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Abnormal colour pattern in a wild specimen of *Cnemidophorus* from the *lacertoides* species group (Squamata, Teiidae)

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The occasional presence of individuals with colour pattern very different from typical is a well known fact in different Squamata (Ballinger and McKinney, 1968; Andrade and Abe, 1998; Carreira, Meneghel and Achaval, 2005), but in many cases still remains not satisfactorily explained (Lema, 1987). It has been interpreted as an anomaly, although it may encompass a significant proportion of the population (Ballinger and McKinney, 1968). In this note we report the finding of an individual of *Cnemidophorus* from the lacertoides species group (sensu Cei, 1993) exhibiting a pattern different to any other known species from this group (i.e., *C. charrua, C. lacertoides, C. leachei, C. serranus and C. vacariensis*).

The specimen (Fig. 1) was captured at Parque Santa Teresa (33°58´17.2´´ S; 53° 31´51.8´´ W), Rocha Department, Uruguay, South America, on 8th March, 2006 by Laura Verrastro. The specimen was measured in the field before fixation. It had a snout-vent length of 38 mm and tail length of 70 mm. During subsequent manipulation the tail was accidentally cut out close to its base, which partially exposed both retracted hemipenes. Its lepidosis is concordant with that of *Cnemidophorus lacertoides* Duméril and Bibron 1839 (range values for *C. lacertoides* are here included in parentheses for comparison): 80 granular dorsal scales across midbody (79-98); 4 and 3 supraocular scales to left and right, respectively (3-4); 18 femoral pores in total (17-22); 13 infradigital lamellae in the fourth finger (12-16) and 23 in the fourth toe (21-26). There are 6 supralabial scales on the left side of the mouth and 7 on the right, and 6 infralabials on each side. Circumorbital granules surround externally and by behind to supraoculars, as usual in taxa from the lacertoides species group, separating in this specimen the supraoculars 1 and 2 of each side. It bears two well-defined gular folds, extended on the sides of neck to above the arms insertion.

The most striking features of this specimen are its pattern and coloration. The background of dorsum is brown-greyish, marbled and speckled in black, striped along by dorsolateral and lateral light stripes of ill-defined borders. Along sides of body there is a second lateral light stripe, with borders better delimited, that fades out to the middle of body. All these stripes have a light blue-greenish shade instead of the yellowish white typical of *C. lacertoides*. The head is ivory, irregularly dark marbled on frontonasal, prefrontals, frontal, frontoparietals, parietals, interparietal, postparietals and other smaller scales, but the left supraoculars 2 to 4 and the right 2 and 3 are black. The supraocular 1, as well as the superciliary 1 of each side, are light. In the snout, nasals and rostral scales are brown. Palpebrals are translucent. Supralabials and infralabials are whitish. Colour and pattern on dorsum of arms and legs match well the typical *C. lacertoides*. Coloration in throat and underside of arms and legs is the usual in this species (pearly white with dark spots on throat), but chest and belly show spots formed by tiny black dots irregularly scattered.

Individuals of populations of any non-parthenogenetic species exhibit some degree of genotypic variation among them, expressed in their phenotypes. However, when any specimen differs markedly from the standard limits of its own species it constitutes an abnormal, and it is assumed (at least in some degree) as non-adaptive or disadvantageous. Classical examples are the teratologies (bicephaly, large corporal deformations) and albinism, which make its bearer more vulnerable to predators (Carreira et al., 2010) and probably accounts

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Figure 1. Alive wild specimen of *Cnemidophorus* (*lacertoides* species group) showing abnormal colour pattern. Photograph by Martin Schossler.

for the low frequency of cases found in the wild. About what causes this phenomenon it is known that in oviparous reptiles the embryonic development is highly sensible to temperature or humidity fluctuation. This has been invoked as causing scutelar anomalies in the shell of tortoises (Andrade and Abe, 1993). This factor has been also reported affecting markedly the chromatic pattern and morphology of a viviparous snake, the tropical rainbow boa (Andrade and Abe, 1998). It has been recently shown that the homogeneous colour pattern found in some Lacertidae is due to homozygotic recessive alleles (Galán and Vázquez, 2010).

The specimen was housed at the herpetological collection of Laboratório de Herpetologia, Instituto de Biociências da UFRGS, under the number UFRGS 5376, and in the tissue bank of the same Collection as UFRGST 2564.

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