

A Second Specimen of *Elaphe flavirufa matudai* (Reptilia: Serpentes)

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Only one specimen of its subspecies has been known for some 56 years since *Elaphe flavirufa matudai* Smith (1941) was described. The absence of confirmatory examples has led some authors (e.g., Dowling, 1932; Wilson and Hahn, 1973; Wilson and Meyer, 1985) to question the validity of the taxon, although generally it has been tentatively accepted (e.g. Dowling, 1952; Schulz, 1993, 1996). We here report a second specimen that supports the concept of its validity.

The specimen is UCM 45777 (Figure 1), a small adult male, 856 mm TTL, 176 mm TL, from San Jerónimo, 450 m, Volcán Tacaná, Chiapas, taken 22 September 1970 by E. C. Welling. That locality is on Pacific slopes some 60 airline kilometers from the type locality on the slopes of Cerro Obando, Chiapas, and at about the same altitude. Presumably the subspecies occurs on Pacific slopes in adjacent Guatemala, inasmuch as Volcán Tacaná peaks on the border between Chiapas and Guatemala. All other subspecies of *E. flavirufa* are confined to Atlantic slopes; all records for “Tehuantepec” (e.g., Dowling, 1952; Schulz, 1996: 279, map) are here regarded as erroneous in reference to the city, although correct in reference to the Isthmus of Tehuantepec. One specimen from “Tehuantepec” (UF 105768) was taken in 1963 by P. J. Regal and G. V. Elliot, whose field catalogs for the pertinent part of the trip were lost. Thus several of their purported collection sites are questionable and unverifiable. The original field tag (PJR 870) on UF 105768 is missing, and “Tehuantepec” on the replacement field tag refers merely to the general region of the Isthmus of Tehuantepec, inasmuch as the exact locality was not then known. Original field tags on other specimens, however, that bracket PJR 870, may more reliably indicate the source of UF 105768: PJR 868 is from “Hwy 185, 40 km N jct Hwy 190”, and PJR 871 is from “Hwy 185, 56 km N jct Hwy 190.” Both localities are on Atlantic slopes over 80 km by road north of the Pacific slope Ciudad Tehuantepec. PJR 870 was quite likely taken between those two localities.

The UIMNH specimen reported by Dowling (1952) from “Tehuantepec” was obtained from Thomas MacDougall, who not only collected many herps with precise, accurate locality data on his many long forays afoot in the hinterlands of Oaxaca, Chiapas and Veracruz, but also bought many specimens from local collectors who obtained them far and wide, but commonly provided no precise locality data. Thus the locality “Tehuantepec” for MacDougall's material cannot be accepted as meaning the city by that name. Accordingly, no incontrovertible evidence exists that *E. f. flavirufa* occurs near Ciudad Tehuantepec or anywhere else on Pacific slopes. It obviously does occur on the Isthmus of Tehuantepec, but only on its Atlantic slopes.

The most distinctive feature of *E. f. matudai* (pronounced in English as though the name were spelled matsudai) is, as recognized by all workers, the extremely broad dorsal blotches, reaching in the present specimen to a mean of the 2.0 dorsal scale row on each side (of the 39 dorsal blotches, 12 reach the 1st scale row, 21 the 2nd, 4 the third, 1 the 4th and 1 the 5th). Concomitantly, the lateral blotches extend dorsad to a mean of the 2.6 dorsal scale row (of the 39 lateral blotches on one side, 7 extend dorsad to only the 1st scale row, 13 to the 2nd, 16 to the 3rd, 1 to the 4th, and 2 to the 6th). Only the three reaching the 5th and 6th rows are closed ventrally. There is no evidence of a third row of spots.

On the contrary, in other subspecies of *E. flavirufa*, few if any dorsal blotches extend laterally to any dorsals below the 5th row, the lateral blotches are mostly closed ventrally, and even a third row of partial blotches is often present. For example, three from Honduras (UF 64784, 86507, 105765) all have relatively narrow dorsal blotches, none extending below the 4th scale row, and few below the 5th; all lateral blotches are closed ventrally, and there is even a third row of incomplete blotches. UF 105768 from “Tehuantepec” is much the same, although none of the dorsal blotches extend below the 5th row, and most end on the 7th and 8th rows. UF 11277, from 14 mi W Acayucán, Veracruz, is badly damaged (DOR), but appears much the same as UF 105768. UF 105767, from 56 mi S Tampico, Tamaulipas, in the state of Veracruz, also has all

lateral blotches complete, but the dorsal blotches extend as far laterally as the 3rd dorsal row (although few below the 5th, and some not below the 8th), and there is a third row of incomplete blotches. In two live specimens from Corn Island, Nicaragua, none of the dorsal blotches extend below the 5th scale row, all lateral blotches are closed ventrally, and an incomplete third row of blotches is present.



Figure 1. Dorsal view of *Elaphe flavirufa* *matudai*, UICM 25999, from San Jerónimo, 50 m. Volcán Tacaná, Chiapas, 856 mm TL.

Other character-states of the second specimen now known of *E. f. matudai* include 256 ventrals, 109 caudals, 25-29-21 scale rows, 1-2 oculars, 10-10 supralabials (5-6-7 entering orbit, 4th wedgelike, not reaching lip), 13-13 infralabials, 10 dorsal tail blotches, no ventral pigmentation medial to lateral keel, and sparse subcaudal pigmentation. Of the several possible differences of this subspecies from the nominotypical taxon, as suggested in the original description and in Dowling (1952), the only ones that now appear likely to be valid, other than the dorsal pattern, are (1) usually 10 supralabials (vs usually 9); (2) usually supralabials 5-6-7 entering orbit (vs usually 4-5-6); and (3) general dorsal ground color relatively dark, as shown in Figure 1 (vs relatively light).

In view of the distinctive characteristics seemingly consistent throughout the apparently completely isolated population of *E. flavirufa* in southeastern, Pacific-slope Chiapas, recognition of the distinctness of its subspecies is fully justified.

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