

The Bushmaster, *Lachesis muta muta* (Linnaeus),
[Ophidia: Viperidae] in Panamá

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Resumen: Se describe por primera vez el hallazgo de *Lachesis muta muta* (la Verrugosa del Chocó) en Playa Chuzo, Darién, Panamá. La escamación, el colorido de la cabeza y otros estudios adicionales son característicos de esta subespecie. Sugerimos que la nueva localidad sea reconocida como un nuevo ámbito de extensión.

Up to the present the known geographical distribution of *Lachesis muta muta* had its northern limit in Venezuela and Colombia (Peters and Orejas Miranda, 1970). Occurrence of this subspecies in Darien Province, Panama, and thus the existence of a possible intergradation zone with *L.m. stenophrys* from Costa Rica and Panama was unknown (Hoge and Romano, 1971; Hoge and Romano-Hoge, 1978/79).

From the medical point of view it is important to know the distribution of this reptile since there are differences in the venom composition among subspecies and among geographical populations (Bolaños *et al.*, 1978).

On August 6, 1979, one of us (V.M.) captured a male specimen of *L.m. muta* 220.15 cm long in "Playa Chuzo", 37 km northwest of the town of Santa Fe, Darien Province, Panama (Fig. 1). This locality is characterized by Tosi (1971) as tropical humid forest transition to very humid; its altitude is below 30 m.

Scale counts and shape: Rostral trapezoidal, nasals divided, one preocular with a small presubocular below, supraoculars longer and wider than the eye, 12 scales between the supraoculars, two postoculars, one subocular separated from supralabials by three rows of

small scales, 226 ventrals, 53 subcaudals, 35 dorsals at midbody; from left to right, 9-9 supralabials and 14-15 infralabials; anal single.

Hemipenis: Description of the everted hemipenis, as recommended by Dowling and Savage (1960), is as follows: bifurcate with spines at the subapical portion and normal tips, spermatic duct bifurcated; approximate length 40 mm.

Head pattern: Small and irregular black spots on the head in a higher proportion than in *L.m. stenophrys*; black postocular band with white scales above.

Additional studies: Electrophoretic and immunoelectrophoretic patterns of the venom of this species are different from those of the venom of *L.m. stenophrys* from Costa Rica (Atlantic and Pacific slopes) and from Panama (Atlantic versant). Lethality of the venom for white mice is slightly lower but capacity of producing edema is twice as great as in *L.m. stenophrys*.

Scale counts of this specimen, coloration patterns of the head in comparison with published drawings of other subspecies (Hoge, 1965), ecogeography of *L. muta* in Central America (Vial and Jiménez-Porras, 1967) and

additional studies of the venom, support our identification of the specimen as *L. m. muta* (Linnaeus). We suggest that the new locality (Playa Chuzo) in Darien, Panama, be recognized as a range extension. The specimen was deposited in the Zoological Museum of the School of Biology of the University of Costa Rica, No.8061.

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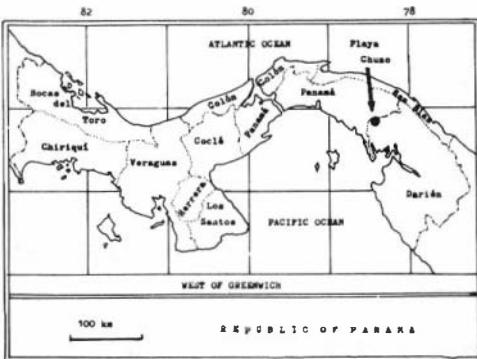


Fig. 1. Site of capture of the specimen of *Lachesis m. muta*, Playa Chuzo, Province of Darien, Panama.

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