

## AMPHIBIA: ANURA: LEPTODACTYLIDAE

## LEPTODACTYLUS MYSTACINUS

## Catalogue of American Amphibians and Reptiles.

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***Leptodactylus mystacinus* (Burmeister)**  
Mustached Frog

*Cystignathus mystacinus* Burmeister 1861:532. Type locality, "Bei Rozario" [Argentina, Santa Fe, Rosario, 32°57' 60"40'W, see **Nomenclatural History**]. Holotype, Martin-Luther-Universität, Halle (Saale), no number, adult male, collector and date unknown (examined by WRH).

*Cystignathus labialis* Cope 1877:90.

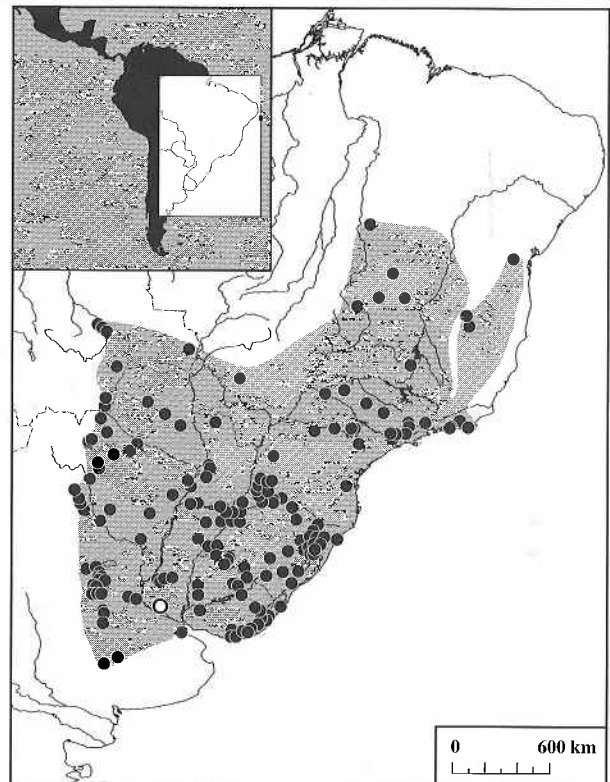
*Leptodactylus mystacinus*: Boulenger 1882:244. First use of currently recognized name.

• **CONTENT.** The species is monotypic (see **Nomenclatural History**).

• **DEFINITION.** Adult *Leptodactylus mystacinus* are of moderate size, the head is as wide as long, and the hind limbs are moderately short (see **Table**; Heyer and Thompson 2000 provided definitions of adult size and leg length categories for *Leptodactylus*). Male vocal sacs are not visible externally or at best are weakly expanded laterally and slightly darker than female throats. Male snouts are more spatulate than those of females. Male forearms are not hypertrophied. Males lack asperities on the thumbs and chest. One or two pairs of dorsolateral folds (indicated by dark/light outlining in indifferently preserved specimens) are present: one distinct more dorsal pair extends from behind the eye (often with a gap with the fold beginning at a level above the tympanum) to the upper groin; a second pair, either complete or interrupted, extends from above the forearm insertion at the same level as the dorsal portion of the supratympanic fold and extends to the groin along the flanks. The toe tips are narrow. The toes lack fringes or fleshy ridges. The upper shank has many or scattered distinct white tubercles. The outer tarsus almost always (94%) has many or scattered distinct white tubercles. The sole of the foot usually (75%) has distinct scattered to many white tubercles, sometimes (25%) the white tubercles are absent.

The upper lip usually (86%) has a distinct light stripe, sometimes (14%) the stripe is indistinct. A dark interorbital bar is absent. The dorsum is uniform, striped, or with small dark spots. The upper pair of dorsolateral folds have a distinct dark brown stripe or band ventrally and usually have a light pinstripe highlighting the fold dorsally; the light stripe is often broader and more distinct posteriorly. The fold along the flanks may have dark or cream highlights or both. The species lacks light mid-dorsal stripes. The belly ranges from being immaculate to mottled, with the mottling more intense on the lateral portions of the belly behind the arm insertions. The posterior thigh surfaces usually (94%) lack light horizontal stripes on their lower aspects; a few specimens (6%) have indistinct light stripes. The upper shanks have narrow dark crossbands, often interrupted medially.

Larvae have a typical pond morphology and are members of the lentic, benthic guild (Altig and Johnston 1986, guild 12). The oral disk is anteroventrally positioned, entire (not emarginate), with an anterior gap lacking marginal papillae. A single row of marginal papillae is on either side of the anterior gap; two rows of marginal papillae occur laterally; one or two rows occur ventrally, the second row usually not complete. No submarginal papillae are present. The tooth row formula is 2(1)/



**MAP.** Distribution of *Leptodactylus mystacinus*. The type locality is indicated by a circle. Dots mark other localities. A dot may represent more than one site. Published locality data used to generate the map should be considered as secondary sources of information, as we did not confirm all specimen identities.



**FIGURE 1.** *Leptodactylus mystacinus*, Uruguay (photograph courtesy of A. Olmos).

3(1). The spiracle is sinistral and the vent tube is median. The dorsal fin ends at the body and does not extend onto it. At Gosner stages 35–36, larval total lengths range from 46–48 mm and

**TABLE.** Summary measurement data for *Leptodactylus mystacinus* (means are in parentheses).

Measurement	Males	Females
SVL (mm)	44–65 (54.1)	53.5–67.1 (57.3)
Head length/SVL (%)	33–39 (37)	32–38 (36)
Head width/SVL (%)	32–38 (35)	33–38 (35)
Thigh length/SVL (%)	33–45 (39)	33–42 (38)
Shank length/SVL (%)	37–45 (42)	36–64 (42)
Foot length/SVL (%)	36–47 (42)	37–46 (42)

body lengths from 17–18 mm; eye diameters are 9–11% of body lengths; and the widths of the oral disks are 21–23% of body lengths. The dorsum and sides of the body are brown; brown melanophores encroach on the venter anterior to the gut, otherwise the venter lacks pigment. The tail musculature is mottled brown and cream. The tail fins range from having distinct dark to little mottling.

The advertisement call consists of a single note per call, given at a rate of 250–400/min. Call duration ranges from 0.04–0.06 s (Barrio's 1965b value of 0.10 s seems to be due to over-recording and/or microphone ringing). The call lacks or has negligible amplitude modulation. The call lacks or has negligible frequency modulation; when modulation is present, the average rise is 50 Hz from beginning to end of call. The call attains near maximum intensity almost immediately; the final third of the call falls off evenly. The dominant frequency is the fundamental frequency. The dominant frequency ranges from 2050–2500 Hz. Harmonics are either absent (calls analyzed from Paraguay for this account) or present (Barrio 1965b from Argentina).

• **DIAGNOSIS.** The species having a combination of no toe fringing, no light stripe on the posterior surface of the thigh, and distinct white tubercles on the posterior surface of the tarsus are *Leptodactylus bufonius*, *L. labrosus*, *L. mystacinus*, *L. troglodytes*, and *L. ventrimaculatis*. *Leptodactylus mystacinus* has distinct dorsolateral folds (at least indicated by color pattern); dorsolateral folds are indistinct or lacking in *L. bufonius* and *L. troglodytes*. *Leptodactylus mystacinus* is difficult to diagnose consistently from *L. labrosus* and *L. ventrimaculatus* based on external morphological features. Most *L. mystacinus* have a very distinct light upper lip stripe; no *L. labrosus* or *L. ventrimaculatus* have distinct upper lip stripes. The advertisement call of *L. mystacinus* differs markedly from those of *L. labrosus* and *L. ventrimaculatus*; the latter two species have calls with pronounced rising frequency modulation (WRH, unpubl. data).

• **DESCRIPTIONS.** Burmeister (1861) (Spanish translation, 1944) described the type specimen in detail and L. Müller (1941) provided a morphological description of the holotype. Detailed

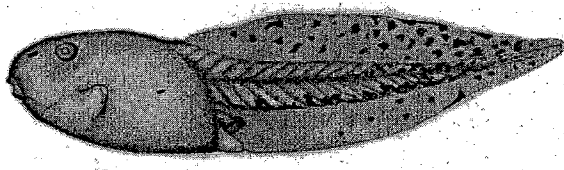


FIGURE 2. Tadpole of *Leptodactylus mystacinus* (USNM 556038) from Quinta de Santos, Montevideo, Uruguay; Gosner stage 37. Bar = 5 mm.

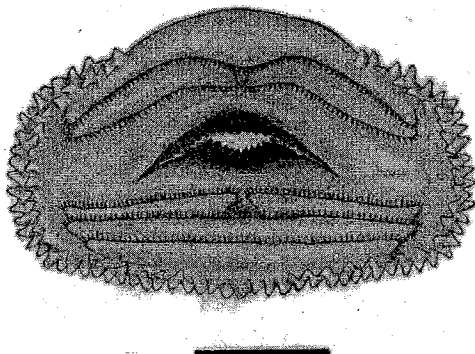


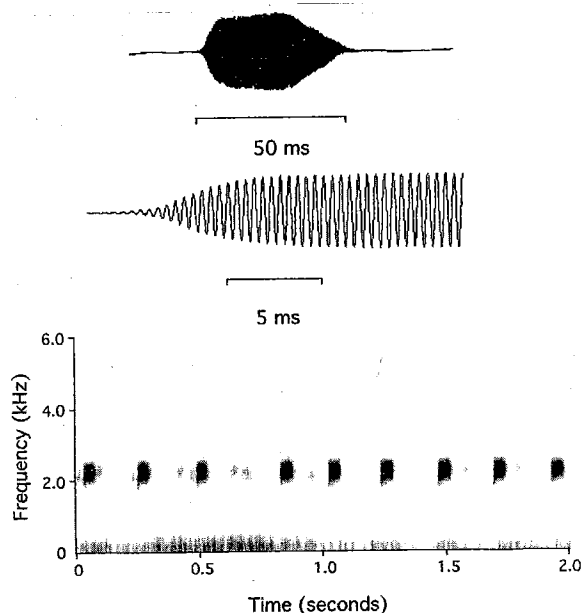
FIGURE 3. Oral disk of *Leptodactylus mystacinus* larva (USNM 556038) from Quinta de Santos, Montevideo, Uruguay; Gosner stage 37. Bar = 1 mm.

character descriptions of adults, including color patterns, are in Gallardo (1964c) and Hensel (1867, as *L. mystaceus*). Cei (1980), Cochran (1955), Heyer (1978), A. Lutz (1926), Méhelý (1904), F. Müller (1880, as sp. questionably *mystacinus*) and Sazima (1975) furnished morphological and color descriptions. Miranda-Ribeiro's (1926) description of *L. pygmaeus* is not of *L. mystacinus*. Descriptions of juvenile *L. mystacinus* were provided by Cope (1877, as *Cystignathus labialis*), Gallardo (1964c), and Sazima (1975). Larval characteristics and color are described in Sazima (1975) and Wogel et al. (2000). Wassersug and Heyer (1988) detailed larval oral features. Advertisement call descriptions are in Abrunhosa et al. (2001), Barrio (1964b, 1965b), Kwet (2001), and Sazima (1975). Kwet (2001) and Straneck et al. (1993) produced a compact disk and cassette tape, respectively, that include *L. mystacinus* advertisement calls. A description of the karyotype is in Bogart (1974).

• **ILLUSTRATIONS.** Color photographs were provided by Couturier (1985), De la Riva et al. (2000), Kwet (2001), and Lavilla et al. (1995, as *L. cf. mystacinus*). Photos of adult specimens are in Bogart (1974), Cei (1956), Freiberg (1972), Gallardo (1964c, 1974), Klappenbach (1969), Martínez Achenbach (1963), and Sazima (1975). Gallardo (1964c, 1987b) furnished drawings of adult specimens. Illustrations by Cei (1980), A. Lutz (1926), and Méhelý (1904) are in color. Depictions of adult anatomical features are in Cei (1980), Gallardo (1987b), Langone (1995), Limeses (1969), Limeses et al. (1972), and Sazima (1975). Sazima (1975) presented an illustration of the head profile of a juvenile specimen. A larval photo is in Wogel et al. (2000) and a SEM micrograph of the larval oral cavity is in Wassersug and Heyer (1988). Drawings of larvae and larval anatomical features were included in Cei (1980), Larson and de Sá (1998), Sazima (1975), and Wogel et al. (2000). Abrunhosa et al. (2001), Barrio (1964b, 1965b), Kwet (2001), Salas et al. (1998), Sazima (1975), Straneck et al. (1993), and Wogel et al. (2002) provided audiospectrograms of the advertisement call. Abrunhosa et al. (2001) included an oscillogram of the advertisement call and audiospectrograms and oscillograms of calls of an unknown function. Photographs and illustrations of nests and nest construction are in Sazima (1975). Bogart (1974) provided a photograph of the karyotype.

• **DISTRIBUTION.** *Leptodactylus mystacinus* is found in subtropical arid and mesic habitats of the eastern slopes of the Andes in Bolivia and the Yungas of northwestern Argentina, extending eastward through Mato Grosso and Goiás to Bahia, Brazil. It ranges southward to central Argentina and Uruguay. *Leptodactylus mystacinus* occurs throughout the Chaco and much of the Cerrado Morphoclimatic Domain, but is not found in the Caatinga Morphoclimatic Domain (Ab'Sáber, 1977). Where *L. mystacinus* occurs in mesic regions, as in the central and southern Atlantic Forests of Brazil, it inhabits clearings such as pastures rather than closed canopied forests.

Harding (1983) listed its distribution by countries in the New World. Duellman (1999) tabled its distribution as Atlantic Forest, Caatinga-Cerrado-Chaco, and Pampean-Monte Domains. Citations for its general distribution are found in Cei (1980), Gallardo (1964c, 1987b), Klappenbach and Langone (1992), Langone (1995), and Lavilla et al. (2000b). Boettger (1892) recorded a *Leptodactylus mystacinus* collected from "Caracas, Venezuela" and Berg (1896), Cei (1956), Freiberg (1942), A. Lutz (1927, 1928), Marelli (1924), and Nieden (1923) included the mistaken locality in their distribution statements. Gallardo (1964c) indicated that the Venezuelan locality error was based on species misidentification. Beebe (1925, 1946), Crawford (1931), and Crawford and Jones (1933) placed *L. mystacinus* in British Guiana and Venezuela based on mistaken identifications.



**FIGURE 4.** Wave form and audiospectrogram displays of the advertisement call of *Leptodactylus mystacinus* (USNM recording 182, cut 2) from El Tirol, near Encarnación, Irapua, Paraguay. Upper wave form of the fifth call in the audiospectrogram; lower wave form of the beginning of the upper wave form.

In addition, the localities cited by Miranda-Ribeiro (1927) for *L. mystacinus*, as *L. pygmaeus*, are contingent on a mix of species (P. E. Vanzolini, pers. comm.). De la Riva et al. (2000), Gonzales (1998), and Machado et al. (1999) collected the species in open formations. Sazima (1975), Bernarde and Kokubum (1999), and Strüssmann et al. (2000a) found it in gallery and primary forests. Finally, altitudinal limits were noted as 1200 m by Barrio (1977) and 1800 m by di Tada et al. (1976).

The following references to distribution and localities are listed by country; the letter (M) indicates a species mention: **Argentina** (Álvarez et al. 1996, 2002; Barrio 1965b; Berg 1896; Bosso and Céspedes 1995; Bucher 1980; Cei 1961; Cei and Roig 1961; Céspedes et al. 1995; Contreras 1982; Contreras and Contreras 1982; Cruz et al. 1992; di Tada et al. 1976, 1996; Freiberg 1942; Gallardo 1961, 1964a,c, 1965, 1966, 1968a,b, 1972a, 1974, 1980, 1982, 1986, 1987a; Heyer 1978; Lajmanovich 1993; Laurent 1973, as *L. mystacinus*; Laurent and Terán 1982; Lavilla and Scrocchi 1992, 1999; Lavilla et al. 1992, 1995, as *L. cf. mystacinus*, 2000b; Limeses 1969; Limeses et al. 1972; Lobo 1995; Martínez Achenbach 1963, 1965; Martori and Aun 1995; Martori et al. 1999; Montanelli and Acosta 1991; Peltzer and Lajmanovich 1999; Peracca 1897; Perotti 1997, as *L. cf. mystacinus*; Richard and Belmonte de Richard 1985; Ringulet and Aramburu 1957; Vellard 1948; Weyenbergh 1876; Widmer 1994; Yanosky et al. 1993); **Bolivia** (De la Riva 1990, De la Riva et al. 2000, Gallardo 1964c, Gans 1960, Gonzales 1998, Gonzales and Reichle 2002, Heyer 1978, Köhler 2000, Lavilla et al. 1996, Peracca 1897); **Brazil** (Abrunhosa et al. 2001; Bernarde and Kokubum 1999; Boettger 1892; Boulenger 1882, 1885a, 1886b; Brandão and Araujo 2001; Brandão and Péres Júnior 2001, as *L. mystacinus*; Braun and Braun 1976a,b, 1980; Cei 1968 (M); Cochran 1955; Cope 1885; Feio and Caramaschi 1995, 2002; Gallardo 1964c; Heyer 1978; Izecksohn and Carvalho e Silva 2001; Kwet 1999, 2001; Lema and Braun 1993; A. Lutz 1924; Machado et al. 1995; Maineri and Gayer 1996; Maxson and Heyer 1988; F. Müller 1885; Muramatsu and Cruz 1996 (M); Sazima 1975; Strüssmann et al. 2000b; Vizotto 1964a;

Vizotto and Castro 1964, as *L. mystacinus*; Wogel et al. 2000); **Paraguay** (Aquino et al. 1996; Bertoni 1914, 1939; Boettger 1885; Gallardo 1964c; Méhely 1904; Scott and Lovett 1975); **Uruguay** (Achával and Olmos 1997; Borteiro et al. 1999; Boulenger 1882; Braun and Braun 1974; Canavero et al. 2001; Cei 1968 (M); Dei-Cas et al. 1976; Gallardo 1964c; González 1997; González et al. 1998; Gudynas 1980, 1989; Heyer 1978; Lagomarsino et al. 1988; Langguth 1976; Langone 1995, 1999; Maneyro et al. 1995; Meneghel 1992a; Prigioni and Langone 1984; Sierra et al. 1977).

• **FOSSIL RECORD.** None.

• **PERTINENT LITERATURE.** Gallardo (1964c) and Hensel (1867, as *C. mystaceus*) published the most comprehensive works on the species. The following literature is listed by topic and the symbol (M) indicates a species mention, whereas (S) stands for a secondary source: **bibliographic information and lists** (Lavilla and Cei 2001, Liner 1992, Vizotto 1964b); **biogeography** (Baumann 1912; Braun and Braun 1980; Bridarolli and di Tada 1994b; Bucher 1980; Cei 1953, 1954, 1982; Cei and Pierotti 1957; Céspedes et al. 1995; Contreras and Contreras 1982; Feio and Caramaschi 1995; Gallardo 1964a,b, 1965, 1966, 1968a, 1972a,b, 1979, 1985; Gudynas 1981; Heyer 1978, 1988; Heyer and Maxson 1982; Lavilla and Manzano 1995; Lynch 1971, 1979; Roig and Cei 1961; Vellard 1948); **call and call parameters** (Abrunhosa et al. 2001; Barrio 1964 a,b; Martínez Achenbach 1962, 1963; Paillette's 1986 citation of *L. mystacinus* is *L. mystaceus*; Salas et al. 1991, 1998; Straughan and Heyer 1976); **catalogue accounts** (Boulenger 1882; Günther 1858, as *C. schomburgkii*; F. Müller 1880, as *C. sp.*); **conservation** (Achával et al. 1984; Anonymous 1997; Brandão and Péres Júnior 2001, as *L. mystacinus*; di Tada et al. 1996; Gudynas 1989; Lagomarsino et al. 1988; Lavilla 2001; Lavilla et al. 2000a; de Ledo et al. 1977; Maneyro and Langone 1999a,b, 2001; Sierra et al. 1977; Vaz-Ferreira and Achával 1983); **ecology, natural history, reproduction** (Abe and Garcia 1990; Anonymous 1877 (S); Barbour 1926 (S); Barrio 1973; Bernarde and Kokubum 1999; Blair 1976; Boettger and Pechuel-Loesche 1892 (S); Boulenger 1886a; Brandão and Araujo 2001; Brandes and Schoenichen 1901 (S); Braun and Braun 1987; Bridarolli and di Tada 1994a; Cascon and Peixoto 1985 (M); Cei 1953 (S), 1954 (S); Cei and Roig 1961; Contreras and Contreras 1982; Cope 1889 (S); Eisentraut 1932 (S); Fernández and Fernández 1921 (S); Freitas et al. 2001 (S); Gadow 1901 (S); Gallardo 1958 (S), 1964c, 1965, 1970, 1972a, 1980, 1987b, 1993; García 1972; González et al. 1998; Gudynas 1989; Gudynas and de León 1992; Gudynas and Gehrau 1981; Gundlach 1881 (S); Hensel 1867, as *C. mystaceus*; Hoffmann 1873–1878 (S), as *C. mystaceus*; Klingelhöffer 1956 (S); Knauer 1878 (S), 1883 (S); Kwet 1999; Langone 1999; Lavilla and Manzano 1995; Lavilla et al. 1995, as *L. cf. mystacinus*; Livezey and Wright 1947 (S); A. Lutz 1927; B. Lutz 1947 (S); Machado et al. 1999; Maneyro et al. 1995; Martínez Achenbach 1962, 1963, 1965; Martins 1988 (M)(S); Martori et al. 1983; Meneghel 1992b, as *L. mystacinus*; Mertens 1929 (S); Milstead 1972, as *L. pygmaeus*; Noble 1917 (S), as *L. mystaceus*; Perotti 1994, 1997, as *L. cf. mystacinus*; W. Peters 1877 (S); Rossa-Feres and Jim 1994, 1996; Sampson 1900 (S), as *C. mystaceus*; Santana and Menin 1994 (S); Sazima 1975; Spirandeli-Cruz 1985; Strüssmann et al. 2000a; Vaz-Ferreira 1984 (S); Vaz-Ferreira and Gehrau 1974, 1975 (M); Vellard 1947 (M), 1948; Werner 1912 (S); Wunder 1932 (S)); **evolution** (Heyer 1969a, 1978; B. Lutz 1948, as *L. mystaceus*; Lynch 1971); **habitat** (Brandão and Péres Júnior 2001, as *L. mystacinus*; Feio and Caramaschi 1995; Gallardo 1964c, 1982, 1987b; Gans 1960; Gonzales 1998; Gonzales and Reichle 2002; Gudynas 1980 (M), 1989; Hensel 1867, as *C. mystaceus*; Köhler

2000; Kwet 2001; Maneyro et al. 1995; Martínez Achenbach 1962, 1963; Martori et al. 1999); **karyotype** (Bogart 1974, Heyer 1978 (S), Heyer and Diment 1974, Rada de Martínez 1976 (M)); **keys** (Boulenger 1882, 1886b; Lavilla 1994b; Lavilla and Scrocchi 1992; Lavilla et al. 1992, 1993; A. Lutz 1926; Nieden 1923; Prigioni and Achával 1992); **lists of specimens in individual collections** (Aquino et al. 1996; Ávila and Martori 1991; Boettger 1892; Elter 1981; Gavetti and Andreone 1993; F. Müller 1880, as sp. questionably *mystacinus*, 1885; Yanosky et al. 1993); **morphology** (Altig and Johnston 1986; Barrio 1965a; Cei and Roig 1961; Echeverría 1995 (S); Gallardo 1987b; Heyer 1978; Langone and de Sá 2001; Larson and de Sá 1998; Limeses 1968, 1969; Limeses et al. 1972; Liu 1935a,b; Martínez Achenbach 1962, 1963; Mertens 1929; Noble 1922; Ponssa 1999); **nomenclature and taxonomy** (Berg 1896; Boulenger 1882; Cei 1980, 1987 (M); Cochran 1955; De la Riva 2000; Dubois and Heyer 1992; Heyer 1974, 1978, 2002; Klappenbach and Langone 1992; Lavilla 1992; A. Lutz 1930; Peters 1877 (M)); **non-technical accounts** (Cuénot 1932; Freiberg 1954, as *L. pygmaeus*, 1972; Gadow 1901; Gallardo 1974; Gliesch 1927; Klappenbach 1969; Maneyro et al. 1995; Santos 1942); **parasite host** (Baker and Vaucher 1984, 1986; Cordero 1933, as *L. pygmaeus*; Dei-Cas et al. 1976; Fabio 1985); **physiology** (Barrio 1965a, Cei and Erspamer 1965, Cei et al. 1967, Daly and Witkop 1971 (S), Erspamer et al. 1986, Roseghini et al. 1986); **relationships and systematics** (Bogart 1974, Cei and Erspamer 1965, Cei et al. 1967, Gallardo 1964b, Heyer 1978, Heyer and Diment 1974, Larson and de Sá 1998, Limeses 1969, Limeses et al. 1972, Lobo 1995, Lynch 1971, Maxson and Heyer 1988, Melin 1941 (M), Montero 1986, Savage 2002 (M), Wassersug and Heyer 1988); **species accounts** (Achával and Olmos 1997; Cei 1980; Cochran 1955; di Tada et al. 1976; Gallardo 1964c; Gallardo and Varela de Olmedo 1992; Heyer 1978; Klappenbach and Langone 1992; Langone 1995; A. Lutz 1926; Nieden 1923; Widmer 1994, as *L. mystaceus*); **species comparisons** (Anderson 1906 (M); Baumann 1912 (M), 1917 (M); Gallardo 1964c; Heyer 1969b (M); A. Lutz 1930 (M); Melin 1941 (M)); **species or taxonomic lists** (Achával 1989; Boulenger 1885a,b; De la Riva et al. 2000; de Sá 1983; Frost 1985; Glaw et al. 2000; Gorham 1963, 1966, 1974; Harding 1983; Knauer 1878, 1883; Lavilla 1994a; Lavilla and Cei 2001; A. Lutz 1924; Ringulet and Aramburu 1957).

• **NOMENCLATURE HISTORY.** *Leptodactylus mystacinus* was identified as *Cystignathus mystaceus*, *Leptodactylus pygmaeus*, or *Cystignathus schomburgkii* prior to its recognition as a distinct species in 1861. The influential paper by Peters (1873) erroneously concluded that Hensel's *L. mystaceus* was not the same species as *L. mystacinus*.

*Leptodactylus labialis* (Cope 1877) was considered to be the valid name for the taxon now recognized as *L. fragilis* (Brocchi 1877) prior to 1978 (Heyer 1978, 2002).

Heyer (1978) was in error in stating that no locality data other than Argentina existed for the holotype of *Cystignathus mystacinus*. Other authors (Barrio 1965b, Cei 1980, Lavilla 1992) correctly identified the type locality as Rosario, Argentina. Schulz (1944, Agregado 2, Parte B, Planilla 1) gave the coordinates for the Rosario published by Burmeister as 32°56'37" latitude (South) and 60°39'00" longitude West.

Lavilla et al. (1995) referred to specimens from the Los Colorados Biological Station in Salta, Argentina as *L. cf. mystacinus*. The males call from above ground, low on tree trunks and are being evaluated as to whether the Chaco frogs represent a species distinct from *L. mystacinus* (E.O. Lavilla, pers. comm.).

• **REMARKS.** "Rana de bigotes" (de Ledo et al. 1977, de Sá 1983, di Tada et al. 1976, Klappenbach 1969, Lagomarsino et

al. 1988, Langguth 1976, Maneyro et al. 1995, Meneghel 1992a, Sierra et al. 1977), "Ranita de bigotes" (Martínez Achenbach 1962), and "Rana Bigote" (Cei 1956) are Spanish variations of the common name, "Mustached Frog" (Frank and Ramus 1955). Other common names include "Pfeifer" (Boettger and Pechuel-Loesche 1892), "Rã" (Anonymous 1997, Brandão and Péres Júnior 2001, as *L. mystacinus*), "Rã dourada" (Braun and Braun 1976b), "Rana" (Schulz 1944), "Rana Criolla" (Álvarez et al. 2002), "Ranita de Burmeister" (Freiberg 1972), "Schnurrbartpfeifer" (Boettger and Pechuel-Loesche 1892, Gliesch 1927, Werner 1912), "Sonderbare Pfeifer" (Knauer 1878, 1883), and "Yuf" (Guaraní) (Álvarez et al. 2002).

Beebe's (1946) citations of *L. mystacinus* and *L. mysticen* [sic] from Guyana and/or Venezuela as snake prey items, repeated by Michaud and Dixon (1989), are most certainly not *L. mystacinus* and are probably *L. mystaceus*.

• **ETYMOLOGY.** The specific name is derived from the Greek word *mystax*, meaning upper lip or mustache. Gadow's (1901) statement, "Its specific name refers to the dark brown stripe which runs from the tip of the mouth through the eye to the tympanum," refers to the canthal stripe. We believe the specific name refers to a distinct light stripe on the upper lip that occurs on most individuals.

• **ACKNOWLEDGMENTS.** Reuber Brandão, José Langone, Esteban Lavilla, Oswaldo Peixoto, and P.E. Vanzolini provided information on literature and localities. Rainer Guenther clarified the status of museum specimens and José Rosado loaned material. Esteban Lavilla critically reviewed the manuscript. The Smithsonian Institution Library staff of the Natural History branch helped obtain difficult-to-find publications. Especially helpful were Martha Cohen, Claire Catron, Ron Lindsey, Leslie Overstreet, Courtney Shaw, David Steere, and Wanda West. Work on this account was supported in part by the Neotropical Lowlands Research Program, Smithsonian Institution (Richard P. Vari, Principal Investigator) and the National Science Foundation (award # 9815787) to RODS and WRH.

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