

REPTILIA: SQUAMATA: LEOIOCEPHALIDAE

LEIOCEPHALUS SEMILINEATUS

Catalogue of American Amphibians and Reptiles.

Nelson, S.E. and R. Powell. 2002. *Leiocephalus semilineatus*.

Leiocephalus semilineatus Dunn

Leiocephalus semilineatus Dunn 1920:33. Type locality, "Thomazeau, [Département de l'Ouest,] Haiti." Holotype, Museum of Comparative Zoology (MCZ) 12748, a subadult female, collected by G.M. Allen, August 1919 (not examined by authors).

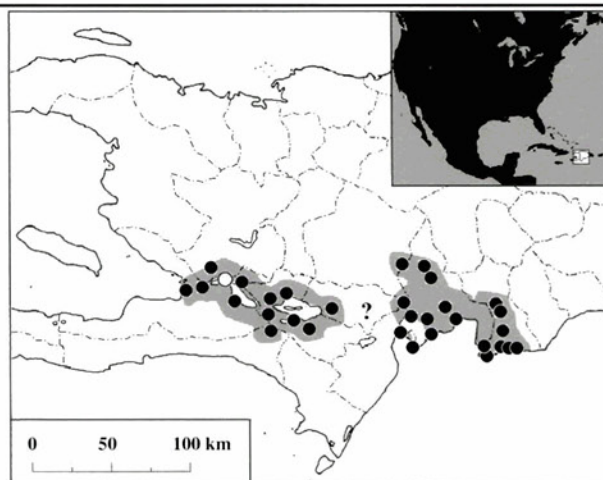
L(eiocephalus). p(ersonatus). semilineatus: Cochran 1932:177.

• **CONTENT.** *Leiocephalus semilineatus* is monotypic.

• **DEFINITION.** *Leiocephalus semilineatus* is a very small member of the genus (maximum SVL in males to 53 mm, females to 48 mm) with the following combination of characters (Schwartz and Henderson 1991, Pregill 1992): nasal overlap of premaxillary spine complete, nasal-maxillary suture straight, nasal processes of frontal not exposed, frontal narrow, parietal table u-shaped in adults, supratemporal lateral, supratemporal process of squamosal indistinct, skull roof rugose, angular process of dentary well developed, transition to tricuspid crowns at tooth 10 or 11 on dentary, head scales smooth, 3 internasals



FIGURE. Adult male (top) and female *Leiocephalus semilineatus* from 4 km WNW Hatillo, Provincia de Azua, República Dominicana.



MAP. Distribution of *Leiocephalus semilineatus* (modified from Schwartz and Henderson 1991). The circle marks the type locality, dots indicate other records. The question mark denotes the presumed hiatus in the range in the eastern Valle de Neiba (see **Distribution**).

with 2 usually in contact with rostral, 2 rows of scales between internasals and anterior pair of frontals and posterior row composed of 3 or a single pair of enlarged scales, supraoculars 5/5 (often 6/6), supraorbital semicircles almost always incomplete, single enlarged temporal scale, temporals 7–11, most lateral parietals subequal or slightly larger than median pair, postparietals in a single row (occasionally 2), preauricular scale enlarged, loreals 2–7, 4 lorilabial scales anterior to enlarged subocular, lateral neck scales undifferentiated, lateral neck folds moderate, nuchal fold moderately convex, dorsal scales imbricate and keeled, middorsal crest moderate with 49–63 dorsal crest scales in the distance from occiput to vent, lateral trunk scales not reduced, lateral fold on trunk absent, ventral scales imbricate and smooth, usually 4 postanal escutcheons, tricarinate scales of first and second toes enlarged into a moderate fringe.

The dorsum is brown, tan, or golden brown and ranges from unicolorous to having scattered bronzy, brassy, golden, or dark brown dots or three vague, nuchal crossbars (Schwartz and Henderson 1991). The dorsal zone is bordered by white, cream, yellowish, or buffy dorsolateral lines. These are bordered ventrally by dark brown to black lateral stripes and, even more ventrally, by white to buffy lines. The lower sides are tan to brown with scattered light scales. The venter is immaculate white, pinkish gray, pale yellow, or white with a central yellow suffusion. The throat is white to pale pinkish purple. Females have unpatterned throats or a few vague spots. Males have dark gray lines radiating from the chin. The tail is tan to buffy, chevronate and darker above, pale orange to orange below.

• **DIAGNOSIS.** *Leiocephalus semilineatus* may be distinguished from other Hispaniolan congeners by the combination of small size and the following characteristics (Henderson and Schwartz 1984): lateral folds absent (present in *L. melanochlorus* and *L. schreibersii*), row of middorsal scales (absent in *L. pratensis*), preauricular scale much larger than adjacent temporal scales (smaller or subequal in *L. vinculum*, *L. rhotidira*, *L. lunatus*, and *L. personatus*), and venter white, pinkish gray, pale yellow, or white with a central yellow suffusion (orange in *L. barahonensis*).

• **DESCRIPTIONS.** In addition to the original description by Dunn (1920), detailed descriptions are in Cochran (1941),

Schwartz (1968), Schwartz and Henderson (1991), and Pregill (1992).

• **ILLUSTRATIONS.** Cochran (1941, as *Leiocephalus personatus semilineatus*) provided black and white illustrations of dorsal, lateral, and ventral views and a line drawing of dorsal head scalation.

• **DISTRIBUTION.** *Leiocephalus semilineatus* is restricted to extremely xeric areas extending from near Port-au-Prince through the Cul-de-Sac plain in Haiti, the Valle de Neiba, and Llanos de Azua to near Baní in the República Dominicana. An apparent hiatus in the range exists in the eastern Valle de Neiba. Schwartz (1980) and Powell et al. (1999) considered *L. semilineatus* a North Paleoisland endemic that had invaded the South Island. The range was illustrated in Cochran (1941), Schwartz (1968), and Schwartz and Henderson (1991).

• **FOSSIL RECORD.** None.

• **PERTINENT LITERATURE.** Schwartz (1967), following Williams (1963), emphatically stated that, contrary to Cochran (1941), *Leiocephalus semilineatus* is a distinct species. Schwartz (1968) provided a detailed taxonomic analysis. Lang (1989) included the species as part of an outgroup in a phylogenetic study of basiliscine iguanians. Powell et al. (1990) noted parasitism by a nematode. Powell et al. (1996b) described spatial niche partitioning.

The species is included in checklists, guides, and keys by Barbour (1930, 1935, 1937), Barbour and Loveridge (1929), Cochran (1928, 1932), Etheridge (1966), Henderson and Schwartz (1984), Henderson et al. (1984), MacLean et al. (1977), Powell et al. (1989, 1996a, 1999), Schwartz and Henderson (1985, 1988), Schwartz and Thomas (1975), SEA/DVS (1990), and Frank and Ramus (1995).

• **ETYMOLOGY.** The name *semilineatus* is from the Latin *semis*, meaning half, and *lineatus*, meaning lined, in allusion to the lateral stripes that fade before entering the tail.

• **REMARKS.** Cochran (1941) suggested that *Leiocephalus semilineatus* was part of the *L. personatus* complex, but Pregill (1992) found no evidence to support the recognition of this group.

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