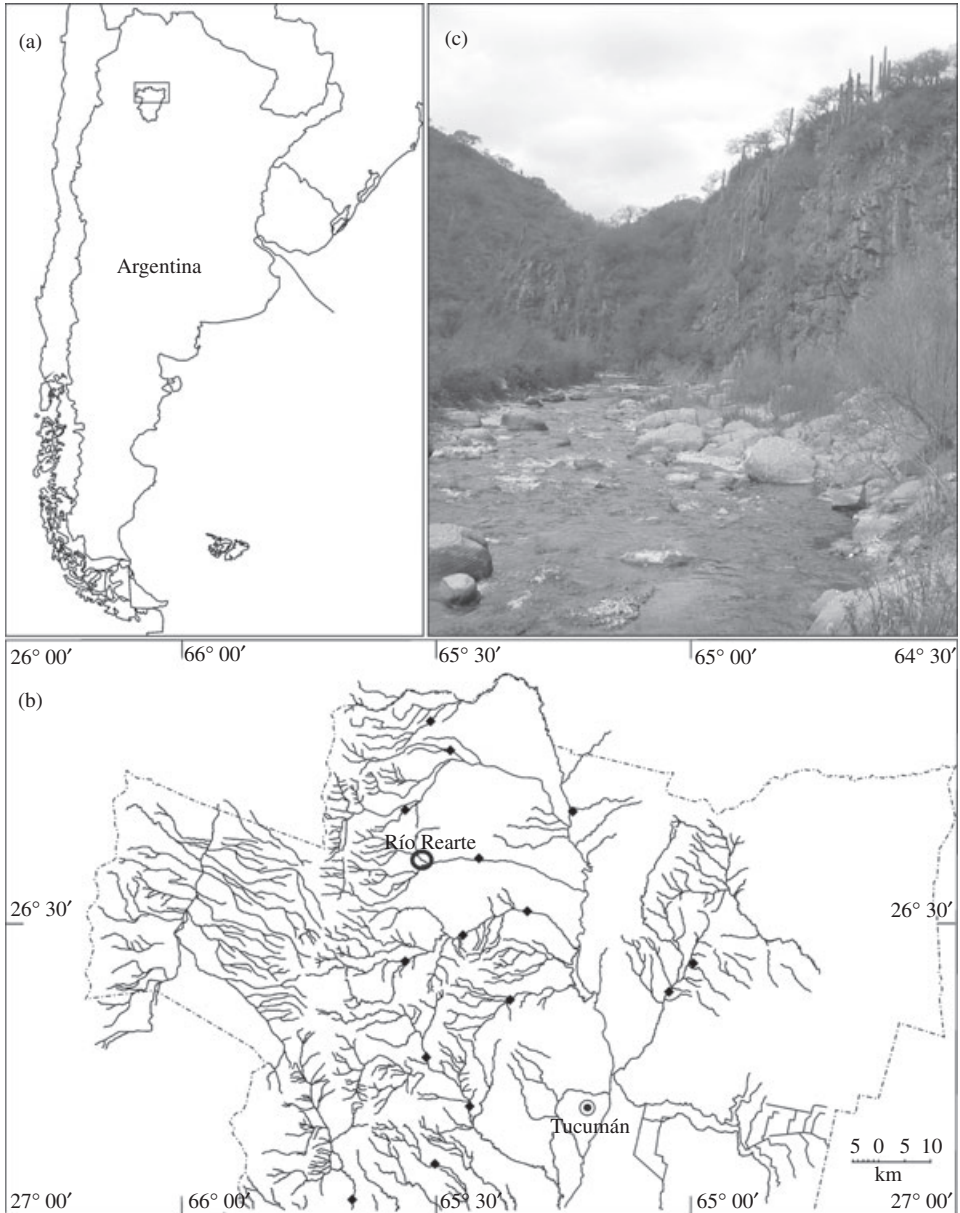


FIG. 2. Distribution of *Heptapterus genqo* n. sp.: (a) map of Argentina where the Province of Tucumán is shown, (b) the area (□) enlarged from (a) type locality of *H. genqo* is indicated (○), and additional localities where this species was collected are also marked (◆) and (c) photograph of type locality.

fin. *Heptapterus genqo* resembles *H. mustelinus* in external morphology although it can be further distinguished by a longer interdorsal length (9.5–13.2% L_S , mean 13.2% L_S v. 3.1–5.0% L_S) and the following measurement ratios: dorsal-fin base: anal-fin base (0.48–0.78 v. 0.13–0.22); internarial: pelvic-anal fin distance

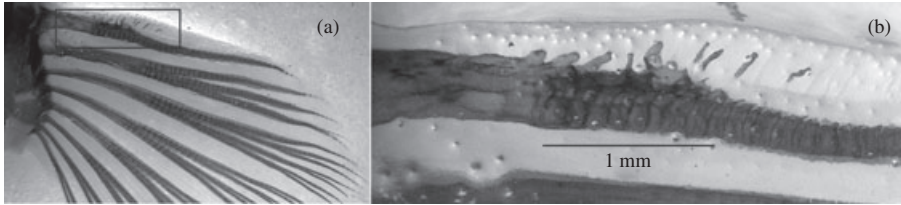


FIG. 3. *Heptapterus qenqo* n. sp., paratype CI-FML 3956: (a) pectoral-fin rays and (b) enlarged area showing the serrae on anterior proximal margin of first pectoral-fin ray.

(0.08–0.11 v. 0.36–0.92); interorbital:anal-fin base (0.20–0.30 v. 0.14–0.19); internarial:anal-fin base (0.10–0.16 v. 0.07–0.09); interdorsal–adipose:pelvic-fin length (0.87–1.49 v. 0.30–0.61); interdorsal–adipose:pelvic-anal fin distance (0.38–0.54 v. 0.14–0.24); posterior nostril–eye:interdorsal–adipose (0.09–0.16 v. 0.31–0.54); interorbital:interdorsal–adipose (0.30–0.47 v. 0.69–1.43).

The short maxillary barbels of *H. qenqo* in adults do not reach the pectoral-fin insertion, whereas in small juveniles this barbel reaches to or just beyond the first pectoral-fin ray insertion, distinguishing it from *H. fissipinnis* (maxillary barbel reaching to pectoral-fin tip) and *H. multiradiatus* (reaching to middle of pectoral fin).

Additionally, *H. qenqo* is distinguished from *H. bleekeri*, *H. multiradiatus* and *H. ornaticeps* by a longer head (19.2–21.5% L_S , mean 20.2% L_S v. 16.7, 12.5 and 16.7% L_S , respectively); from *H. bleekeri* by a lower body depth (10.6–15.3% L_S , mean 12.7% L_S v. 10% L_S), and adipose-fin origin slightly anterior to the vertical through the anal-fin insertion (v. origin above fifth to seventh anal-fin ray); from *H. tapanahoniensis* by a higher number of total vertebrae (51–52 v. 43); from *H. stewarti* by a lower dorsal-fin ray number (seven v. nine).

Description

Morphometric data are presented in Table I. Elongate body, almost cylindrical anteriorly and compressed along caudal peduncle. Dorsal profile of body: straight from snout tip to supraoccipital process, concave from this point to dorsal-fin origin, convex along dorsal-fin base to adipose-fin origin, and almost straight along caudal peduncle to caudal fin. Ventral profile straight from snout tip to vertical through pectoral-fin base, concave along prepelvic area to pelvic-fin base, almost straight to anal-fin origin, and slightly oblique posteriorly along anal-fin base to caudal fin. Head depressed and broad, anterior nostrils very close to snout tip and posterior nostrils closer to eye than to snout tip. Small eyes, covered by skin. Mouth terminal, upper jaw slightly in advance of lower jaw; rounded snout margin. Maxillary barbels not reaching pectoral-fin base in adults, only in small juveniles maxillary barbels reach pectoral fin or slightly surpass first pectoral-fin ray insertion. In *H. qenqo* as many other catfishes, the maxillary barbel presents a negative allometric development, being relatively shorter in adults than in juveniles (Fig. 4). Bases of mental barbels at same level anteriorly on body or inner ones slightly anterior. Premaxillary teeth in a single broad band, without distinct backward projections; anterior margin of band convex and posterior one anteromedially oblique, forming an angle at medial line. One tooth band on each dentary; bands anteriorly broadened and slender posteriorly; distal end of band following curvature of inner wall of dentary. Cranial fontanel long

TABLE I. *Heptapterus qenqo* Morphometrics of holotype and 14 paratypes (mean \pm S.D. in parentheses)

	Holotype	Paratypes ($n = 14$)
L_S (mm)	183.5	67.3–213.1
% L_S		
Predorsal distance	34.6	33.3–36.9 (35.1 \pm 1.0)
Preadipose distance	53.0	50.0–56.5 (54.0 \pm 2.0)
Prepectoral distance	18.1	18.0–22.2 (19.5 \pm 1.0)
Prepelvic distance	37.2	35.4–41.4 (38.1 \pm 1.3)
Preanal distance	59.7	58.2–65.0 (61.3 \pm 1.8)
Body depth	12.6	10.6–15.3 (12.7 \pm 1.3)
Peduncle depth	5.9	5.3–6.9 (6.2 \pm 0.4)
Peduncle length	21.9	19.8–25.4 (22.0 \pm 1.5)
Body width	13.2	12.2–15.5 (13.9 \pm 1.0)
Dorsal-fin base	9.3	8.3–10.0 (9.2 \pm 0.5)
Anal-fin base length	19.4	15.8–21.2 (18.3 \pm 1.5)
Pectoral-fin length	9.1	7.4–12.4 (10.3 \pm 1.3)
Pelvic-fin length	8.8	7.3–11.9 (10.0 \pm 1.3)
Unbranched dorsal-fin ray length	8.5	7.1–9.9 (8.5 \pm 1.0)
Dorsal-fin length	11.0	9.3–12.9 (11.0 \pm 1.0)
Unbranched pectoral-fin ray length	9.4	5.5–10.0 (7.8 \pm 1.2)
Pectoral-pelvic distance	21.6	17.8–23.1 (20.9 \pm 1.3)
Pelvic-anal origin distance	23.5	21.7–26.2 (24.3 \pm 1.3)
Adipose-fin depth	2.3	1.6–3.1 (2.4 \pm 0.5)
Adipose-fin base length	44.3	40.9–47.4 (43.9 \pm 2.0)
Interdorsal length	10.0	9.5–13.2 (11.6 \pm 1.2)
L_H	19.6	19.2–21.5 (20.2 \pm 0.6)
Dorsal-fin origin-hypural plate	66.7	65.2–69.3 (66.4 \pm 1.1)
Pelvic-fin origin-hypural plate	64.0	60.4–65.1 (63.1 \pm 1.3)
Anal-fin origin-hypural plate	40.8	22.5–41.8 (38.7 \pm 4.8)
% L_H		
Snout length	38.7	33.7–40.9 (37.0 \pm 2.2)
Orbital diameter	10.7	7.4–14.2 (11.8 \pm 1.7)
Head width	73.4	72.0–83.9 (75.9 \pm 3.0)
Mouth width	45.6	40.0–49.7 (45.7 \pm 3.1)
Upper prognathism	6.1	4.1–9.3 (6.1 \pm 1.5)
Postorbital distance	55.1	52.5–56.6 (54.3 \pm 1.3)
Interorbital width	22.8	17.6–24.1 (21.4 \pm 2.2)
Snout-anterior nostril distance	11.4	10.1–16.5 (12.4 \pm 2.1)
Internarial distance	10.5	9.9–13.0 (11.0 \pm 0.9)
Posterior nostril-eye	7.9	5.0–10.1 (7.1 \pm 1.3)
Head depth	41.6	42.0–54.4 (46.2 \pm 3.2)

L_S , standard length; L_H , head length.

and slender, with its anterior margin at line through posterior end of nasal and reaching to posterior third of supraoccipital. Anterior fontanel slightly wider than posterior one with epiphyseal bar situated at line through distal part of fourth suborbital bone.

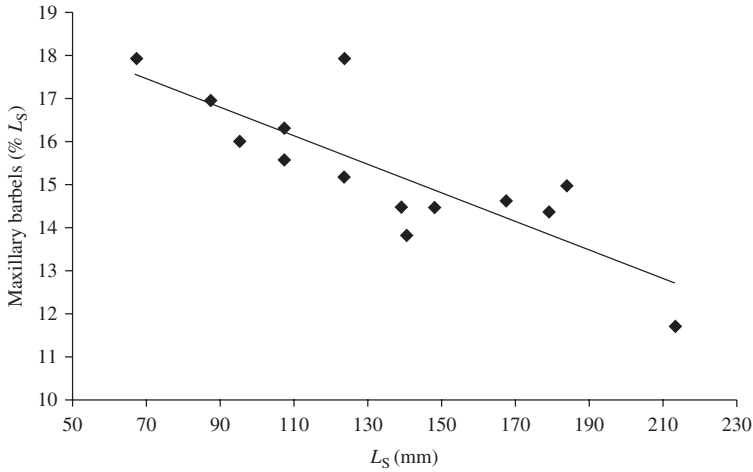


FIG. 4. The relationship between standard length (L_S) and maxillary barbel length as % L_S of *Heptapterus qenqo* sp. nov. The negative slope of the linear regression indicates negative allometric development. The curve was fitted by $y = -0.033x + 19.832$.

Pores of cephalic sensory lateral system are shown in Fig. 5. Supraorbital canal with five pores, s1 anteromedial to anterior nostril, complex pore s2+i2 postero-medial to anterior nostril, s3 medial to posterior nostril, epiphyseal complex pore s6+i6 on mid-dorsal line of head, behind eyes and s8 on dorsum of head at posterior region. Infraorbital canal with five pores: i1 lateral to anterior nostril, i3 on maxillary barbel groove, anterolateral to posterior nostril, i4 on maxillary barbel groove, anterior to vertical through anterior margin of eye, i5 posterolateral to vertical through posterior margin of eye and i6 posterior to eye. Preoperculomandibular canal with 11 pores, pm1 slightly lateral to mid-ventral line, pm2–5 bordering lower jaw, pm5–8 on ventral part of head following a concave line to lateral margin of head, pm9 ventrolateral, pm10 lateral and pm11 on head dorsum.

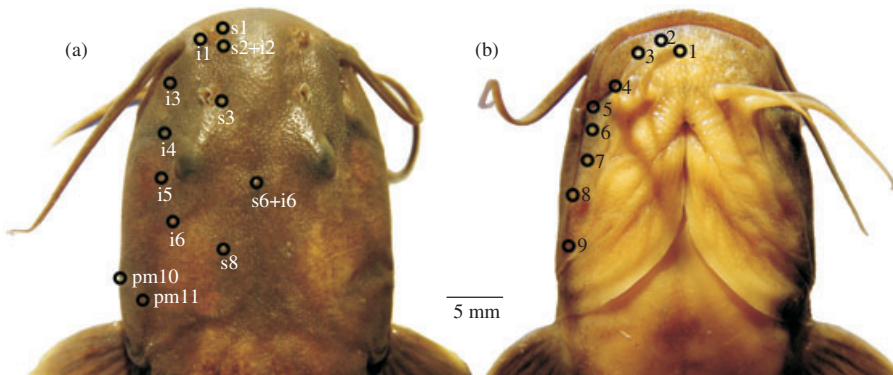


FIG. 5. *Heptapterus qenqo* sp. nov., CI-FML 3954, holotype. Pores of cephalic sensory lateral system in (a) dorsal and (b) ventral view showing only preoperculomandibular canal pores. s, supraorbital canal pores; i, infraorbital canal pores; pm, preoperculomandibular canal pores.

Lateral line almost straight, complete and uninterrupted reaching to third or fourth vertebrae before compound caudal complex. Pores on anterior portion of lateral line well developed and almost inconspicuous to posterior portion.

Dorsal-fin rays i, 6 (15*), its origin inserted on anterior portion of body, dorsal fin with straight to slightly rounded distal margin. Anal-fin origin inserted on posterior portion of body, with iv-v, 11 (2), 12 (12*), 13 (1) rays and short base. Adipose-fin origin half way between insertion of posteriormost dorsal-fin ray and vertical through anal-fin origin. Caudal-fin margin rounded with dorsal lobe longer than ventral lobe. Pectoral-fin rays i, 7 (15*), pectoral fin with rounded distal margin and serrae on anterior proximal margin of first ray (Fig. 3), more developed in adults; juveniles with a few ossified basal serrae and distal most ones formed by cartilaginous tissue. Pelvic-fin rays i, 5 (15*), pelvic-fin origin inserted just posterior to vertical through dorsal-fin origin.

Counts on C&S material: principal caudal-fin rays i, 13, i; one unbranched and six branched rays on dorsal caudal plate and five branched on ventral caudal plate; 10–11 dorsal and 19–23 ventral procurrent rays. Total vertebrae 51–52 (11–12 abdominal and 40 caudal); nine pleural ribs; parapophyses of three anterior free abdominal vertebrae wider at distal end than at their bases, parapophyses of other abdominal vertebrae triangular in shape with distal end pointed and curved backwards; first dorsal-fin pterygiophore between neural spines of sixth and seventh, or seventh and eighth free vertebrae; seven to nine branchiostegal rays; nine to 10 gill rakers on first arch (seven or eight on ceratobranchial, one on cartilage and one on epibranchial).

Colouration in preserved material

Body background brownish dorsally to cream ventrally. Head dorsum dark brown from snout tip to posteromedial area. Two pale areas on posterodorsal region of head, separated by a darker bar; lower pale area at cheek between insertion of maxillary barbel and area ventral to eye; upper pale area on dorsal part of head posterior to eye. A darker area anterior to dorsal-fin base. Dorsal-fin base dark brown with pale areas at insertion of anteriormost and posteriormost dorsal-fin rays; posterior pale area reaching tip of adpressed dorsal fin. Dark brown area from adpressed dorsal-fin rays, along mid-dorsal region of peduncle, to caudal fin. Body flanks with a dark brown area above pectoral-fin base, continued posteriorly as a slender lateral band extending to caudal fin. Body flanks with scattered dark brown chromatophores, which are more concentrated following the myosepta. A concentration of dark brown chromatophores forming a very faint band obliquely from pelvic fins, becoming more apparent at pelvic girdle region and running parallel to ventral body profile to hypural plate. Dorsal, pectoral and pelvic fins with a concentration of chromatophores proximally and becoming more diffuse distally. Anal fin almost hyaline with scattered chromatophores. Dorsal, adipose and caudal fins darker than paired fins. Chromatophores concentrated along rays of all fins. Barbels with chromatophores concentrated on dorsal surface and creamy ventrally.

Etymology

The specific epithet *genqo* derives from the Quechua language meaning serpentine or sinuous, in allusion to the swimming movements of this species. An adjective, singular and masculine.

Distribution

Heptapterus qenqo is widely distributed in mountain to piedmont streams of the endorheic Río Salí Basin, Tucumán, Argentina, being endemic of this basin (Fig. 2).

Ecological notes

Heptapterus qenqo inhabits well-oxygenated rivers and streams, with gravel substratum and moderate to rapid flowing waters. The specimens are usually sheltered under large rocks. Apparently the members of this species are solitary and only a few specimens are usually captured per collecting site.

DISCUSSION

The presence of serrae on the anterior proximal margin of the first pectoral-fin ray of *H. qenqo* is apparently the first record of such a structure for the genus. Serrae, however, are not visible externally, and the presence in other species must be verified. This feature is more notable in large adults of *H. qenqo* whereas in juveniles most of the serrae are cartilaginous, with only a few of them ossified. The type species of the genus, *H. mustelinus*, which resembles *H. qenqo* in external morphology, lacks serrae on the anterior proximal margin of first pectoral-fin ray. Among the remaining species of the genus, *H. stewarti* presents a short rudimentary spine on the pectoral fins without hooks or teeth (Haseman, 1911), but the description of this species was based on one specimen of 56 mm L_S and the serrae, if present, were still not developed.

Buckup (1988) analysed the geographic variation of the anal-fin ray counts of *H. mustelinus*, reporting a range from 16 to 24 rays. Buckup (1988) included eastern slopes of the Andean region in Argentina within the distributional range of *H. mustelinus*, where the province of Tucumán is located, based on a citation by Ringuélet *et al.* (1967). In addition, Miquelarena *et al.* (1990) and Butí & Cancino (2005) referred to specimens of *H. mustelinus* based on the meristic counts and the wide distributional range provided by Ringuélet *et al.* (1967). The examination of the specimens studied by Ringuélet *et al.* (1967), housed at the fish collection of the Fundación Miguel Lillo, Tucumán (CI-FML 187, CI-FML 608 and CI-FML 2041), however, revealed that they actually belong to the new species, *H. qenqo*. Therefore, the references of Buckup (1988), Miquelarena *et al.* (1990) and Butí & Cancino (2005) to *H. mustelinus*, based on Ringuélet *et al.*'s (1967) data, are incorrect. *Heptapterus qenqo* is the single species of *Heptapterus* occurring in Tucumán.

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