

Catalogue of American Amphibians and Reptiles.

SCHWARTZ, ALBERT. 1977. *Eleutherodactylus abbotti*.*Eleutherodactylus abbotti* Cochran

Eleutherodactylus abbotti Cochran, 1923:93. Type-locality, "Laguna, Samaná Peninsula [Samaná Province], Dominican Republic." Holotype, National Museum of Natural History 65055, adult male, collected in May 1922, by W. L. Abbott (not examined by author).

- CONTENT. No subspecies are recognized.

- DEFINITION. A species of the *auriculatus* group of Antillean *Eleutherodactylus* characterized by the combination of small size (males to 19 mm, females to 25 mm snout-vent length), dorsal pattern extremely variable (marbled, median dorsal pale hairline, even asymmetrically blotched with orange) but ground color yellowish tan to tan, a darker postanal area that is not a distinct triangle (in contrast to *E. audanti* Cochran which is partially sympatric), and hindlimbs vaguely banded with a single crural band that is not outlined with pale (in contrast to *E. audanti*); tibia/snout-vent length ratio ($\times 100$) 40.8–52.5 in males, 45.6–56.5 in females; the dorsal pattern often includes a scapular X attached to a dark interocular bar; the ventral surface is immaculate yellow, but there may be some vague stippling on the throat.

- DESCRIPTIONS. Aside from the original description (Cochran, 1923), additional information is available in Cochran (1941: 58–60), Mertens (1939:32–33), Lynn (1958:155), and Schwartz (1966). The last paper gives detailed comparisons of *E. abbotti* and *E. audanti*, two species long confused. Goin (1959) gave counts of maxillary teeth.

- ILLUSTRATIONS. Drawings of dorsal pattern, side view of head, ventral views of hand and foot, and buccal cavity are in Cochran (1941); Schwartz (1966) has a drawing of the dorsal pattern. Mertens (1939) has an excellent dorsolateral photograph of a living individual.

- DISTRIBUTION. *Eleutherodactylus abbotti* is widespread on Hispaniola. Schwartz and Thomas (1975:14) give the detailed distribution as follows: In Haiti, known from scattered localities on the Tiburon Peninsula from Dame-Marie in the extreme west to Morne de Cayette, Kenscoff-Furcy, Seguin, Fond Verrettes, Thiotte, and Forêt des Pins in the east, in both the Massif de la Hotte and Massif de la Selle and in the lowlands (Dame-Marie; Aquin); extreme northern Haiti (Limbé; Citadelle Laferrière; Marmelade; Anse à Margot; Grande Rivière du Nord); near Burrage de Peligre in central Haiti; widely distributed in

the República Dominicana, but apparently absent in the xeric northwest (Monte Cristi Province) and most of the southeast, where found only along the southern shores of the Bahía de Samaná (Sabaná de la Mar; Miches) and in the mountains northwest of San Cristóbal; an isolated occurrence at the Río Cumayasa. La Romana Province; very abundant in all mountains except the Cordillera Oriental in the República Dominicana, even occurring in the Sierra Martín García in Barahona and Azua provinces, but absent from the xeric Peninsula de Barahona. Altitudinal distribution is from sea level at many localities to 5600 feet (1700 m; Furcy, Montagne Noire) and to 6000 feet (1830 m) in the Cordillera Central north and southeast of Constanza; in the Sierra de Baoruco and Massif de la Selle in southwestern República Dominicana from 600 feet (180 m; 13.0 mi. N Pedernales) to 4800 feet (1460 m; El Aguacate).

- FOSSIL RECORD. None.

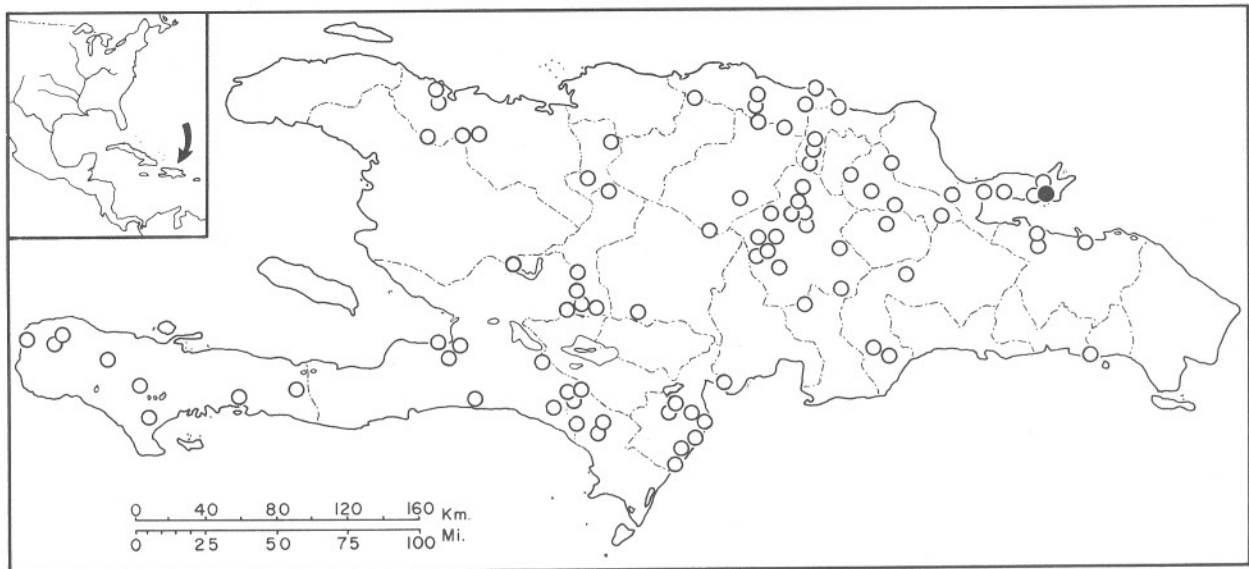
- PERTINENT LITERATURE. Mertens (1939) gave a few observations on the ecology of *E. abbotti*, noting that it is eurytopic and that the frogs were found in dead leaves and cacao husks, under stones, and in a small brook. Schwartz (1966), although not particularly concerned directly with ecological data, compared four diminutive Hispaniolan *Eleutherodactylus* (*abbotti*, *audanti*, *minutus* Noble, *haitianus* Barbour) in color and pattern, altitudinal distribution, structure, and ecological preferences.

- ETYMOLOGY. The species is named for W. L. Abbott who collected for the National Museum of Natural History between 1883 and 1923.

- REMARKS. *E. abbotti* is a mesophile. Widespread in mesic situations, primarily forest (both broadleaf and pine), the frogs shun xeric areas such as the Cul de Sac-Valle de Neiba plain and the Peninsula de Barahona, as well as the northwestern xeric Valle de Cibao. The absence of the species in extreme eastern Hispaniola is unexplained since this is basically a mesic area. The call is a long repetitive series of "tuck's," followed by or preceded by a two-note "tuck-wheep," this latter disyllable also is often interspersed randomly within the series of single notes. Choruses of *E. abbotti* are often composed of huge numbers of males; calling may occur on rainy, cool, and overcast days as well as during the night. Mertens (1939:33) rendered the call as "click-click-click" and noted that it sounds like a delicate bird in its diminuendo. Calling sites are invariably above the ground surface on herbs and low shrubs, maximally about 4 feet from the ground surface.

COMMENT

National Science Foundation grants to the author (G-7977 and B-023603) aided in obtaining specimens of *E. abbotti* and data.



MAP. Distribution of *Eleutherodactylus abbotti* in Hispaniola. Solid circle marks the type-locality; open circles indicate other localities, in many instances including several closely approximated sites.

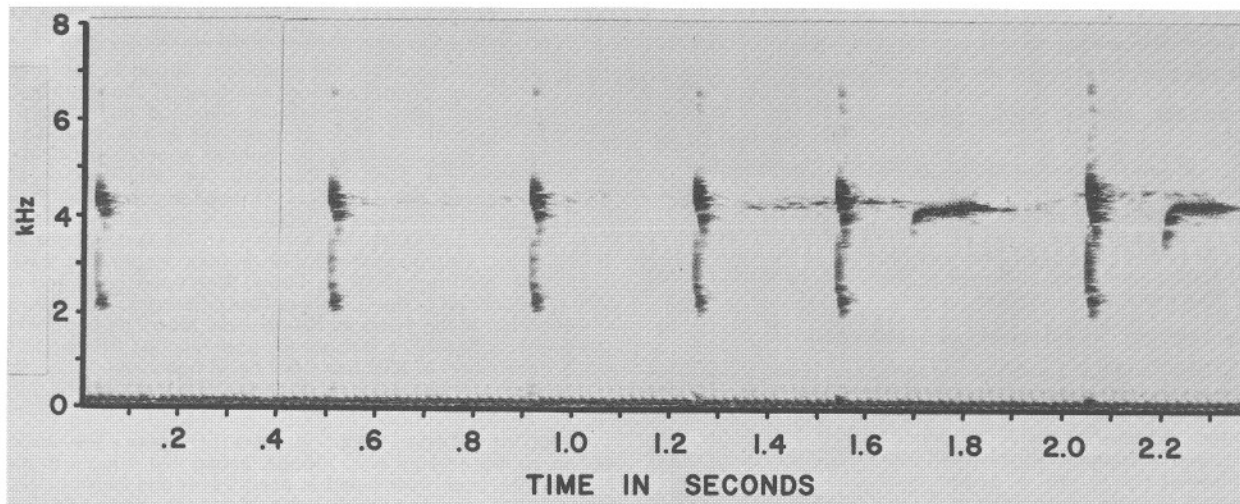


FIGURE. Audiospectrogram of call of *Eleutherodactylus abbotti*: 2.8 km NE Sanchez, Samaná Prov., República Dominicana, 22 Feb. 1975, air 20.3° C.; one complete call-group, narrow band (45 Hz) filter. Recording courtesy of R. Crombie, National Museum of Natural History.

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ALBERT SCHWARTZ, MIAMI-DADE COMMUNITY COLLEGE, MIAMI, FLORIDA 33167.

Primary editor for this account, Richard G. Zweifel.

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