

## Catalogue of American Amphibians and Reptiles.

Muñoz-Alonso, Antonio, and Oscar Flores-Villela. 1990. *Anolis liogaster*

***Anolis liogaster* Boulenger**  
**Abaniquillo Rojo**

*Anolis liogaster* Boulenger, 1905:245. Type-locality, "Omiteme, Guerrero [México], 7600 ft. [2316 m]". Cotypes (Smith and Taylor, 1950), British Museum of Natural History (BMNH) 1946. 8.8.53-54 (original numbers 1906.6.1.157-158), adult male and female, collected by Hans Gadow, date of collection unknown (not examined by authors).

• **Content.** No subspecies have been described.

• **Definition.** This species is characterized as follows: ventral scales smooth; an interparietal scale longer than the tympanum; loreals in 3-5 rows; 4-6 internasals, five or six contacting the rostral; 3-6 canthals; usually 3 suboculars in contact with the supralabials; 2 gular scales in contact with the mental; the supraorbital semicircles usually in contact. The length of the tibia is equal to or shorter than (97-78%) the distance between the tip of the snout and the anterior margin of the tympanum. The mean (and maximum) snout-vent length (SVL) of 43 specimens collected at Omiteme is 49.3 (66) mm for males and 42.4 (54) mm for females. There are 5-9 horizontal

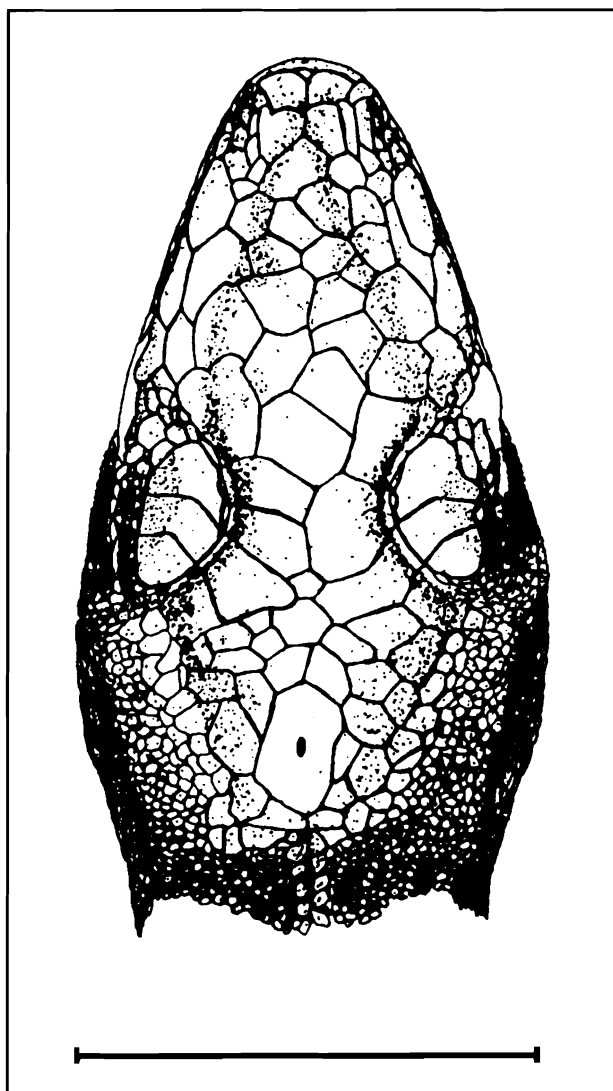
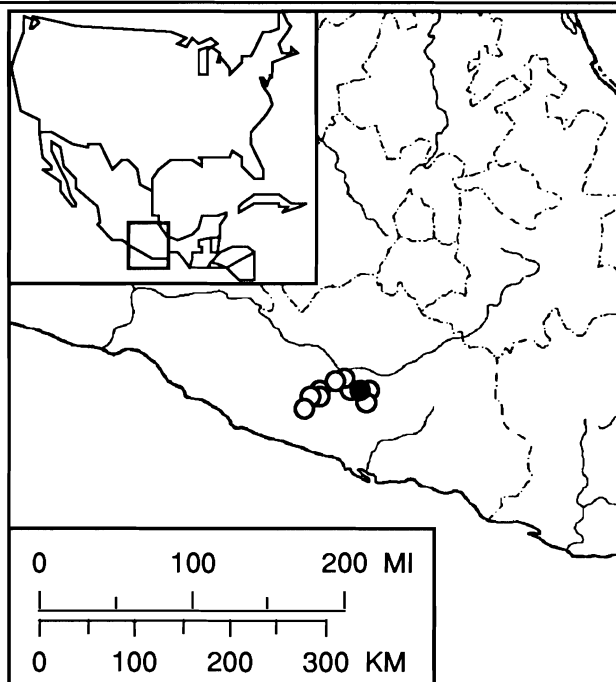


Figure. Illustration of the head of *Anolis liogaster* (MZFC.02787), 6X.



**Map.** Distribution of *Anolis liogaster* in the State of Guerrero, México. Solid circle indicates the type-locality; open circles indicate other records.

gorgetal-sternal scale rows with a mean number of 10 scales per row. Mean number of dewlap marginals (N=19) is 38.3, and the mean area of the dewlap (N=10) is 126.3 mm<sup>2</sup> for specimens between 50.4 and 56.5 mm SVL. The color of the dewlap is purple.

• **Diagnosis.** *Anolis liogaster* can be distinguished from other members of the *gadovi* species group as follows: from *A. gadovi* which is larger, has a smaller interparietal, suboculars that do not reach the supralabials, and more gulars contacting the mental (usually 2 in *liogaster* and usually 4 in *gadovi*); from *A. taylori* which has 5-6 rows of loreals, 8-9 internasals, and a red with violet dewlap; from *A. omiltemanus* which is smaller and has an orange-yellow dewlap; from *A. dunni* which has a red dewlap with light markings.

• **Descriptions.** Boulenger (1905), Smith (1972), Lieb (1981), and Muñoz-Alonso (1988) provided descriptions.

• **Illustrations.** Boulenger (1905) provided a drawing of the body and head scales, although Lieb (1981) stated that the specimen illustrated is "rather atypical".

• **Distribution.** *Anolis liogaster* is known from central Sierra Madre del Sur in the Mexican state of Guerrero in pine, pine-oak, oak, and cloud forest. It has been found on trees, in ground litter, and in bromeliads. The species has been reported from 750-2450 m in elevation; records below 1000 m probably are erroneous.

• **Fossil Record.** None.

• **Pertinent Literature.** Lieb (1981) provided a good discussion of systematics. Etheridge (1959) mentioned some characteristics of the skeleton and the number of presacral vertebrae. Fitch and Hillis (1984) provided scale counts of the dewlap of a single specimen. Barbour (1934) discussed the type-locality and the type material. Gorman et al. (1984) analyzed the relationship among several species of the *gadovi* species group including *liogaster* using albumin immunological patterns, and compared this group with other species. Davis and Dixon (1961) reported reproductive data of gravid females. Muñoz-Alonso (1988) provided a general ecological account. Saldaña de la Riva and Pérez-Ramos (1987) gave some data on the species' distribution in relation to climatic zones; however, there are some errors in locality data due to misidentifications of specimens.

• **Remarks.** The vernacular name here chosen comes from the local people at Omiltemi who call all the species of *Anolis* "abani-quillos" which means "little fan" and refers to the dewlap. Rojo means red, to distinguish *liogaster* from other species which occur at Omiltemi.

The stability of the generic name is currently being debated by several workers. Guyer and Savage (1986) proposed that all species of Mexican anoles belong to the genus *Norops*, a classification seriously questioned by Cannatella and de Queiroz (1989) and Williams (1989). We choose to be conservative until this debate has been settled and use the name *Anolis* in this account. Lieb (1981) has suggested that *Anolis adleri* and *A. liogaster* may be conspecific, a situation that merits further study.

• **Etymology.** The specific name *liogaster* is composed from the Greek *leios* (smooth) and *gaster* (belly or stomach), and refers to the characteristic absence of keels on the ventral scales.

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