

Papéis Avulsos de Zoologia

MUSEU DE ZOOLOGIA DA UNIVERSIDADE DE SÃO PAULO

ISSN 0031-1049

PAPÉIS AVULSOS ZOOL., VOL. 36 (29): 333-336

29.I.1988

A NEW ANOLE OF THE *PUNCTATUS* GROUP FROM CENTRAL AMAZONIA (SAURIA, IGUANIDAE)

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ABSTRACT

Anolis philopunctatus, sp. n. is described after 7 specimens from two localities in "terra firme" forest on the left bank of the Amazon, near Manaus. It differs strikingly from the sympatric and wide ranging *Anolis punctatus* in having an orange dewlap with large black spots (uniform yellow or orange-yellow in *punctatus*).

INTRODUCTION

Very recently several anoles of the *punctatus* group were described from forested areas in Colombia (Williams, 1982; Ayala et al., 1983; Williams, 1984). The anoles of this group are poorly known except for *Anolis punctatus* (Williams, 1982). In fact, *Anolis punctatus* was initially considered to be more than one species but recent evidence shows that the western specimens with keeled ventrals formerly known as *A. boulengeri* and eastern and northern specimens with smooth ventrals called *A. punctatus* are morphs of the same species (Williams & Vanzolini, 1980).

During a lizard survey of the INPA-WWF reserves (90 km NE of Manaus) in 1984 and 1986 I obtained 5 green anoles. In life these specimens were very similar to *A. punctatus* in size, body color, and behavior but contrasted sharply in dewlap color. Because this new species strongly resembles *A. punctatus*, I called it *A. philopunctatus*.

Anolis philopunctatus, sp. n.

Holotype: MZUSP 65859, male, Brasil: Amazonas: INPA/WWF Reserves (2206-Dimona), 90 km NW Manaus, 18.vii.84, M.T. Rodrigues, field number 84.6086

Paratypes: MZUSP 65860, male, same data as holotype; MZUSP 65856, male, INPA/WWF Reserves (1401-Gavião), 20.i.86, M.T. Rodrigues; MZUSP 65857, male, and MZUSP 65858, female, INPA/WWF Reserves (1501-Antártida), 23.i.86; M.T. Rodrigues.

Diagnosis

A green anole of the *punctatus* group very close to *Anolis punctatus* but differing from it by an orange dewlap with large black spots (orange-yellow in *punctatus*).

DESCRIPTION

Head: head scales moderately sized, smooth and flat posteriorly; more conical and weakly keeled toward the tip of snout: 27,32 between rostral and interparietal. Ten to twelve scales across snout between second cantals. Frontal depression well marked; some of the scales within it smaller than those immediately anterior or lateral to it but larger than those of the tip of the snout. Seven to 11 scales border rostral posteriorly; the central largest or not.

Anterior nasal scale divided or not; it and the inferior nasal in contact with rostral. Six to 8 scales between supranasals. Rostral area swollen, protuberant, rostral prominent, extending well beyond mental in male, not so on female.

Supraorbital semicircles separated by a row of moderately sized scales and from supraocular disk by one row of granules; this last ill defined, grading in to supraocular scales or granules. One elongated supraciliary followed by minute granules. Canthus rostralis distinct; five to six canthal scales, the first three, or occasionally the second, the largest; followed by 2 or 3 small granules of which the last is in contact to nasal. Five or six loreal rows at the level of second canthal; the ventralmost largest, the dorsalmost smallest. Temporals and supratemporals granular, the latter grading into larger scales around the interparietal. An ill defined and tapering double intertemporal row of enlarged flat granules. Interparietal the same size as ear os larger; separated from the supraorbital semicircles by 2-3 scales of the same size of the largest supraoculars. Scales surrounding interparietal largest anterolaterally, grading posteriorly into minute granules that enlarge in the dorsals. Supraocular strongly or weakly keeled, in contact with supralabials. Eight to eleven supralabial to below the center of the eye.

Mental semidivided, each half distinctly wider than long, in contact with four or five scales between the keeled and enlarged sublabials. Four or five sublabials in contact with infralabials. Nine or 10 infralabials. Gulars small, smooth, increasing in size laterally; the anterior ones longest grading to rounded posteriorly.

Trunk: dorsals granular, subequal, smaller than the smooth subimbricate ventrals; in transverse rows.

Dewlap: moderate in male, not extending posteriorly much beyond axilla. Lateral scales elongate, longer than ventrals, in close packed rows; edge scales shorter, crowded, subimbricate; vestigial in female.

Limbs: largest scales on forelimbs uncarinate, multicarinate on digits. Scales in front of thigh and the largest scales of tibia weakly uncarinate; one or two irregular rows of bicarinate scales on knee. All other scales granulate. Twenty five or 26 lamellae under the phalanges ii and iii of the fourth toe.

Tail: tail weakly compressed posteriorly without dorsal crest. Scales of the dorsal surface of the tail weakly carinate but with a weakly double middorsal row beginning in the first third of tail. Scales at the base of tail granular dorsally enlarging posteriorly to become keeled scales. Postanals well defined or not. Ventrally scales smooth at the base becoming keeled posteriorly. A double midventral crest of scales beginning on the first third of tail. On the middle of tail the midventral crest scales are larger than the middorsal ones.

Size: largest male 73 mm, tail 116 mm (broken), female 69 mm, tail 175 mm.

Color: Dorsally uniform light green with very small scattered blue or white dots; venter is cream-gray with irregularly spaced points (1-5 scales in size) with concentration of melanophores. Dewlap orange with large irregular black spots occupying 2-4 scales in area. Scales gray (Fig. 1).

Habitat: the specimens were found 2-6 meters above ground on trunks of large trees (30-60 cm diameter) in primary forest.



Figure 1. *Anolis philopunctatus* ♂. MSUSP 65856.

DISCUSSION

There are only two Amazonian *Anolis* species with protuberant snouts in males that can be compared with *philopunctatus: punctatus* and the recently described *Anolis vaupesianus* (Williams, 1982).

I have carefully compared the specimens of *philopunctatus* with *punctatus* and no diagnostic differences were found other than the color of dewlap in males: *A. philopunctatus* have an orange dewlap mottled with large black spots. Williams (1982) quoting detailed description of dewlap color in life and data available from the literature reported an orange or orange-yellow dewlap for *punctatus*. The following data I have obtained in field support this view. (i) Peru. Loreto: Rio Yuvineto: Aldeia Bellavista; skin orange, scales green-yellowish. (ii) Brasil: Pará: Rio Tapajós: Uruá (Parque Nacional da Amazonia); skin orange, scales green-yellowish. (iii) Brasil: Paraíba: Mamanguape: three adult males: skin orange, scales white. (iv) Brasil: Bahia: 15 km NW Porto Seguro: two adult males: skin orange, scales grey.

I have not personally examined specimens of *vaupesianus* and I rely on Williams (1982) reporting a uniform black or mulberry red dewlap for this species. Each species has a particular dewlap color pattern (Williams, 1982). Map 1 shows the approximate distribution of these three species.

The dewlap color pattern of *Anolis punctatus* does not vary throughout its range which is evidence for the specific status of *philopunctatus* and *vaupesianus*.

As dewlap color is the only feature that decisively distinguishes these species, females cannot be identified confidently. Also, there is no evidence that the 3 species are not syntopic. Possibly behavioral field studies will solve this problem.

ACKNOWLEDGEMENTS

I thank Barbara Zimmerman-Reis, Juruna, Leo and Juscelino Reis for constant support in the field. This paper is the contribution n.º 25 of Minimum critical size for ecosystems project supported by the Instituto Nacional de Pesquisas da Amazonia and the World Wildlife Fund. Thanks are due to Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq). Ernest E. Williams, P. E. Vanzolini and Barbara Zimmerman criticized the manuscript.



Map. 1. Aproximate distribution of *Anolis philopunctatus* (triangle); *Anolis punctatus* (open circles) and *Anolis vaupesianus* (crosses).

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