Catalogue of American Amphibians and Reptiles.

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

Stefania evansi (Boulenger)
Evans' Stefania; Rana Stefania guayanesa

Hyla evansi Boulenger 1904:106. Type-locality "Groete Creek, Essequibo, British Guiana." Holotype, British Museum of Natural History (BMNH) 1947.2.13.11, age and sex unknown, collected November 1902 by R. Evans (not examined by authors).
Cryptobatrachus evansi Ruthven 1922:56.
Stefania evansi Rivero 1968:143.

• **CONTENT**. No subspecies are recognized.

• **DEFINITION**. *Stefania evansi* is one of the largest members of the genus, with adult females up to 97.5 mm and males to 53 mm SVL. Head width is 88–92% head length; distance between nostrils is 50–66% interorbital distance, 1.5 times distance from nostril to tip of snout. Interorbital space is 1.1–1.4 times width of upper eyelid. Frontoparietal ridges are present but low. Tympanum is 42–47% of eye diameter, separated from the eye by a distance equal to or slightly greater than the tympanum diameter. Vomerine processes each bear 7–10 teeth. The skin of the dorsum is shagreened. Prominent tubercles are present in the temporal and post-tympanic regions. The largest finger disc is equal to 90% of the tympanum diameter. Finger and toe discs are approximately equal in size. Supernumerary tubercles on the hands and feet are numerous and distinct. Toe webbing formula is **I** 1 - (1⁺–1¼) **II** 1 - (1⁺–1½) **III** (1–1⁺) - (2–2¼) **IV** (2–2¼) - (1–1⁺) **V**.

Duellman and Hoogmoed (1984) illustrated three color patterns for *S. evansi*. However, it appears likely that their color morph C (dorsal chevrons) is the juvenile pattern, while morphs A and B represent adult coloration. The dorsal chevron pattern, present in neonates of several species of *Stefania* (MacCulloch and Lathrop 2002), is retained in newly independent juveniles, but present only rarely in adults (Duellman and Hoogmoed 1984). Similarity in juvenile color pattern among *Stefania* makes this character an unreliable tool for identification. Variation in color pattern of *Stefania evansi* is shown in Figs. 1 and 2 and in MacCulloch et al. (2006).

Females carrying 11, 17, 21, 22, 24 and 25 eggs or juveniles have been reported (Boulenger 1904, Jungfer and Böhme 1991, Kok et al. 2006, Lang 1924, MacCulloch and Lathrop 2002, see also Fig. 3). Juveniles attain independence at about 19 mm SVL.

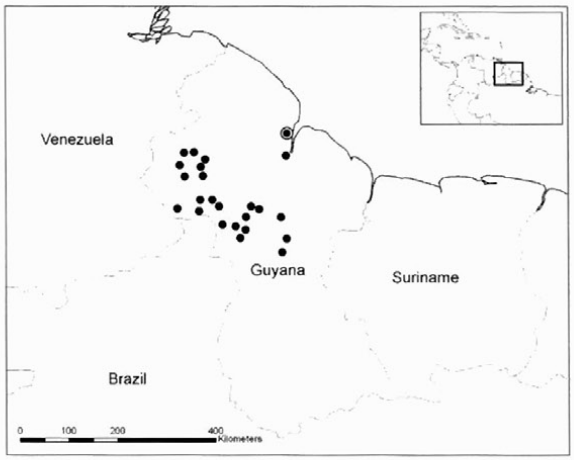
• **DIAGNOSIS**. *Stefania evansi* can be distinguished from all other congeners except *S. scalae* by the extent of the toe webbing, with usually only slightly more than one phalange (two on toe IV) free of webbing in *S. evansi* and *S. scalae*, and at least two phalanges (three on toe IV) free in other *Stefania*. *Stefania evansi* has more extensive toe webbing (one phalange free on most toes), shagreened dorsal skin, low frontoparietal crests, toe discs equal in size to finger discs and numerous prominent tubercles in the tympanic region, whereas *S. scalae* has less webbing (somewhat more than one phalange free on most toes), smooth skin, no frontoparietal crests, relatively small toe discs (largest toe disc equal to the smallest finger disc) and a few low tubercles in the tympanic region. There is also an elevational difference among reported localities for the two species, with *S. evansi* occurring at lower elevations and *S. scalae* at higher elevations.

Figure 1. Pattern variation in adults of *Stefania evansi*. Specimens are 50–65 mm SVL (photograph by A. Lathrop).

Figure 2. Juveniles of *Stefania evansi* from Mt. Ayanganna, Guyana. Specimens are 19–21 mm SVL (photograph by A. Lathrop).

Figure 3. Female *Stefania evansi* carrying juveniles, AMNH A-166304, Konawaruk River, Guyana (photograph by C.J. Cole).

• **DESCRIPTIONS**. The holotype was described by Boulenger (1904); the original description was re-



Map. The known distribution of *Stefania evansi*. The type-locality is shown by the circled dot. Map courtesy of Blake Matejowsky.

printed verbatim, along with descriptions of additional specimens, by Rivero (1968). Duellman and Hoogmoed (1984) provided further descriptions, including color variation. Some additional descriptions of adults and juveniles is in Jungfer and Böhme (1991), MacCulloch and Lathrop (2002) and MacCulloch et al. (2006).

• **ILLUSTRATIONS**. Photographs are presented in Jungfer and Böhme (1991), Lang (1924), MacCulloch et al. (2006) and Rivero (1968). Several drawings are in Duellman and Hoogmoed (1984).

• **DISTRIBUTION**. Forested lowlands of west-central Guyana, up to 900 m. Its presence in Venezuela has not been confirmed (Barrio-Amorós and Fuentes, 2003). All of the higher-elevation specimens of *S. evansi* in Duellman and Hoogmoed (1984) are properly referred to *S. scalae*. The distribution map is based on data from C.J. Cole (pers. comm.), M.A. Donnelly (pers. comm.), Duellman and Hoogmoed (1984), Jungfer and Böhme (1991), MacCulloch and Lathrop (2002), MacCulloch et al. (2006) and L.R. Minter (pers. comm.). At several locations *S. evansi* and *S. woodleyi* were collected syntopically.

• **FOSSIL RECORD**. None.

• **PERTINENT LITERATURE**. Descriptions of reproduction and brooding, as well as habitat, were provided by Duellman and Hoogmoed (1984), Jungfer and Böhme (1991), MacCulloch and Lathrop (2002), and MacCulloch et al. (2006). A table of diagnostic characters useful for species identification is in MacCulloch and Lathrop (2002) and a key to species is in Señaris et al. (1997).

• **NOMENCLATURAL HISTORY**. The species was first described as *Hyla evansi* by Boulenger (1904). Ruthven (1922) transferred the species to *Cryptobatrachus*; Rivero (1968) subsequently erected the genus *Stefania* and included this species. Duellman and Hoogmoed (1984) synonymized *Stefania scalae* with *S. evansi*. Señaris et al. (1997) separated the two taxa, restoring *Stefania scalae* to species status.

• **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 evansi* is in the *S. evansi* group by virtue of its head proportions. The Spanish vernacular name "Rana Stefania guayanesa" is from Barrio-Amorós (1998). Frank and Ramus (1995) proposed the English vernacular name "Groete Creek Treefrog"; we feel that the use of "treefrog" for *Stefania* is confusing and imprecise, and therefore propose the name "Evans' Stefania", which is in accordance with names proposed for other *Stefania*, and follows the Spanish example of using the genus name as a common name.

• **ETYMOLOGY**. The specific epithet is a patronym honoring R. Evans, who collected the holotype.

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