

## First records of *Phalotris sansebastiani* Jansen and Köhler, 2008 (Serpentes: Dipsadidae) from Argentina

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**ABSTRACT:** *Phalotris sansebastiani* is recorded for the first time in Argentina based on five specimens from Jujuy and Salta provinces, and its characters are compared with Argentinean specimens of *P. tricolor*.

Phalotris sansebastiani (Serpentes: Dipsadidae) was described from three localities in the Provincia Ñuflo de Chávez of eastern lowlands of Bolivia (Jansen and Köhler 2008). The species belongs to the *Phalotris tricolor* group of the genus, characterized by rounded rostral; 1+1 temporals and red or chested dorsal color, without dark or black longitudinal lines (although black dots in the dorsum may design a vertebral line); two postcephalic collar more than three scales wide, the anterior white and the posterior black; venter white to yellowish; hemipenis bilobed or slightly bilobed (Ferrarezzi 1993; Jansen and Köhler 2008; our observations). The group includes five species (Phalotris mertensi, P. tricolor, P. cuyanus, P. matogrossensis and P. sansebastiani); only P. tricolor and P. cuyanus (endemic) were previously mentioned in Argentinean fauna (Giraudo and Scrocchi 2002; Leynaud et al. 2005).

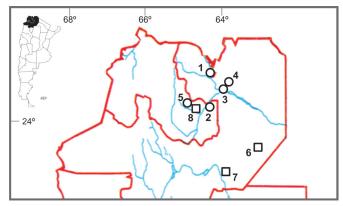
During the description of a new species and the revision of the Argentinean material of the genus, we found four specimens of *Phalotris sansebastiani* from northern Argentina (Figure 1). The localities of Argentinean specimens are in the Yungas phytogeographic province characterized by cloud forest with warm and humid climate, with aestival rains and hibernal frosts, which is very different of the area of the species in Bolivia where inhabits Cerrado habitats and Chiquitano Dry Forest.

**Material examined**: specimens revised are all from the Herpetological Collection of Fundación Miguel Lillo, Tucumán, Argentina and the Instituto Nacional de Limnología (INALI, CONICET, UNL) Santa Fe, Argentina. The number before the specimen's data is used as reference in the Figure 1.

## Phalotris sansebastiani

- 1 FML 15971: Aguas Blancas road to Finca Arazayal, Departamento Orán, Salta. 434 m a.s.l. 22°43'25" S, 64°23'31" W .
- 2 FML 01084: Yuto, Departamento Ledesma, Jujuy. 23°38'49" S, 64°27'51" W.

- 3 FML 17657: Embarcación, Departamento Gral. J. S. Martín, Salta. 23°13'16" S, 64°5'57" W.
- 4 FML 17659: Senda Hachada, Departamento Gral. J. S. Martin, Salta. 23°03'0.5" S, 63°57'00" W.
- 5- INALI 4342: Las Condoreras, Provincial route N°83, between San Francisco and crossroad of Pampichuela, Valle Grande, Jujuy. 1445 m a.s.l. 23°35′30.05″ S, 64°58′25.64″ W.



**FIGURE 1.** Localities of *Phalotris sansebastiani* (circles) and *Phalotris tricolor* (squares) from northwestern Argentina. The localities are mentioned in the list of material, and the number before each serves as reference to the map.

## Phalotris tricolor

- 6 FML 02501, 06584 and 06589: Campo Grande Finca Los Colorados 100 km NE of Joaquín V. González, Departamento Anta, Salta. 24°38'02" S, 63°08'49" W.
- 7 FML 02309 and 02310: Finca Pozo Largo 8 km S of Joaquín V. González and 12 km E of Finca San Javier, Departamento Anta, Salta. 25°12'34" S, 63°58'53" W.
- 8 FML 23201: Seccional Aguas Negras Parque Nacional Calilegua, Departamento Ledesma, Jujuy. 23°45'37" S, 64°51'1.1" W.

Phalotris sansebastiani is sympatric with P. tricolor, and they are very similar in lepidosis and coloration

(all the *P. sansebastiani* cited here, were misidentified as *P. tricolor* in the collections). Due to this we compare them, and our comparisons reveal that the diagnostic characters between them are actually more variable than mentioned by Jansen and Köhler (2008). The variation will be thoroughly studied in the Argentinean genus' revision, but some observations can be discussed here, using only the specimens of *P. tricolor* mentioned in the material list.

None of the specimens of *P. sansebastiani* has the triangular projection of the red snout coloration as marked as in the photo of the original description; all specimens clearly shows the triangular area lighter than the rest of the head, but in all of them there are some black spots or areas within the triangle.

According Jansen and Köhler (2008), the black collar of *P. tricolor* reaches onto ventrals and in some specimens forms a complete ring; in *P. sansebastiani* reaches the first dorsal scale row or the extreme tip of ventrals. In specimens of *P. tricolor* FML 02310, 02501 and 06584, the black collar does not reach the ventrals.

The ventral area of the head of *P. tricolor* is not completely black as mentioned by the cited authors. While some specimens have this character, most of them have black spots in different extentions, but they do not completely cover the ventral face of the head.

The Figures 2, 3 and 4 shows the coloration of specimens of *P. sansebastiani* from northern Argentina (FML 15971 and INALI 4342).

All specimens of both species have: 6 supralabials with  $2^{\rm nd}$  and  $3^{\rm rd}$  entering the orbit; loreal absent; narina in the center of nasal scale; 1 preocular; 2 postoculars; dorsals in 15-15-15 rows and divided anal. Table 1 shows characters that varies.

All other characters that separates both species are, in our material, as mentioned in Jansen and Köhler (2008).

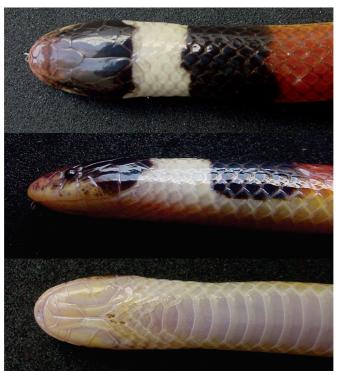


**FIGURE 2.** *Phalotris sansebastiani*. FML 15971. Female from Aguas Blancas – road to Finca Arazayal, Departamento Orán, Salta. 434 m a.s.l.

Here we present the first Argentinean records of *Phalotris sansebastiani*, a species of the *tricolor* group of the genus. As the species is sympatric with the morphologically similar *P. tricolor*, we compare them, and point out the characters that differs with the diagnostic ones provides by Jansen and Köhler (2008).



**FIGURE 3.** Phalotris sansebastiani. INALI 4342. Female from La Condorera, between San Francisco and crossroad of Pampichuela, Valle Grande, Jujuy.



**FIGURE 4.** *Phalotris sansebastiani*. Details of the head of specimen FML 15071

**TABLE 1.** Variation of some characters of specimens studied. IL: number between parenthesis are the infralabials scales that contact the first geneial. V: ventrals. SC: subcaudals. SVL: Snout-vent length in milimeters. TL: Tail length in milimeters. WC: white collar, number of dorsal scales and between parenthesis the extention in milimeters. BC: black collar, number of dorsal scales and between parenthesis the extention in milimeters. The specimens FML 17657 and 17659 are road-killed and it is not possible to define sex and other characters.

N Col	Sex	IL	V	SC	SVL	TL	WC	ВС
Phalotris sansebastiani								
FML15971	Н	7 (4)	214	19+1	457	29	4 (4.4)	5 (8.0)
INALI 4342	Н	7 (4)	225	22+1	580	36	3 (5.7)	6 (10.0)
FML1084	M	7 (4)	207	33+1	326	38	4 (3.7)	5 (5,3)
FML17659	?	7 (4)	?	?	?	?	5	6
FML17657	?	8 (4)	?	?	?	?	3 (2.8)	5 (4.5)
Phalotris tricolor								
FML6584	Н	9 (1-5) /8 (1-4)	227	27+1	585	43	4 (9.3)	4 (7.0)
FML6589	Н	8 (1-4)	227	27+1	416	33	4 (4.2)	9 (12.0)
FML2309	M	8 (4)	214	30+1	308	31	1 (1.0)	7 (7.0)
FML2310	M	8 (4)	210	31+1	302	34	3 (2.7)	7 (6.5)
FML23201	M	8 (4)	201	28+1	280	25	3 (2.2)	6 (5.5)
FML2501	juv	7 (4)	222	22+1	222	14	2 (1,6)	6 (5.2

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## LITERATURE CITED

Giraudo, A.R. and G.J. Scrocchi. 2002. Argentinean snakes: an annotated checklist. *Smithsonian Herpetological Information Service* 132: 1-53. Jansen, M. and G. Köhler. 2008. A new species of *Phalotris* from the eastern lowlands of Bolivia (Reptilia, Squamata, Colubridae). *Septemberginga hiplogica* 88 (1): 103–110

Senckenbergiana biologica 88 (1): 103–110
Leynaud, G.C., M.R. Cabrera and P. Carrasco. 2005. A survey of the southernmost representatives of the tricolor species group, genus Phalotris (Serpentes, Colubridae). Phyllomedusa, 4(2): 103–110.

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