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A NEW ANOLIS FROM NORTHERN CENTRAL AMERICA

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In a recent paper I listed and discussed, under the name of Anolis humilis Peters, a series of anoles from El Peten, Guatemala. Shortly thereafter appeared a paper by Barbour in which the range of A. humilis was described as "from Darien to Nicaragua." Dr. E. R. Dunn of Haverford College, upon a reexamination of my material, informed me that not only were the specimens considerably beyond the geographic limits of A. humilis, but also differed from that species in several characteristics. For Alexander G. Ruthven of the University of Michigan, who has contributed so much to our understanding of the anoles, I name this new form

Anolis ruthveni, new species

HOLOTYPE.—Museum of Zoology, University of Michigan, No. 76622. An adult male collected in the high bush about two miles north of Santa Teresa,³ El Peten, Guatemala, April 13, 1933, by L. C. Stuart.

- ¹ L. C. Stuart, "A Contribution to a Knowledge of the Herpetological Fauna of El Peten, Guatemala," Occ. Pap. Mus. Zool., Univ. Mich., No. 292, 1934: 9-10.
- ² T. Barbour, "The Anoles II. The Mainland Species from Mexico Southward," Bull. Mus. Comp. Zool., Harvard Univ., 77, No. 4, 1934: 134.
- ³ Santa Teresa is a *champo* on the Rio Subin about 14 miles south of La Libertad, El Peten, Guatemala.

DIAGNOSIS.—An anole very close to A. humilis, from which it may be distinguished by the large purple spot near the base of its brilliant red dewlap and by its smaller occipital shield.

Description of type.—Tail (broken) slightly compressed; body relatively short and stocky. Ten rows of strongly enlarged, keeled, hexagonal dorsal scales, these grading very abruptly into granular laterals; ventral scales strongly keeled, as large as or slightly smaller than enlarged dorsals; gulars very small and keeled. Head .55 as broad as long, 1.4 as long as tibia, strongly concave in frontal region; snout blunt. Upper head scales unicarinate, elongate; supraorbital semicircles not readily distinguishable, separated by two scales; about a half dozen enlarged supraorbitals, in contact with semicircles and bordered laterally by several rows of granules; occipital smaller than ear opening and scarcely larger than surrounding scales. Ear opening moderate, vertically ovoid. Canthus rostralis distinct but short, disappearing before reaching nostril. Rostral shield broad and low; eight supralabials to below the center of the eye; loreals in seven rows. Dewlap (in life) large, brilliant red, with large purple spot at base; when retracted the purple spots lie laterally on either side of the neck.

Color (in alcohol) greyish brown above with four darker, elongate spots in the mid-dorsal region; undersurfaces a greyish yellow, slightly darker on chin. Upper surfaces of legs light brown.

MEASUREMENTS.—Length to anus, 36 mm.; head length, 12.5 mm.; head breadth, 7 mm.; tibial length, 9 mm.; tail broken.

Paratypes.—The following specimens I have examined and designated as paratypes: Museum of Zoology, University of Michigan, Nos. 75095 (4), 75096, 75097, vicinity of Santa Teresa; 75098, 6 miles north of La Libertad; 75099, 12 miles east of Ramate; 75100, west end of Lake Yaxha; 75101, 18 miles east of Yaxha (all localities in central El Peten, Guatemala): Field Museum of Natural History, Nos. 20014, 20019,

20025, 20029–30, 20036, 20041–42, 20055–58, 20070–75, 20501–02, 20582, 20737–38, Escobas, opposite Puerto Barrios; 20116, 20123, 20153–54, Bobas Plantation, near Playitas (both localities in Izabal, Guatemala): United States National Museum, Nos. 71866, 71869, 71892, 71908, 71911, 71915, El Peten, Guatemala.⁴

Remarks.—The 41 specimens of the new species at hand indicate that the form is remarkably constant. The rows of enlarged dorsal scales range in number from 8–11, the loreal rows 6–9, the supralabials to below the center of the eye 7–9, and the scales between the supraorbital semicircles 1–3. Variation in proportional measurements is likewise slight, the head-length—tibia-length ratio varying .55–.67 and the head-length—tibia-length .75–.85. In coloration and pattern the specimens show no more variation than is to be expected in an anole. The dark dorsal blotching varies from absence to a series of rhombs, and several specimens have a green iridescence plainly visible ventrally. Laterally some specimens have several narrow, vertical, white stripes. The upper surfaces of the legs and thighs show signs of oblique banding.

With respect to the allies of A. ruthveni, there is little doubt that it is the northern representative of A. humilis. It parallels in distribution the series of A. petersii—A. copei and Ameiva quadrilineata—Ameiva undulata. Dr. Dunn has suggested that it may be related to Anolis crassulus Cope, but I think this is unlikely. Although I have seen no specimens of the latter, numerous figures of the type and excellent descriptions exist which lead me to believe that crassulus is undoubtedly very close to A. uniformis Cope. This series differs from the humilis-ruthveni group in possessing postanal scales in the males, and the head shields of the two series are of quite a different nature. Although ruthveni is very similar to A. tropidonotus Peters,⁵ it is impossible to associate the two very closely, because the range of the latter completely blankets that of ruthveni and meets humilis in Nica-

⁴ See Stuart, op. cit.: 2-3 for discussion of locality.

⁵ Stuart, op. cit.: 9.

ragua. Boulenger⁶ not unlikely had before him a specimen of *ruthveni* which he described as *humilis*.

The range of A. ruthveni probably extends from the east-west mountain ranges of central Guatemala on the south through British Honduras and the Peten northward to the dry scrub forest area of northern Yucatan. Westward it is probably limited by the north-south mountains of western Guatemala and possibly the dense rain forests of Tabasco. Species which appear to possess a similar range are Cnemidophorus d. cozumelus (Gadow), Micrurus a. stantoni Schmidt, and an undescribed Leptodeira (to appear soon).

Anolis ruthveni is an inhabitant of the high bush, and I have never found it in open country. Along the forest trails it is not uncommon clinging to the trunks of trees and shrubs, and is similar in actions to A. tropidonotus.

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⁶ G. A. Boulenger, Catalogue of Lizards in the British Museum, London: Pub. by order of the Trustees, 2, 1885: 82.

Note.—Since this was written, I have received from the British Museum (Natural History), through the courtesy of Mr. H. W. Parker, the material examined by Dr. Boulenger. Specimens a (loc. cit.) from Vera Paz all prove to be Anolis ruthveni while specimens b and c of uncertain locality contain two specimens of Anolis ruthveni and one Anolis tropidonotus.