

Catalogue of American Amphibians and Reptiles.

Hedges, S. Blair and R. Powell. 1998. *Eleutherodactylus amadeus*.

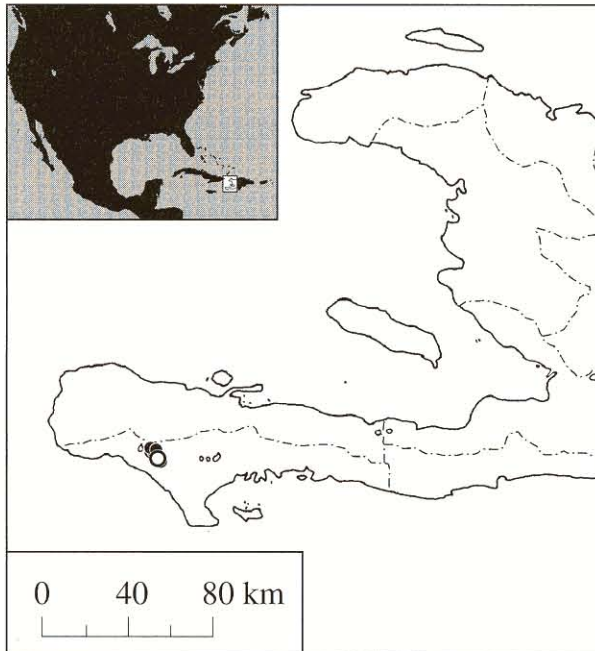
Eleutherodactylus amadeus
Hedges, Thomas, and Franz

Eleutherodactylus amadeus Hedges et al. 1987:943. Type locality, "Formon Ridge Camp, on the south slope of Morne Formon (Formon Ridge), 3.0 km N Base Camp (2.6 km N, 15.1 km W Camp Perrin, airline distance), Dépt. du Sud, Haiti (18°20'59" N, 74°00'38" W, 1650 m)." Holotype, National Museum of Natural History (USNM) 258676, adult male, one of a series collected 13–15 July 1985, by S. Blair Hedges and Richard Thomas (examined by SBH).

• **Content.** No subspecies are recognized.

• **Definition.** *Eleutherodactylus amadeus* is one of the smaller (mean SVL 18.7 mm in males, $n = 15$; 23.4 mm in females, $n = 15$) members of the genus (Hedges et al. 1987). The dorsum is smooth and the venter nearly so (fine corrugations or indentations are present, but usually no tubercles or areolae). Supraaxillary, inguinal, and postfemoral glands are microscopically visible in males and most females. Digital discs are expanded, with the largest discs about 1/3–1/2 the horizontal diameter of the tympanum. Internal paired subgular vocal sacs are present in most adult males.

Dorsal ground colors range from pale yellow and tan to brown or dark brown, with males generally lighter than females. Dorsal pattern elements, if present, are variable and markings may be either darker or lighter than the ground color. Reversed parentheses, blotch, broad or narrow middorsal stripes, long or short dorsolateral stripes, a "W," or combinations of these elements are known. The venter is pale yellow or white with tan or



Map. Range of *Eleutherodactylus amadeus* (modified from Schwartz and Henderson 1991). The circle marks the type locality, dots indicate other known records.

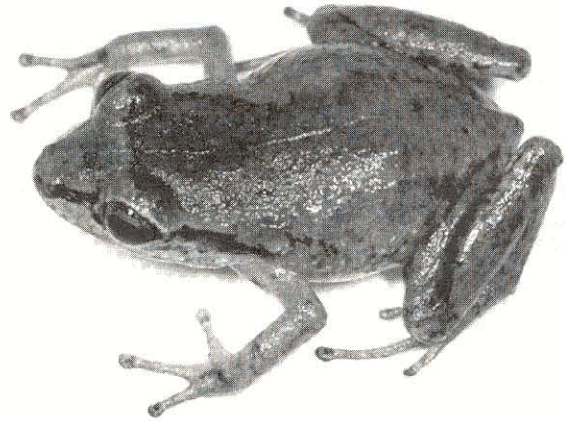


Figure 1. An adult male *Eleutherodactylus amadeus* (USNM 258691, paratype) (photograph by SBH).

brown spots or larger flecks. The testicular peritoneum is dark brown or black.

• **Diagnosis.** *Eleutherodactylus amadeus* is most similar to *E. heminota*, from which it differs in having supraaxillary, inguinal, and postfemoral glandular areas (visible in preservative), smaller digital tips, ventral spotting, and a four-note rather than a one-note call (Hedges et al. 1987).

• **Descriptions.** In addition to the original by Hedges et al. (1987), a brief description is in Schwartz and Henderson (1991).

• **Illustrations.** A black and white photograph of a paratype, line drawings illustrating variation in dorsal patterns, and an audiospectrogram are in Hedges et al. (1987).

• **Distribution.** This Hispaniolan South Island endemic is known only from the eastern Massif de la Hotte in Haiti, where it occurs at moderate to high elevations (1000–2340 m) in pine and associated woodlands. Generally encountered under rocks and logs by day, individuals may forage and males may call from the ground or up to 50 cm in herbaceous vegetation. The range was illustrated by Schwartz and Henderson (1991).

• **Fossil Record.** None.

• **Pertinent Literature.** Hedges et al. (1987) described the species and left its species group allocation "uncertain." Hedges (1989), based on protein electrophoretic, immunological, and morphological data, placed it in the *bakeri* series, subgenus *Euhyas*. Additional comments on the *bakeri* series (including *E. amadeus*) were given in Hedges and Thomas (1992a, b). Duellman (1993) agreed with its subgeneric assignment, but Lynch and Duellman (1997) disagreed, and placed this species in the newly created *abbotti* group, *abbotti* series, subgenus *Eleutherodactylus*.

The species is included in checklists by Schwartz and Henderson (1988) and Powell et al. (1996). Frank and Ramus (1995) provided a common name, Haitian Robber Frog, which we prefer not to use.

• **Etymology.** The name *amadeus* is a patronym honoring Wolfgang Amadeus Mozart, in allusion to the resemblance of the wideband audiospectrogram of this species to musical notes (Hedges et al. 1987).

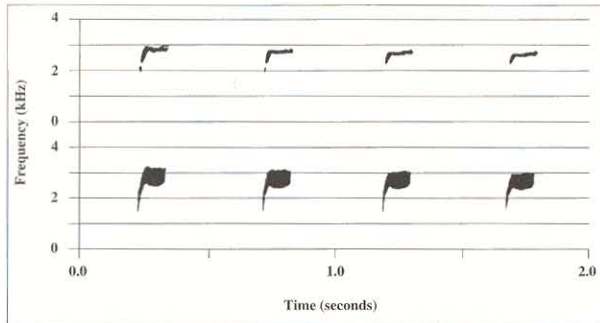


Figure 2. Audiospectrograms of *Eleutherodactylus amadeus* (USNM 258721, paratype). A single four-note call is shown (above, 45 Hz filter; below, 300 Hz filter).

• **Acknowledgment.** This work was supported in part by grants from the National Science Foundation to SBH.

Literature Cited

- Duellman, W.E. 1993. Amphibian Species of the World: Additions and Corrections. Univ. Kansas Mus. Nat. Hist. Spec. Publ. (21):1–372.
- Frank, N. and E. Ramus. 1995. A Complete Guide to Scientific and Common Names of Reptiles and Amphibians of the World. NG Publ. Co., Pottsville, Pennsylvania.
- Hedges, S.B. 1989. Evolution and biogeography of West Indian frogs of the genus *Eleutherodactylus*: slow-evolving loci and the major groups, p. 305–370. In C.A. Woods (ed.), *Biogeography of the West Indies: past, present, and future*. Sandhill Crane Press, Inc., Gainesville, Florida.
- and R. Thomas. 1992a. A new marsh-dwelling species of *Eleutherodactylus* from Haiti (Anura: Leptodactylidae). *J. Herpetol.* 26:191–195.
- and —. 1992b. Two new species of *Eleutherodactylus* from remnant cloud forest in Haiti (Anura, Leptodactylidae). *Herpetologica* 48:351–358.
- , —, and R. Franz. 1987. A new species of *Eleutherodactylus* (Anura: Leptodactylidae) from the Massif de la Hotte, Haiti. *Copeia* 1987:943–949.
- Lynch, J.D. and W.E. Duellman. 1997. Frogs of the genus *Eleutherodactylus* (Leptodactylidae) in western Ecuador: systematics, ecology, and biogeography. Univ. Kansas Nat. Hist. Mus. Spec. Publ. (23):iv + 236 p.
- Powell, R., R.W. Henderson, K. Adler, and H.A. Dundee. 1996. An annotated checklist of West Indian amphibians and reptiles, p. 51–93, 1–8 pls. In R. Powell and R.W. Henderson (eds.), *Contributions to West Indian Herpetology: A Tribute to Albert Schwartz*. SSAR Contrib. Herptol. Vol. 12. Ithaca, New York.
- Schwartz, A. and R.W. Henderson. 1988. West Indian amphibians and reptiles: a check-list. Milwaukee Pub. Mus. Contr. Biol. Geol. (74):1–264.
- and —. 1991. *Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History*. Univ. Florida Press, Gainesville.

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Primary editor for this account, John D. Lynch.

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