

Stenorrhina degenhardtii ocellata
JAN, 1876 in Venezuela

Snakes of the colubrid genus *Stenorrhina* DUMÉRIL, 1853 are found from Mexico to Colombia, Ecuador and Venezuela (ROZE 1966; LANCINI & KORNACKER 1986) and include the species *S. degenhardtii* BERTHOLD, 1846 (Mexico to Colombia, Ecuador and Venezuela) and *S. freminvillii* DUMÉRIL 1854 (Guerrero, Mexico and Panama) (PÉREZ-SANTOS & MORENO 1988). Study of these snakes has been largely neglected, possibly due to the unattractive aspect of these secretive leaf-litter animals and their apparent rareness. *Stenorrhina* is characterized by its small size (70–80 cm), cylindrical body, short and conical tail, small head not differentiated from the neck, small eyes with rounded pupils and prefrontals touching the supralabials (LANCINI 1979; PEREZ-SANTOS & MORENO 1988). *Stenorrhina degenhardtii degenhardtii* (BERTHOLD, 1854) is found in Panama, Pacific Colombia and Ecuador; *S. degenhardtii mexicana* (STEINDACHNER, 1867) in Veracruz (Mexico) and South Guatemala and *S. degenhardtii ocellata* (JAN, 1876), which constitutes the subject of this study has been described from Colombia, North-Central and Northwestern Venezuela (ROZE 1966; GORZULA 1978; LANCINI 1979; PETERS & OREJAS-MIRANDA 1986; PEREZ-SANTOS & MORENO 1988; PEFAUR 1992; LA MARCA 1997; KORNACKER 1999). STUART (1963) proposed to restrict *S. degenhardtii ocellata* (JAN, 1876) to the Caribbean drainage system.

According to ROZE (1966) and LANCINI (1979) *S. degenhardtii ocellata* is characterized by a divided nasal scale, absence of the loreal, presence of one preocular and two postoculars, a pentagonal frontal scale, the temporal formula of 1+2 or 2+3, and two pairs of mental scales. The dorsal scales are present in 17 longitudinal rows without reduction. The number of ventral scales varies from 135 to 155, and of the divided subcaudals from 27 to 40. The dorsal coloration is a clear uniform brown; the ventral region is pale yellow with contrasting dark spots in the adults. In juvenile specimens dark spots are present along the median and lateral parts of the body while the ventral region is similar as in the adults.



Fig. 1: Geographical distribution of *Stenorrhina degenhardtii ocellata* JAN, 1876 in Venezuela. Venezuelan states which hold records are marked (●).

In order to increase the scarce information about morphology, geographical distribution and biology of Venezuelan *S. degenhardtii ocellata*, 57 specimens collected between 1953 and 2002 from different Venezuelan states (Federal District, Miranda, Aragua, Yaracuy, Falcón, Carabobo and Táchira) and stored in Venezuelan scientific collections were included in the study:

Materials examined: Edo. Aragua: Guamitas - Parque Nacional H. Pittier (EBRG 134), Carretera Maracay - Ocumare (EBRG 586, 587, 588, 683, 684, 787, 1807, 1809, 1853), Estación de Fauna El Limón (EBRG 2871), Río Tuy (MCNC 232); Edo. Carabobo: Embalse Río Morón (EBRG 2395), Carretera a San Esteban (MHNLS 476); Distrito Capital: Nueva Tacagua (MHNLS 9336), Soapo - Quebrada El Limón (MHNLS 4396, 4465), El Paraíso - Caracas (MBUCV 8157), El Valle (MBUCV 8154); Edo. Falcón: Sanare (EBRG 3246), Cabure (MHNLS 1458); Edo. Miranda: Alto Hatillo (EBRG 681), Municipio Zamora - Araira (EBRG 3531), El Encanto (MCNC 41), Curupao (MCNC 1372, 3757), Mampote (MHNLS 10832), El Cafetal - Caracas (MHNLS 13031), Higuero (MBUCV 8155), Petare (MBUCV 8210); Edo. Táchira: Distrito Bolívar - Aguas Calientes (MCNC 3802); Edo. Vargas: Canales de Naiguatá (MCNC 3364, 3365, 7074, 7075, 7076, 7077, 7078, 7079, 7080, 7081, 7082, 7083, 7084, 7085, 7086, MHNLS 11389, 11391, MBUCV 1814, 2141), El Vigía (MCNC 381), Naiguatá (MCNC 1162), Carayaca (MCNC 1941), Municipio Vargas (MCNC 3728), Campurichico (MBUCV 8158); Edo. Yaracuy: Hacienda El Jaguar - Aroa (EBRG 2954), Sierra de Aroa (EBRG 3807), San Felipe (MCNC 1940).

Museum acronyms: MHNLS (Museo de Historia Natural La Salle, Caracas); EBRG (Museo de la Estación Biológica de Rancho Grande, Estado Aragua, Maracay); MIZA (Museo del Instituto de Zoología Agrícola, Facultad de Agronomía, Universidad Central de Venezuela, Estado Aragua, Maracay); MBUCV (Museo de Biología de la Universidad Central de Vene-

Table 1: Sex and relative length of tail in 19 male (M) and 38 female (F) individuals of *Stenorrhina degenhardtii ocellata* JAN, 1876 from Venezuela.

	Number and Sex		Rostral-anal length (mm)		Tail length (mm)		Ratio Tail length / Rostral-anal length	
Mean value	19 F	38 M	529	502	62	97	0.12	0.18
Standard deviation	19 F	38 M	104	83	16	17	0.03	0.04
Minimum-maximum	19 F	38 M	320-688	258-622	32-109	51-144	0.12-0.16	0.16-0.21

zuela, Caracas); CIEZAH (Centro de Investigaciones en Ecología y Zonas Áridas, Universidad Francisco de Miranda, Estado Falcón, Coro); ULABG (Universidad de los Andes, Facultad de Ciencias Forestales y Ambientales, Escuela de Geografía, Laboratorio de Biogeografía, Estado Mérida, Mérida); MCNC (Fundación Museo de Ciencias, Caracas).

The specimens were easily sexed based on the presence/absence of hemipenes.

The sample comprised 38 males and 19 females (male : female proportion 2:1). Maximum rostral-anal length in females was 688 mm, in males 622 mm. The relative tail length (tail length / rostral-anal length) showed considerable sexual dimorphism in that it was longer in males (0.16-0.21) than in females (0.12-0.16) with almost no overlap (table 1).

Ventral scale counts revealed higher numbers in females, however, the number of subcaudals was higher in males (table 2). The number of supralabial scales was 7(3,4) in 98.36% and 8(3,4) in 1.64% of the specimens (supralabials with eye contact in parentheses), infralabial scales were 8(4) and 8(5) in 85.24% and 14.76% of the specimens (posteriormost infralabial with genial shield contact in parentheses), and temporal formulae were 1+2 in 88.26% and 2+3 in 11.74% of the specimens, respectively. Values in parentheses mean in supralabials

In all our specimens the dorsal scales were arranged in 17 longitudinal series (table 3), not presenting any reduction which is opposite to what was mentioned by PEREZ-SANTOS & MORENO (1988) who described scale reduction in the posterior trunk region (17-15).

The coloration observed in adult specimens was considerably different from that in juvenile specimens. Coloration of juvenile specimens was characterized by a design of irregular dark brown spots on the medio-dorsal and dorso-lateral scales. In adult specimens a uniform clear brown coloration on the back was present. In both juvenile and adult specimens the dark spots of the ventral region contrasted with a creamy background.

Four females of *S. degenhardtii ocellata* (total length 574.3 ± 8 mm) were gravid (7 to 17 eggs).

According to our data the geographical distribution comprises the north-western and central-north regions of Venezuela (fig. 1).

Stenorrhina degenhardtii ocellata is a nocturnal terrestrial and fossorial inhabitant of the Venezuelan La Costa Range forest, frequently living near watercourses. These snakes generally dwell in wet areas, and have terrestrial habits (ROZE 1966; LANCINI 1979; SAVAGE 2002). This species is common in woods and light forests of the piedmont, while densely forested regions are avoided. No consistent pattern of geographic variation is found in this species. The hypothetical differences in color pattern described by SMITH & TAYLOR (1945) probably are only individual variations, as indicated by STUART (1963). Nevertheless, Venezuelan samples lack a dark temporal stripe as has been described on Colombian specimens.

The snake is active during the day and feeds on amphibians, lizards and inverte-

Table 2: Mean values and standard deviations of ventral and subcaudal scale counts in 19 male (M) and 38 female (F) individuals of *Stenorrhina degenhardtii ocellata* JAN, 1876 from Venezuela.

	Number and Sex		Ventral scales		Subcaudal scales	
Mean value	19 F	38 M	152.05	144.10	30.58	40.24
Standard deviation	19 F	38 M	5.97	5.67	5.97	2.60
Maximum/minimum	19 F	38 M	133-159	135-149	27-39	31-47

brates such as insect larvae, grasshoppers, spiders, scorpions and crickets (SAVAGE 2002), on the other hand it is predated by other snakes, fowl-like birds and some mammals (LANCINI & KORNACKER 1986). *Stenorrhina degenhardtii ocellata* is opisthoglyphous, but usually inoffensive and, according to our experience, cannot be tempted to bite. However, COOK (1984) described a case history of a bite by the neotropical opisthoglyph, *Stenorrhina freminvillei* DUMÉRIL, BIBRON & DUMÉRIL, 1854. This is apparently the first documentation of human envenomation by this genus. Localized pain and swelling were the predominant symptoms; no systemic reaction was noted. Such mild effects are consistent with the bites reported for other New World colubrids, in contrast to the potentially lethal effects produced by Old World colubrid genera *Dispholidus*, *Thelotornis*, *Rhabdophis* and *Atractaspis*.

Most of the specimens under study originated from different locations of the La Costa Range in the North of the country. The occurrence of *S. degenhardtii ocellata* in Táchira state, located in South-West Venezuela, appears to be disjunctive so far.

REFERENCES: COOK, D. G. (1984): A case of envenomation by the neotropical colubrid snake *Stenorrhina freminvillei*.- *Toxicon*, Oxford, Frankfurt/M.; 22(5): 823-827. GORZULA, S. (1978): Clave para los ofidios de Venezuela. Series Boletín Técnico. Caracas, Venezuela, (MARNR). KORNACKER, P. M. (1999). Checklist and key of the snakes of Venezuela. Lista sistemática y clave para las serpientes de Venezuela. Rheinbach, (Pako), pp. 270. LA MARCA, E. (1997): Lista actualizada de los reptiles de Venezuela; pp. 123-142. In: LA MARCA, E. (ed.): Vertebrados actuales y fósiles de Venezuela.- Serie catalogo de vertebrados de Venezuela, vol. I. Museo de ciencias y tecnología de Mérida, Venezuela. LANCINI, A. R. (1979): Serpientes de Venezuela. Caracas (Ernesto Armitano), pp. 263. LANCINI, A. R. & KORNACKER, P. M. (1986): Die Schlangen von Venezuela. Caracas (Armitano Ed.), pp. 381. PEFAUR, J. E. (1992): Checklist and bibliography (1960-85) of the Venezuelan herpetofauna.- Smithsonian herpetological information service; Washington; 89: 1-54. PEREZ-SANTOS, C. & MORENO A. G. (1988): Ofidios de Colombia.- Monografía di museo regionale di scienza naturale, Torino; 6: 1-517. PETERS, J. A. & OREJAS-MIRANDA, B. (1986): Catalogue of the Neotropical squamata. Part I. Snakes.- United States National Museum Bulletin, Washington; 297: 1-347. ROZE, J. A. (1966): La taxonomía y zoogeografía de los ofidios de Venezuela. Caracas (Ediciones de la Biblioteca, Universidad Central de Venezuela), pp. 343. SAVAGE, J. M. (2002): The amphibians and reptiles of Costa Rica. A herpetofauna between two continents, between two seas. Illinois (University of Chicago

Press), pp. 934. STUART, L. C. (1963): A checklist of the herpetofauna of Guatemala.- Misc. Publ. Mus. Zool. Univ. Michigan, Ann Arbor; 122:1-150.

KEY WORDS: Reptilia: Squamata: Serpentes: Colubridae, *Stenorrhina degenhardtii ocellata*, pholidosis, morphometry, sexual dimorphism, Venezuela

SUBMITTED: January 09, 2004

AUTHORS: Luis F. NAVARRETE, Instituto de Medicina Tropical, Serpentarium. Apartado 47423, Caracas 1041, Venezuela; Alexis RODRIGUEZ-ACOSTA (corresponding author), Instituto de Medicina Tropical, Serpentarium. Apartado 47423, Caracas 1041, Venezuela, <rodriguf@ucv.ve>; Yasmin CONTRERAS, Instituto de Zoología Agrícola, de la Universidad Central de Venezuela, Caracas, Venezuela; José M. BRICENO, PROVITA, Caracas, Venezuela.

First record of *Coluber smithi* (BOULENGER, 1895) from Tanzania

On 07 October 2002, an adult *Coluber smithi* (BOULENGER, 1895) was collected on a porch of a house at the Merelani Mine (African Gem Resources Ltd. - Tanzania) and subsequently rescued from a person who was in the process of stoning it to death. The individual was approximately 25 cm in length, kept for a day and photographed before been set free in the local vicinity again.

The site is approximately 11 km south of Kilimanjaro International Airport (KIA), Northern Tanzania (Moshi District), 50 km southeast of Arusha and southwest of Moshi, respectively. The distance to the Kenyan border (straight line) is approximately 90 km (opposite the Amboseli Game Reserve). The area is on the northeastern flank of the Letatema Mountains on the Massai Steppe at an elevation of 1100 m (UTM 9606284).

This little known diurnal, terrestrial snake is known from the dry savannah and semi-desert, in Kenya at low altitudes (100 - 1300 m). It also occurs in southern and eastern Ethiopia and southern Somalia. The southernmost records are from Ukambani and Tsavo National Parks up to Mackinnon Road in Kenya (SPAWLS et al. 2004).

This record indicates an extension in the known range of *C. smithi* southwards into Tanzania from where, as could be determined, this species has not been recorded.

ACKNOWLEDGEMENTS: Wulf HAACKE (Transvaal Museum, Pretoria) for originally identifying this species from an attached photograph and encouraging further reading on the species.

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Herpetozoa](#)

Jahr/Year: 2005

Band/Volume: [18_1_2](#)

Autor(en)/Author(s): Navarrete Luis F., Rodriguez-Acosta Alexis, Contreras Yasmin, Briceno Jose M.

Artikel/Article: [Stenorrhina degenhardtii ocellata JAN, 1876 in Venezuela 89-91](#)