

Catalogue of American Amphibians and Reptiles.

MacCulloch, R.D. and A. Lathrop. 2006. *Stefania coxi*.

***Stefania coxi* MacCulloch and Lathrop
Cox's *Stefania*; *Rana Stefania* de Cox**

Stefania coxi MacCulloch and Lathrop 2002:336.

Type-locality "...northeast plateau of Mount Ayanganna, Guyana (05° 24' N, 059° 57' W) elevation 1550 m." Holotype, Royal Ontario Museum (ROM) 39477, adult female, collected by A. Lathrop and C. Cox, 27 October 2000 (examined by authors).

• **CONTENT.** No subspecies are known.

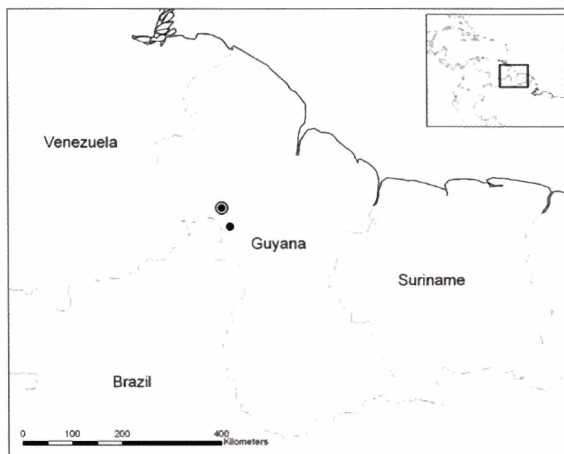
• **DEFINITION.** Adult females attain an SVL up to 70 mm, males to 51 mm. Head width is greater than its length. Frontoparietal and supratympanic crests are prominent. The canthus rostralis is distinct, angular, and straight. The tympanum diameter is two-thirds the diameter of the eye, separated from it by a distance equal to half the eye diameter. The vomerine processes each bear 3–6 teeth. The dorsal skin is smooth to finely shagreened with scattered tubercles; the ventral skin is granular. The first finger is longer than the second by the length of the disc on the first finger. All digits have well-developed discs. The largest finger disc is equal to the tympanum diameter. Toe webbing formula is I 2⁺–2^¼ - 2^¼ II (2–2⁺) - 3–3⁺ III (2–2⁺) - (3^½–3^¾) IV 3^½–(2–2⁺) V.

The dorsum is medium brown or gray with a few scattered dark brown marks. Flanks are medium brown with darker brown mottling. The lower limbs, hands and feet are light brown with dark brown mottling. The distal phalanges of the toes have a red wash. Dark brown canthal and supratympanic stripes are present. The upper lip is creamy white with black mottling; the lower lip is black with a few white spots. The throat is brown or gray with white mottling; the venter and underside of thighs are white with a variable amount of brown or gray mottling (Fig. 1).

The cephalic crests are not visible in neonates car-



Figure 1. *Stefania coxi*, ROM 39478, female with young, from Mt. Ayanganna, Guyana (photograph by A. Lathrop).



Map. Distribution of *Stefania coxi*. The circle indicates the type-locality, Mt. Ayanganna. The solid dot indicates the other known locality, Mt. Wokomung. Map courtesy of Blake Matejowsky.

ried by their mother. Neonates are dark gray with immaculate limbs and a cream interorbital bar; some have a dorsal chevron pattern.

Females carrying 4 and 6 juveniles have been reported. Juveniles become independent at 18–19 mm SVL.

• **DIAGNOSIS.** *Stefania coxi* can be distinguished from *S. goini* by its enlarged frontoparietal and supratympanic crests (present, but smaller, in *S. goini*), vomerine processes with 3–6 teeth (6–10 teeth), dorsum smooth or finely shagreened (coarsely shagreened or granular), palpebral membrane with dark stippling (not pigmented), interorbital distance 1.3–1.5 times upper eyelid width (two times eyelid width), finger discs larger than toe discs (smaller or subequal). *Stefania coxi* can be distinguished from *S. ginesi* by its smooth or shagreened dorsal skin with only a few tubercles (heavily tubercular in *S. ginesi*), larger digital discs, and relatively longer hindlimb length. It differs from *S. riveroi* in having smooth or shagreened dorsal skin (granular in *S. riveroi*) and fewer supernumerary tubercles on hand and foot (numerous in *S. riveroi*). *Stefania satelles* and *S. schuberti* have tuberculate skin and a dorsal color pattern. *Stefania coxi* can be distinguished from *S. oculosa* by its prominent cephalic crests (reduced in *S. oculosa*). All other described species of *Stefania* belong to the *S. evansi* species group, and their greater head length/width ratio distinguishes them from *S. coxi* (see **Remarks**).

• **DESCRIPTIONS.** MacCulloch and Lathrop (2002) and MacCulloch et al (2006) provided descriptions of adults and neonates, including color variation. The mating call is unknown.

• **ILLUSTRATIONS.** Color photographs of adults and neonates, as well as black-and-white photos of the palm and sole, are in MacCulloch and Lathrop (2002) and MacCulloch et al (2006).

• **DISTRIBUTION.** *Stefania coxi* is known only from Mounts Ayanganna and Wokomung, Pakaraima Mountains, Guyana, at elevations of 1490–1700 m. The Pakaraima region has not been well-studied, so the species may occur elsewhere in suitable high-elevation habitat.

• **FOSSIL RECORD.** None.

• **PERTINENT LITERATURE.** The only works covering this species are MacCulloch and Lathrop (2002) and MacCulloch et al (2006), which provide information on reproduction and habitat, and a table of diagnostic characters useful for species identification.

• **REMARKS.** *Stefania* was placed in the new family Cryptobatrachidae by Frost et al. (2006). Rivero (1970) divided the genus *Stefania* into two species groups; *Stefania coxi* is in the *S. goini* group by virtue of its head proportions (head width greater than length in the *S. goini* group). The Spanish vernacular name is in accordance with names proposed by Barrio-Amorós (1998), and the English vernacular name follows this example.

• **ETYMOLOGY.** The specific epithet, in the masculine genitive, is a patronym honoring Carter J. Cox, a member of the party that collected the type series.

LITERATURE CITED

- Barrio-Amorós, C.L. 1998. Sistemática y biogeografía de los anfibios (Amphibia) de Venezuela. *Acta Biol. Venez.* 18:1–93.
- Frost, D.R., T. Grant, J. Faivovich, R.H. Bain, A. Haas, C.F.B. Haddad, R.O. de Sa, A. Channing, M. Wilkinson, S.C. Donnellan, C.J. Raxworthy, J.A. Campbell, B.L. Blotto, P. Moler, R.C. Drewes, R.A. Nussbaum, J.D. Lynch, D.M. Green, and W.C. Wheeler. 2006. The amphibian tree of life. *Bull. Amer. Mus. Nat. Hist.* (297):1–370.
- MacCulloch, R.D. and A. Lathrop. 2002. Exceptional diversity of *Stefania* (Anura: Hylidae) on Mount Ayanganna, Guyana; three new species and new distribution records. *Herpetologica* 58:327–346.
- , A. Lathrop, and S.Z. Khan. 2006. Exceptional diversity of *Stefania* (Anura: Cryptobatrachidae) II: six species from Mount Wokomung, Guyana. *Phyllomedusa* 5:31–42.
- Rivero, J. 1970. On the origin, endemism, and distribution of the genus *Stefania* Rivero (Amphibia, Salientia) with the description of a new species from southeastern Venezuela. *Bol. Soc. Venezolana Cien. Nat.* 28:456–481.

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