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# Significant range extension for the Central American Colubrid snake *Ninia pavimentata* (Bocourt 1883)

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**ABSTRACT** — The second specimen of the snake *Ninia pavimentata* is reported from Honduras, significantly extending the known distribution of the species. This record reduces the distributional gap between this species and its presumed sister taxon, *Ninia maculata*, while supporting their continued recognition as distinct species. Relative measurements, scale counts, and pattern descriptions are provided.

*NINIA pavimentata* (Bocourt 1883) is a small semifossorial snake reported from pine-oak and cloud forest areas in central Guatemala, as well as from a single locality in northwestern Honduras (Smith & Campbell, 1996; Townsend *et al.*, 2005). Until recently, this species was considered a synonym of *Ninia maculata* (Peters, 1861), a situation clarified by Smith & Campbell (1996), who resurrected *N. pavimentata* to species level on the basis of non-overlapping segmental count ranges and other morphological characteristics. The distributions of *N. maculata* and *N. pavimentata* are presently known to be separated by a 315 airline km gap in Honduras, with *N. pavimentata* reaching its easternmost known distribution in the Sierra de Omoa, outside of Parque Nacional Cusuco, Depto. de Cortés (15°30'N, 88°11'W), 1250 m elevation, and *N. maculata* its northernmost known locality at Quebrada Machín, Reserva de la Biósfera Río Plátano, Depto. Colón (15°19'N, 85°17'W), 540 m

elevation (McCranie *et al.*, 2001; Townsend *et al.*, 2005).

On 10 April 2008, a female *Ninia pavimentata* (Florida Museum of Natural History [UF] 152810; Figure 1) was collected from under a rock at the edge of a fragment of cleared cloud forest in Refugio de Vida Silvestre Texiguat (15°26.502'N, 87°18.092'W), 1715 m elevation, Departamento de Yoro, Honduras. This habitat is similar to that of the localities of most *N. pavimentata* specimens, which have been collected between 1120 and 1825 meters from pine-oak or cloud forest (Smith & Campbell, 1996), and to the disturbed habitat (a shade *cafetal*) where the other Honduran specimen originated.

Relevant measurements and scale counts for UF 152810 are as follows: snout-vent length 131 mm, tail length 47 mm, ventrals 141, subcaudals 72, segmental count 213, supralabials 7/7, infralabials 7/7, temporals 1+2, postoculars 2/2. The specimen possessed 39 dorsal crossbands on

its left side, 3 of which split in half at the mid-dorsal scale row and continue onto the right side as two bands. The ventrals exhibited a boldly checkered pattern. These characteristics fall within the known variation in *N. pavimentata* (Smith & Campbell, 1996; Townsend *et al.*, 2005), providing further evidence for the specific status of this taxon.

This record extends the known range of *Ninia pavimentata* approximately 65 airline km east from its known distribution. The new locality also narrows the geographic gap between *N. pavimentata* and its most similar congener and presumed sister taxon, *N. maculata*, to approximately 250 airline km. This gap in distribution is consistent with gaps

documented in other snake taxa, and was termed the “Honduran hiatus” by Savage & Crother (1989) in their review of the colubrid genus *Pliocercus* in Central America.

The semi-fossorial colubrid *Rhadinaea decorata* has long been known to occur from Mexico to Guatemala, and from Nicaragua to Ecuador, but was unknown from Honduras until discovered in La Mosquitia in 2004 (McCranie, 2004). This is also the case for the terrestrial colubrid *Dendrophidion vinitor*, which was finally reported from Honduras in 2003. Additionally, the colubrid taxon *Scaphiodontophis venustissimus* was recently resurrected from synonymy with *Scaphiodontophis annulatus*, based on evidence



**Figure 1.** Female *Ninia pavimentata* (UF 152810), Refugio de Vida Silvestre Texiguat (15°26.502'N, 87°18.092'W), 1715 m elevation, Depto. de Yoro, Honduras. Photograph by JHT.

from recently collected specimens in eastern Honduras, yet another distributional “hiatus” that had previously been hypothesized as a zone of integration between the two forms by Savage & Slowinski (1996). This region contains contact zones between closely related species of *Scaphiodontophis* (McCranie, 2006) and the aforementioned *Ninia*, where species in both genera maintain diagnosable species boundaries and exhibit no evidence of integration in morphological characteristics. Continued field work in this area may reveal additional taxa supporting this biogeographic pattern.

## RESUMEN

Se reporta para Honduras el segundo espécimen de la serpiente *Ninia pavimentata*, ampliando significativamente la distribución conocida para esta especie. Este registro reduce la separación entre esta especie y su supuesto taxón hermano, *Ninia maculata*, mientras que al mismo tiempo sustenta su reconocimiento como especies distintas. Se proveen las medidas relativas, conteo de escamas, y descripciones del patrón.

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