

Squamata, Iguania, Leiosauridae, *Pristidactylus nigroiugulus* Cei, Scolaro and Videla, 2001: New records for Chubut province and geographic distribution

Ignacio Minoli* and Luciano J. Avila

Grupo de Herpetología Patagónica, CENPAT-CONICET, Boul. Almt. G. Brown 2915, U9120ACD, Puerto Madryn, Chubut, Argentina.
* Corresponding author. E-mail: minoli@cenpat.edu.ar

ABSTRACT: We present new records of *Pristidactylus nigroiugulus* (Cei, Scolaro and Videla, 2001) for Chubut province. A geographic distribution map presents all known records in Chubut province, central Patagonia, Argentina.

The genus *Pristidactylus* is distributed in central and southern Argentina and central Chile, with 10 recognized species, some with very restricted distributions (Cei *et al.* 2004). In Argentina six species are distributed in disjunct areas over a 29° to 45° S. latitudinal range. Two species occur in isolated mountain ranges and the others in Monte and Patagonian environments of these biogeographic regions (Cei *et al.* 2004). *Pristidactylus nigroiugulus* Cei, Scolaro and Videla, 2001, described from the foothills of the Sierra Negra plateau, Telsen department, Chubut province, is a medium-sized lizard (mean SVL = 96.3 mm for males, 87 mm for females; Cei *et al.* 2004) with a pronounced sexual dichromatism (Cei *et al.* 2001). Males have an intense emerald-green body color, while females have a gray-brown coloration with a dark cross-banding pattern (Scolaro 2005). The species is secretive and is frequently observed basking on rocks or in the edges of shrubs, along the herbaceous steppe of central Río Negro and Chubut volcanic plateaus and surrounding valleys (Cei *et al.* 2001). However, the majority of the lizards collected for this study were spotted basking on rocks piled up by grazers on the side of the roads. *Pristidactylus nigroiugulus* only is known from a few localities in southern Río Negro province and northern and central areas of Chubut province (Cei *et al.* 2001; Avila *et al.* 2003, Figure 1).

During seven surveys carried out in 2004, 2005, 2006, and 2010, we collected 25 specimens by hand after visual spotting from a vehicle along unpaved roads. Latitude, longitude and elevation for each collection locality were determined by a Garmin GPS 12™ Global Position Device. After capture, lizards were kept alive in plastic bottles, euthanized in a laboratory by a pericardic injection of sodium thiopental Abbot®, fixed in 20% formalin, and stored in 70% ethanol (standard herpetological procedures; Simmons, 2002). Lizards are deposited in the LJAMM-CNP collection, CENPAT-CONICET, Puerto Madryn, Argentina, under the following catalog numbers: LJAMM-CNP 3406, 3409, 3417, 3839–43, 3888, 3897, 3900–04,

6045, 6104–05, 6254, 6757, 6760–61, 6903–04, 13090. A distribution map was made using gvSIG 1.10®. Numbers were used for mapping new localities records, using the same number legend to represent geographically close sites.

Two of the collection localities represent new records for the species, and the other four localities fill the gap between previous cited collections and the southernmost record reported here. A juvenile female (SVL = 64.61 mm, LJAMM-CNP 13090, Figure 2a) from Six Hermanos Ranch, Provincial Road 18, 10 km northeast of the junction with National Road 25, to Provincial Road 62, near Pocitos de Quichaura (43°36'23.9" S, 70°00'12.7" W; 743 m elevation) is the westernmost record for the species (Figure 1, Locality 1). It is located (straight line distance) 80 km west from the Paso de Indios population (Cei *et al.* 2001), and 150 km from the Telsen population (Avila *et al.* 2003, Figure 1). The individual was found basking in the edge of a shrub and quickly ran into the interior portions of the shrub once disturbed. Other lizards found in syntopy were *Liolaemus kingii*, *L. boulengeri*, *L. aff. canqueli*, *L. bibronii*, *Diplolaemus sexcinctus* and *Homonota darwini*.

The area where this individual was collected is part of the Patagonian phytogeographic province (Roig 1998), characterized by the dominant plant species *Adesmia ameghinoi*, *Corynabutilon bicolor*, *Nassauvia axillaris*, *N. glomerulosa*, and *Stillingia patagonica*. The southernmost record for the species is based on one adult male specimen (SVL = 97.46 mm, LJAMM-CNP 3888, Figure 2b) collected on Provincial Road 27, 46.5 km south of the junction with Provincial Road 29 in the road to Garayalde Village (44°56'07.6" S, 68°01'37" W; 373 m elevation; Figure 1, Locality 2), in the Escalante Department. The landscape of this collection area is in the eastern slope of the Cuadrada plateau, an irregular surface with volcanic outcrops intermixed with sandy areas and ephemeral creeks, covered with shrub vegetation. Common plants in the collection site were *Chuquiraga avellanadae*, *Mulinum spinosum*,

Grindelia chilensis and *Berberis* sp. Two species of lizards, *Liolaemus fitzingerii* and *L. boulengeri*, were collected at the same site. Two collection sites from Paso de Indios Department fill the gap between the southernmost locality cited here and the records cited by Cei *et al.* (2001) and Cei *et al.* (2004) from the "Road Paso de Indios-Sombrero". Five adult individuals were collected on Provincial Road 27, 78.1 km south of El Sombrero at the junction with Provincial Road 53 (44°35'20.3" S, 67°53'47.2" W; 311 m elevation): LJAMM-CNP 3900-04 (Locality 3, Figure 1). An adult male was collected on Provincial Road 27, 14.2 km south of El Sombrero at the junction with Provincial Road 53 (44°15'33.8" S, 68°15'34.4" W; 467 m elevation): LJAMM-CNP 3897 (Figure 1, Locality 4). All lizards were found basking on medium-sized stones found along the roads, in a lowland area in the northern slope of Cuadrada Plateau where salty lagoons intermix with ephemeral creeks, and flatlands of sandy or stony soils, were the vegetation is dominated by *Coliguaya integerrima*, *Prosopis denudans*, *Lycium* sp., *Chuquiraga avellanadae* and in some parts by *Zampa* sp. and *Boopis* sp. All lizards ran for protection below burrows found under the same rock or to nearby shrubs when disturbed.

Two collection sites (Figure 1, Locality 5) from Gastre Department fills a gap of 60 km. northwest from the closest record of the Telsen population cited by Avila *et al.* (2003). One adult was collected at 40 km. west of Gan Gan Village, 3 km. south of Provincial Road 4, in Aguada Oveja Muerta (42°26'24.6" S, 68°48'20.0" W; 1146 m elevation): LJAMM-CNP 6045. Two adults were collected at 40 km. west of Gan Gan Village, 3 km. south of Provincial Road

4, in Cerro Navidad (42°24'50.8" S, 68°49'17.5" W; 1219 m elevation): LJAMM-CNP 6104-05. One collection area (Figure 1, Locality 6) with 9 nearby georeferenced sites from the Telsen Department fills a gap of 19 km. northwest from the closest record of the Telsen population cited by Avila *et al.* (2003). One adult was collected on Provincial Road 67, 19.7 km north from Gan Gan Village (42°25'01.8" S, 68°14'57.7" W; 1076 m elevation): LJAMM-CNP 3839. One adult was collected on Provincial Road 67, 17.7 km north from Gan Gan Village (42°24'18.8" S, 68°15'27.1" W; 1066 m elevation): LJAMM-CNP 3409. One adult was collected on Provincial Road 67, 21.6 km. N from Gan Gan Village (42°25'16.2" S, 68°16'37.4" W; 1100 m elevation): LJAMM-CNP 6254. Two adults were collected on Provincial Road 67, 16 km. north from Gan Gan Village (42°25'27.4" S, 68°17'08.8" W; 1009 m elevation): LJAMM-CNP 6903-04. One adult was collected on Provincial Road 67, 15.1 km. north from Gan Gan Village (42°25'24.7" S, 68°17'15.8" W; 1112 m elevation): LJAMM-CNP 6757. One adult was collected on Provincial Road 67, 3.7 km north from Gan Gan Village (42°25'43.6" S, 68°18'11.5" W; 1002 m elevation): LJAMM-CNP 3417. Four adults were collected on Local road junction Provincial Road 67, 10 km. north from Gan Gan Village (42°26'44.9" S, 68°18'42.6" W; 968 m elevation): LJAMM-CNP 3840-43. One adult was collected on Provincial Road 67, 7.9 km north from Gan Gan Village (42°27'12.5" S, 68°18'49.7" W; 952 m elevation): LJAMM-CNP 3406. Two adults were collected on Provincial Road 67, 10 km. north from Gan Gan Village (42°27'24.7" S, 68°18'50.3" W; 945 m elevation): LJAMM-CNP 6760-61.

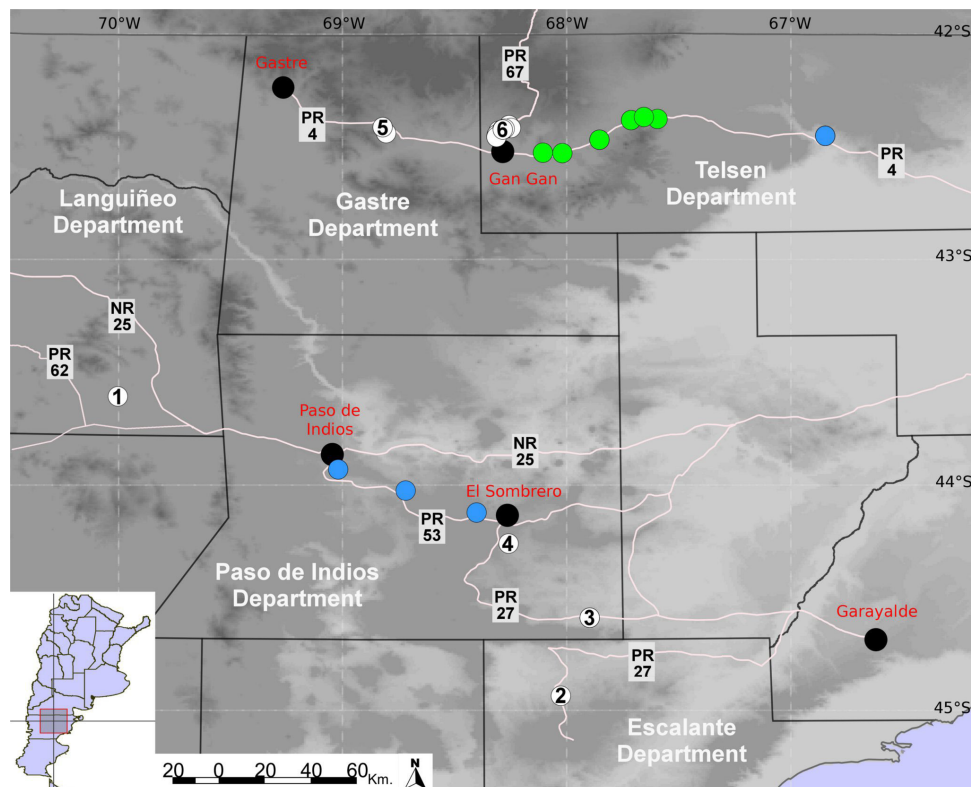


FIGURE 1. Geographic records for *Pristidactylus nigroiugulus* in Chubut province, central Patagonia, Argentina. Blue dots: bibliographic records cited from Cei *et al.* (2001), arrow mark the type locality. Green dots: records from LJAMM-CNP collection cited by Avila *et al.* (2003). White dots: new records: (1) Six Hermanos Ranch, Provincial Road 18, 10 km NE junction National Road 25, to Provincial Road 62, near Pocitos de Quichaura, Languiño Department, (2) Provincial Road 27, 46.5 km S junction with Provincial Road 29 in the road to Garayalde Village, Escalante Department, (3) and (4) filling gaps records, Paso de Indios Department, (5) filling gap records, Gastre Department and (6) filling gap records, Telsen Department. Black lines are political department's limits, in white Department's names, in red Town's names. Black dots: main towns in the area are marked as reference. Red square: study area in Argentina.



FIGURE 2. New records of *Pristidactylus nigroiugulus*: (a) Juvenile female (SVL = 64.61 mm, LJAMM-CNP 13090) for Languiño Department, Chubut, Argentina; (b) Adult male specimen (SVL = 97.46 mm, LJAMM-CNP 3888) for Escalante Department, Chubut, Argentina.

ACKNOWLEDGMENTS: We thank M. Kozykariski, C.H.F. Pérez, M.F. Breitman and R.J. Martinez for help in the field. M. Morando kindly reviewed early drafts of the manuscript. Financial support for fieldwork was provided by a grant from the Monte L. Bean Museum (granted to J. W. Sites Jr.), an NSF “Partnership for International Research and Education” award (OISE 0530267) for support for collaborative research on Patagonian biodiversity, and FONCYT PICT 0600506 issued to Luciano J. Avila.

LITERATURE CITED

Avila, L.J., M. Morando and C.H.F. Pérez. 2003. New records and natural history notes for *Pristidactylus nigroiugulus* Cei, Scolaro & Videla, 2001 from Río Negro and Chubut provinces, Argentina. *Herpetozoa* 16: 83-86.

Cei, J.M., J.A. Scolaro and F. Videla. 2001. The present Status of Argentinean Polychrotidae Species of the Genus *Pristidactylus* and Description of Its Southernmost Taxon as a New Species. *Journal of Herpetology* 35(4): 597-605.

Cei, J.M., J.A. Scolaro and F. Videla. 2004. An updated biosystematics approach to the leiosaurid genus *Pristidactylus*. *Bollettino del Museo Regionale di Scienze Naturali* (Torino) 20: 291-314.

Roig, A.F. 1998. La vegetación de la Patagonia; p. 48-174. In M. N. Correa (dir.), *Flora Patagónica: Colección científica del INTA, Tomo VIII, parte I*. Buenos Aires, Argentina.

Scolaro, J.A. 2005. *Reptiles Patagónicos: Sur. Guía de Campo*. Ed. Universidad Nacional de la Patagonia, Trelew. 80 p.

Simmons, J.E. 2002. Herpetological Collecting and Collections Managements. *Society for the Study of Amphibians and Reptiles, Herpetological Circular* 31: 1-154.

RECEIVED: February 2011

LAST REVISED: March 2011

ACCEPTED: June 2011

PUBLISHED ONLINE: July 2011

EDITORIAL RESPONSIBILITY: Cameron Siler