

## The identity of *Hyla leucotaenia* Burmeister, 1861 (Anura: Hylidae)

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The German naturalist Carl Hermann Conrad Burmeister (1807–1892) had a prolific scientific career, spanning multiple taxa from diverse insect groups and trilobites to temnospondyls, birds, and extant and fossil mammals (see Berg, 1895). His contributions to anuran taxonomy are concentrated in two books, “*Erläuterungen zur Fauna Brasiliensis...*” (Burmeister, 1856) and “*Reise durch die La Plata-Staaten...*” (Burmeister, 1861). The latter is an account of his travels in Argentina and Uruguay from 1857–1860 and includes descriptions of three new species of frogs: *Leiuperus nebulosus*, *Cystignathus mystacinus*, and *Hyla leucotaenia*. While the first two names currently designate valid species, with the combinations *Pleurodema nebulosum* and *Leptodactylus mystacinus* respectively, the last name has had a more complex taxonomic history. It involves confusions involving a homonym, its consideration as a junior synonym of *Hypsiboas pulchellus* (Duméril & Bibron, 1841)—a widely distributed species in eastern Argentina, southeastern Brazil, and Uruguay (Frost, 2014)—and its actual identity corresponding to another widespread species in the same geographic area, with which it has never before been associated: *Scinax squalirostris* (A. Lutz, 1925). All these issues are discussed in this paper.

Burmeister (1861) described *Hyla leucotaenia*, from “Paraná”, at that time the capital of Argentina and since 1883 the capital of the province of Entre Ríos, on the eastern bank of the Rio Paraná. Subsequently, on the basis of a single specimen, Günther (1868) described a homonym from “Rio Grande”, referring to Rio Grande do Sul, Brazil. The fact that *Hyla leucotaenia* Günther, 1868 was preoccupied by *Hyla leucotaenia* Burmeister, 1861 was noticed by Boulenger (1886), who coined the replacement name *Hyla guentheri* for the former. Langone (1997) provided a detailed account of the taxonomic history of *Hyla guentheri* Boulenger, 1886 (now with the combination *Hypsiboas guentheri*). *Hyla leucotaenia* Burmeister was treated as a valid species, without comment, by Weyenberg (1876) and Avé-Lallémand (1895).

Berg (1896) considered *Hyla leucotaenia* Burmeister to be a junior synonym of *Hyla raddiana* Fitzinger, 1826. After describing variation in adults and juveniles, Berg (1896) states that “Probably *Hyla leucotaenia* Burm. was established in presence of equally young specimens” (translated from the Spanish). This proposal was followed by subsequent authors (Nieden, 1923; Miranda-Ribeiro, 1926; Barrio, 1965; Lutz, 1973; Gorham, 1974; Duellman, 1977; Cei, 1980; Klappenbach & Langone, 1992; Lavilla, 1992) who included that name as a junior synonym of *Hyla raddiana* Fitzinger, 1826 or *Hyla pulchella* Duméril & Bibron, 1841, after Bokermann (1966) demonstrated that the latter name was the correct one to be applied for that species. The only comment on the synonymy, subsequent to Berg (1896), was by Lutz (1973) who stated that “*Hyla leucotaenia* Burmeister (1861) seems to be correctly interpreted by most authors as the juvenile of *Hyla pulchella*”.

The brief description by Burmeister (1861: p. 531–532) states that:

“Of the look and size of the *H. leucophyllata* (D. B. VIII, 607), but more slender, the head sharper with a rounded and truncated snout overhanging the mouth. – Vomer teeth on two little round knobs between the

Burmeister, 1861 is available for them, following Art. 23.9.2 of the ICBN, as are the names *Hyla lindneri* Müller & Hellmich, 1936 and *Hyla evelynae* Schmidt, 1944.

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## APPENDIX. Examined specimens

- Hyla leucotaenia*—ARGENTINA: ENTRE RÍOS: Paraná (ZMB 7376 [Museum für Naturkunde, Berlin]).
- Hypsiboas pulchellus*—ARGENTINA: CORRIENTES: Manatiales (MACN-HE 14953–963, juveniles [Herpetological Collection of Museo Argentino de Ciencias Naturales Bernardino Rivadavia, Buenos Aires]).
- Scinax squalirostris*—BRAZIL: SÃO PAULO: Bonito, Serra da Bocaina (AL-MN 954 [Adolfo Lutz Collection, Museu Nacional, Rio de Janeiro]); ARGENTINA: ENTRE RÍOS: Basavilbaso (MACN-HE 38248 [Herpetological Collection of Museo Argentino de Ciencias Naturales Bernardino Rivadavia, Buenos Aires]).