

REPTILIA: SQUAMATA: PHRYNOSOMATIDAE

Sceloporus shannonorum

Catalogue of American Amphibians and Reptiles.

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***Sceloporus shannonorum* Langebartel**
Shannon's Spiny Lizard

Sceloporus heterolepis Boulenger 1894:724 (part; the syntype British Museum (Natural History) (BMNH) 92.2.8.30 from Rancho La Berbería, Sierra de Bolaños, Jalisco, Mexico).

Sceloporus shannonorum Langebartel 1959:25. Type-locality, "37 miles by road from Concordia, Sinaloa, near the Durango-Sinaloa border". Holotype, University of Illinois Museum of Natural History (UIMNH) 43060, adult male, collected by J. Schaffner, 2 September 1957 (examined by HMS).

Sceloporus heterolepis shannonorum: Webb 1969: 305.

Sceloporus shannorum: Gilboa 1974:107 (incorrect subsequent spelling).

- **CONTENT.** No subspecies are recognized.

• **DEFINITION.** A medium-sized species, maximum SVL 78 mm in males, 73 mm in females; at least the lateral scales irregular in size, small ones scattered among larger scales; large dorsolateral nuchal scales sharply differentiated from small lateral nuchal scales, the outer row forming a prominent lateral nuchal fringe and tuft; dorsals 41–49, mean 45.3; lateral scale rows oblique, posteriorly converging dorsally almost to midline; femoral pores 13–19, mean 15.7; head scales more or less normal for the genus; two canthals; supraoculars in two rows, scales of medial row much the larger. Dorsal and lateral surfaces dark gray, without prominent markings; a narrow diagonal light-bordered dark line on each side of neck in front of the arms, separated medially; generally three dim, narrow, chevron-shaped dark lines across dorsum, broken medially; males with bluish, medially dark-bordered abdominal semeions, in contact medially or narrowly separated. Venter immaculate in females.

• **DIAGNOSIS.** This species can be distinguished from all other congeners except *S. heterolepis* by the following combination of characters: some lateral scales smaller than others; lateral scale rows strongly convergent dorsally; no paravertebral rows of enlarged scales; nuchals of uniform size between the lateral nuchal fringes (a key character separating this species from *S. heterolepis*); usually two superimposed preoculars.

The only other species of *Sceloporus* with small dorsals or laterals mixed with larger ones is *S. heterolepis*. In that species there is a more or less continuous paravertebral row of enlarged scales on each side; the scales between the paravertebral rows are very small, irregular in size and arrangement, 56 or more in number; between the lateral nuchal fringes,



Figure 1. *Sceloporus shannonorum* from 0.6 km W. of Revolcadores, Durango, Mexico. Photograph courtesy of Robert G. Webb.



Figure 2. Habitat of *Sceloporus shannonorum* in Durango, Mexico. Photograph courtesy of Robert G. Webb.

areas of tiny scales separate two paravertebral rows of larger scales from each other, and from the lateral nuchal fringes; usually one preocular.

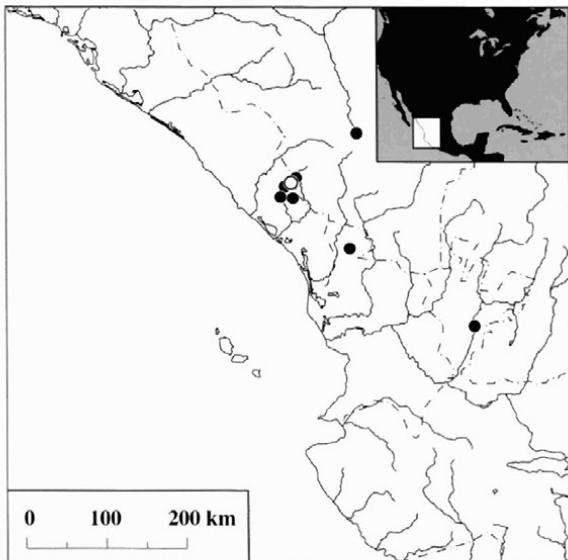
• **DESCRIPTIONS.** The most useful descriptions can be found in Langebartel (1959), Hardy and McDiarmid (1969), Köhler and Heimes (2002), and Webb (1969).

• **ILLUSTRATIONS.** Black-and-white photographs are in Langebartel (1959) and Webb (1969).

• **DISTRIBUTION.** Oak-pine-fir forests in the Sierra Madre Occidental from central Durango to extreme northern Jalisco, at elevations of 1850–2600 m, north of the Río Santiago Valley. That valley separates the range of *S. shannonorum* from that of its closest relative, *S. heterolepis*, south of the Rio Santiago Valley.

• **FOSSIL RECORD.** None.

• **PERTINENT LITERATURE.** Citations in the literature in contexts other than previously indicated include the following: **anatomy and morphology** (Burstein et al. 1974, and Larsen and Tanner 1974); **ecol-**



Map. Distribution of *Sceloporus shannonorum*. The circle indicates the type-locality, dots indicate other sites of collection. Courtesy of W.C. Johnson and S.K. Collinge, EE Biology, University of Colorado.

Ecology and zoogeography (Duellman 1961, Flores-Villela 1993, Flores-Villela and Gérez 1988, 1994, Hardy and McDiarmid 1969, Langebartel 1959, McCranie and Wilson 1987, 1990, Nieto-Montes de Oca 1987, Webb 1969, 1982, 1984, and Wilson and McCranie 1979); **karyology** (Gilboa 1974, Hall 1980, and Sites et al. 1992); **phylogeny and systematics** (Flores-Villela et al. 2000, Hall 1973, 1980, Larsen and Tanner 1975, Sites et al. 1992, Wiens 1999, and Wiens and Reeder 1997); **reproduction** (Guillette et al. 1980, and Méndezde la Cruz et al. 1998). The species occurs in the following **checklists and similar compendia**: Bell et al. 2003, Lara-Góngora 1983, Liner 1994, Smith and Smith 1976, 1993, Smith and Taylor 1966, Smith et al. 1964, and Sokolov 1988.

• **ETYMOLOGY.** The name *shannonorum* honors Dr. Frederick A. Shannon and his wife Ellen for their support of the field work that resulted in discovery of the taxon named for them.

• **REMARKS.** This species belongs to the *grammicus* group (Webb 1969, Wiens and Reeder 1997), and like others of that group is arboreal, occurring on oaks or pines. It is extremely wary, climbing quickly out of sight when disturbed (Webb 1969).

Webb (1969) described morphological intermediates between *S. shannonorum* and *S. heterolepis* in samples from the western edge of the range of the latter (including most notably the Sierra de Cuale). He regarded them as intergrades. They are not, however, from an area between the present ranges of the two species. There is no evidence that the two taxa intergrade at present; their ranges are dichopatric so far as is known, separated by the valley of the Río Santiago. We have examined the Sierra de Cuale series, and consider them as representative of *S. het-*

erolepis. Their dorsal scales are somewhat depressed, making the paravertebral rows rather indistinct. They are there, however, and the most important feature of *S. heterolepis*, with scales of sharply differing size across the nape, is well developed and sharply different from the arrangement in *S. shannonorum*.

• **ACKNOWLEDGMENTS.** We are much indebted to the curators of collections at CAS, KU, MZFC (Museo de Zoología, Facultad Ciencias, UNAM), TCWC, UCM, UMMZ, USNM, UTA and UTEP for information on their holdings of this species (acronyms follow Leviton et al. 1985). We especially thank C. McCarthy, who kindly provided information on the syntypes of *S. heterolepis*, which includes one specimen of *S. shannonorum* from Rancho La Berbería, Sierra de Bozáños, Jalisco.

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- Hobart M. Smith**, Department of EPO Biology, University of Colorado, Boulder, CO 80309-0334 USA (hsmith@colorado.edu); **Ernest A. Liner**, 310 Malibou Boulevard, Houma, LA 70364-2598 (eliner@mobilitel.com); **Paulino Ponce-Campos**, Bosque Tropical A.C., A.P. 5-515, Guadalajara, Jalisco, 45042 México (poncecp@hotmail.com); and **David Chiszar**, Department of Psychology, University of Colorado, Boulder, Colorado 80309-0345 (david.chiszar@colorado.edu).
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