**Catalogue of American Amphibians and Reptiles.**

Jadin, R.C. 2010. *Cerrophidion tzotzilorum*.

## *Cerrophidion tzotzilorum* (Campbell)
## Tzotzil Montane Pitviper
## Nauyaca del frío, víbora

*Bothrops nummifer mexicanus:* McCoy and Van Horn 1962:186 (part).

*Cerrophidion godmani:* Auth, Smith, Brown, and Lintz 2000:73 (part).

*Bothrops tzotzilorum* Campbell 1985:48. Type-locality, "10.9 km ESE San Cristóbal de Las Casas, Chiapas, Mexico, elevation 2320 m." Holotype, Amphibian and Reptile Diversity Research Center, University of Texas at Arlington (UTA) R-9641, an adult male collected by J.A. Campbell on 8 June 1979.

*Porthidium tzotzilorum*: Campbell and Lamar 1989: 264.

*Cerrophidion tzotzilorum*: Campbell and Lamar 1992: 24.

• **CONTENT**. No subspecies are recognized.

• **DEFINITION**. *Cerrophidion tzotzilorum* may be the smallest species of pitviper in the New World (Campbell and Lamar 2004); adults probably do not exceed 50 cm in total length. Coloration may be a dark grayish brown or rust. A darker gray or brown zig-zag pattern extends from the neck down the entire length of the body, along with 29–49 (mean 40) lateral body blotches. The supraoculars are large and flat and there is a pale border both above and under the dark postocular stripe. Scalation of *C. tzotzilorum* is generally as follows: 3 intersupraoculars with a large median scale in the frontal region, 19–23 (mode 21) midbody dorsal scale rows, 120–137 ventrals, 23–36 undivided subcaudals, 3–4 gulars, 1–4 suboculars, 2–3 postoculars, 10–13 scales contacting supraoculars, 9–11 (mode 9–10) supralabials, 9–12 infralabials, 2–4 prefoveals, 23–26 interrictals, loreal undivided and longer than high. There are 4 palatine, 12–14 pterygoid, and 11–14 dentary teeth.

**FIGURE 1.** Adult female (left) and male (right) *Cerrophidion tzotzilorum* from Chiapas, Mexico. Photograph by Eric N. Smith, courtesy of A. Ramirez Velasquez and the Parque Zoologico Miguel Alvarez del Toro, Mexico.

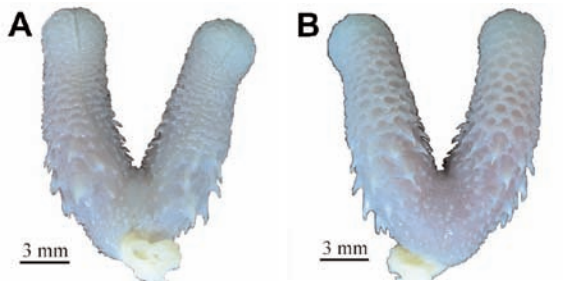



**FIGURE 2.** Photograph of the hemipenis of the holotype of *Cerrophidion tzotzilorum* (UTA R-9641); (A) sulcate view, (B) asulcate view.

• **DIAGNOSIS**. This species is parapatric with *C. godmani* with few reports of sympatry (Campbell 1985). It differs from *C. godmani* in having shorter and more numerous dorsal and lateral body blotches, generally lower ventral scale counts, and fewer dentary and pterygoid teeth.

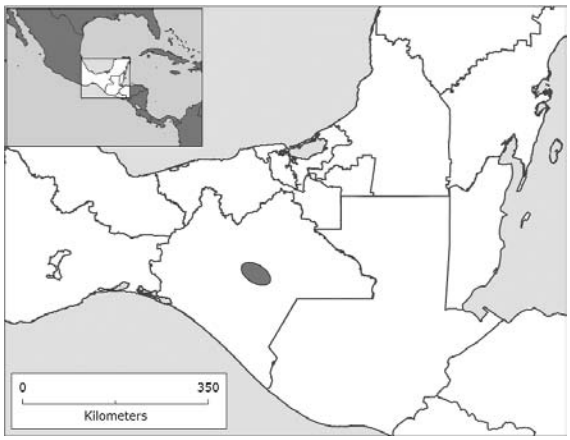
• **DESCRIPTIONS**. The most complete descriptions of the external morphology are in Campbell (1985, 1988), Campbell and Lamar (1989, 2004), and Jadin (in press).

• **ILLUSTRATIONS**. In the original description, Campbell (1985) provided sketches of both the left side and dorsal views of the head of the holotype, along with a sulcate view of the left hemipene. These same images are included in Campbell and Lamar (2004); the dorsal head view is also included in Campbell and Lamar (1992). Campbell (1985) provided 2 black-and-white photographs of the holotype in life. Color photographs are in Campbell and Lamar (1989), Köhler (2003), and Campbell and Lamar (2004).

• **DISTRIBUTION**. *Cerrophidion tzotzilorum* is endemic to high elevations (2050–2500 m) in the Meseta Central region of Chiapas, Mexico. The habitat of this region is seasonally dry pine-oak forest. Because of this restricted distribution, Greene and Campbell (1992) listed *C. tzotzilorum*, alongside 73 other pitviper species with limited distributions, as threatened with extinction.

• **FOSSIL RECORD**. None

• **PERTINENT LITERATURE**. Campbell (1985) and Campbell and Lamar (2004) provided the most comprehensive accounts of the species. Campbell and Solórzano (1992) discussed the historical biogeography and possible timeframe for the evolution of the species. Jadin (2007, in press) described the diet of *C. tzotzilorum* and compare it to other *Cerrophidion*. Additional references of distribution are included in McCoy and Van Horn (1962, as *Atropoides nummifer*), Auth et al. (2000, as *Cerrophidion godmani*), and Köhler (2003). Liner (2007) included this species in a checklist of the herpetofauna of Mexico.




**Map.** Distribution of *Cerrophidion tzotzilorum* in Chiapas, Mexico, based on Campbell and Lamar (2004).

• **REMARKS**. Two phylogenies based on morphological evidence (Campbell 1988; Jadin in press) show support for a sister relationship between *C. tzotzilorum* and *C. godmani*. Campbell and Solórzano (1992) and later Werman (2005) hypothesized this relationship, predicting that a *Cerrophidion* ancestor split at the Isthmus of Tehuantepec, forming a *barbouri–petlalcalensis* clade and a *godmani–tzotzilorum* clade. However, recent molecular studies (Castoe et al. 2005) show strong support for a *petlalcalensis–tzotzilorum* clade to the exclusion of several distinct *C. godmani* populations.

• **ETYMOLOGY**. The species name refers to the Tzotzil Indians who inhabit the region in Chiapas where the species is found.

• **COMMENT**. The *C. tzotzilorum* specimen illustrated in plate 295 in Campbell and Lamar (1989) and plate 676 in Campbell and Lamar (2004) was erroneously labeled as UTA R–9491. The specimen is the holotype UTA R–9641 as labeled in Campbell (1985).

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**Robert C. Jadin**, Amphibian and Reptile Diversity Research Center, Department of Biology, University of Texas at Arlington, Arlington, Texas 79016 (snakeman1982@hotmail.com).

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