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## AMPHIBIA: CAUDATA: PLETHODONTIDAE

## Catalogue of American Amphibians and Reptiles.

Lynch, J.F. and D.B. Wake. 1999. Pseudoeurycea parva.

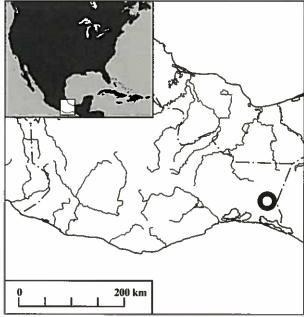
## Pseudoeurycea parva Lynch and Wake

Pseudoeurycea parva Lynch and Wake 1989:15. Type locality, "inside an arboreal bromeliad on a ridge SE Cerro Baul, 21 km W Rizo de Oro, Chiapas, Mexico (ca 1600 m)," just within the eastern border of Oaxaca. Holotype, Museum of Vertebrate Zoology (MVZ) 196101, an adult male, collected by K. Lucas, 8 September 1972 (examined by authors).

- CONTENT. No subspecies are recognized.
- **DEFINITION.** Pseudoeurycea parva is the second-smallest known member of the genus (only P. praecellens is smaller). The largest of 17 available specimens has a SVL = 40 mm, and all individuals exceeding 35 mm appear to be sexually mature. Limbs and tail are moderately long for the genus (for adults projected to a SVL = 40 mm, combined limb length = 0.54 SVL, and tail length = 0.91 SVL). Adults have an average of 80 maxillary/premaxillary teeth and 50 vomerine teeth. Hand and foot morphology are typical for the genus, except that no tibial spur is present. Sexual dimorphism is not evident, but marked ontogenetic variation occurs in proportional and meristic characters. Compared with adults, juveniles possess relatively shorter tail and limbs, and fewer maxillary/premaxillary and vomerine teeth.

The ground color is dark brown or gray-brown. Melanophores are reduced in the middorsal region, and a creamy white to tan dorsal stripe is present in about half of the specimens. Large lichenous white or tan spots are present on the tail in most individuals. Tiny white spots are invariably present on the belly, and larger light spots are present laterally.

 DIAGNOSIS. Compared with Pseudoeurycea saltator, the only congener with which this species might be confused, adults of P. parva are smaller (median SVL of largest third of sample



MAP. Distribution of *Pseudoeurycea parva*. The circle represents the type locality and a cluster of nearby localities in eastern Oaxaca, México.

- = 39 mm versus 44 mm in *P. saltator*), have a proportionately shorter relative tail length (0.93 times SVL versus 1.02), and have more vomerine teeth (50 versus 28). The two species are similar in limb proportions and have similar numbers of maxillary/premaxillary teeth. Protein comparisons indicate substantial genetic differentiation between *P. parva* and *P. saltator*, and between these two species and other *Pseudoeurycea* (Lynch and Wake 1989).
- DESCRIPTIONS. Lynch and Wake (1989) give a detailed description of external morphology and osteology, and present

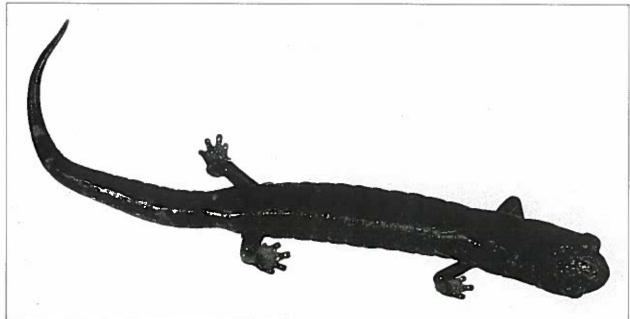


FIGURE. Adult female *Pseudoeurycea parva* (38.3 mm SVL), collected by R.L. Seib in the vicinity of the type locality near the Chiapas-Oaxaca border, 23 km (by road) N Rizo de Oro, México, 1570 m elevation, on 16 October 1984.

comparative electrophoretic data for this and seven other species of *Pseudoeurycea*, plus *Dendrotriton*, *Nyctanolis*, and *Ixalotriton*.

- ILLUSTRATIONS. Lynch and Wake (1989) presented a photograph of a living adult paratype and drawings of a cleared-and-stained hand and foot of a paratype.
- DISTRIBUTION. Pseudoeurycea parva is known only from cloud forest on the flanks of Cerro Baul, a 2,000-m peak located just east of the Isthmus de Tehuantepec, near the boundary between the Mexican states of Oaxaca and Chiapas. Specimens have been collected from several localities in easternmost Oaxaca, 17–31 km W Rizo de Oro, Chiapas. Elevational range is 1,500–1,900 m. Unlike most species of Pseudoeurycea, which are terrestrial, P. parva inhabits arboreal bromeliads (Vriesia and Tillandsia spp.). Bolitoglossa occidentalis is the only salamander known to occur in sympatry with P. parva.
- FOSSIL RECORD. None.
- PERTINENT LITERATURE. Morphology, distribution, and relationships are discussed in Lynch and Wake (1989).
- ETYMOLOGY. The specific name parva is a Latin word meaning "small."
- COMMENT. In its habitus and ecology, Pseudoeurycea parva somewhat resembles an oversized Dendrotriton, but differs from members of that genus in possessing prefrontal bones and lack-

ing enlarged nostrils in either juveniles or adults (nostrils are invariably enlarged in juvenile *Dendrotriton*, but not in *Pseudoeurycea*). *Pseudoeurycea* parva shares some morphological and behavioral similarities with *Nyctanolis* and *Ixalotriton*, two monotypic bolitoglossine genera that occur in eastern Chiapas, México and western Guatemala. The small sample available of this species may not include large adults, which would make a relationship to *Ixalotriton*, which occurs relatively nearby, more likely. Electrophoretic data suggest that the closest relative of *P. parva* is *P. saltator*, and that both species are more closely related to *Nyctanolis* and *Ixalotriton* than they are to some species of *Pseudoeurycea* (Lynch and Wake 1989).

## LITERATURE CITED

Lynch, J.F. and D.B. Wake. 1989. Two new species of *Pseudoeurycea* (Amphibia:Caudata) from Oaxaca, Mexico. Contrib. Sci. Nat. Hist. Mus. Los Angeles Co. (411):11–22.

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