

First Record of the Dwarf Green Anole, Anolis isolepis (Dactyloidae), from Lomas de Banao Ecological Reserve in central Cuba

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The Dwarf Green Anole, Anolis isolepis (Dactyloidae), lacksquare has been regarded as one of the rarest anoles in Cuba, probably because it spends most of the time high in the forest canopy where it is well camouflaged (Barbour 1914, 1937; Barbour and Ramsden 1919; Ruibal 1964; Garrido 1985). Nonetheless, it has a relatively wide distribution and, although most records are restricted to eastern Cuba, some additional records for the central region of the island exist (see Rodríguez Schettino et al. 2013 for a review on distribution) and, interestingly, only a few records of this species exist between the eastern and central populations, specifically from Ciego de Ávila, Camagüey, and Las Tunas Provinces, and most parts of Granma Province (Rodríguez Schettino et al. 2013). The latter might be due to a combination of extensive deforestation across those provinces (it is a forest-dwelling species; Henderson and Powell 2009) and a lack of surveys. In central Cuba, it has been recorded from a few localities on the western side of the Guamuhaya Massif, the so-called Trinidad Range (Schwartz and Thomas 1975; Garrido 1985; Rodríguez Schettino et al. 2013). However, Barbour (1914) mentioned a specimen "collected by Mr. Barnum Brown, probably in the Sierra de Jatibonico, Cuba" (see also Schwartz and Thomas 1975). Herein we report *A. isolepis* from Lomas de Banao Ecological Reserve in the westernmost Guamuhaya Massif.

At 2150 h on 16 March 2019, we found an adult female *A. isolepis* (ca. 40 mm SVL) (Fig. 1) about 420 m NNE of La Sabina Ranger Station, Lomas de Banao Ecological Reserve, Sancti Spíritus Municipality, Sancti Spíritus Province, Cuba (21.88744, -79.60066; elev. 550 m asl; WGS 84). This locality is 60 km east of Cafetal de Gaviñas, the nearest verified published record of the species (Schwartz and Thomas 1975; Garrido 1985) and represents the first record for Sancti Spíritus Municipality. A photographic voucher was deposited in the Herpetology Digital Archives of the University of Kansas (KUDA 13763–6).

When first seen, the anole was sleeping on a Tree Fern (Cyatheaceae) frond about 2 m above the ground adjacent to a mountain path (Fig. 2). Air temperature was 22 °C and relative humidity 85% at the time of the observation. The surrounding vegetation was composed mostly of second-growth forest and Caribbean Pine (*Pinus caribaea*, Pinaceae) plantations with a dense understory. The original vegetation in the area probably was mesophyllous evergreen forest and



Figure 1. Adult female Dwarf Green Anole (*Anolis isolepis*) observed in Lomas de Banao Ecological Reserve, Sancti Spíritus Province, Cuba (left, KUDA 13763; right, KUDA 13765). Photographs © Aslam I. Castellón.

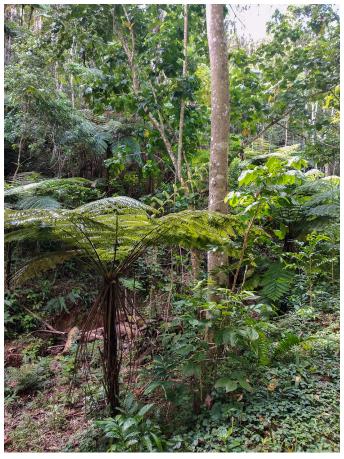


Figure 2. Habitat of the Dwarf Green Anole (*Anolis isolepis*) in Lomas de Banao Ecological Reserve, Sancti Spíritus Province, Cuba. The individual reported here was found sleeping at night on the Tree Fern to the lower left area of the photo. Photograph © T.M. Rodríguez-Cabrera.

rainforest, of which several representative species still persist (P. González, pers. comm.).

Rodríguez Schettino et al. (2013) listed A. isolepis from Topes de Collantes, 43 km west of the new locality record, based on an unpublished action plan of the protected area. The occurrence of *A. isolepis* in this area falls within the realm of possibility; however, given numerous incongruences, omissions, and misidentifications found in the action plans cited by Rodríguez Schettino et al. (2013) from all over the country (see also Rodríguez-Cabrera and Blanco Morciego 2021), unverified records from such sources should be confirmed. Also of note is that Díaz et al. (2022) published a map with dots representing localities of A. isolepis across Cuba, including a dot in the eastern region of the Guamuhaya Massif. However, many localities indicated were not addressed in the text and apparently represent "author's visual records," a repeated practice capable of generating considerable confusion in the herpetological literature (see also Díaz and Cádiz 2020; Díaz et al. 2021).

Other species of anoles observed in the same habitat include (in decreasing order of relative abundance) the

Cuban White-fanned Anole (*A. homolechis*), the Blue-eyed Twig Anole (*A. alutaceus*), the Escambray Blue-eyed Anole (*A. ahli*), the Cuban Green Anole (*A. porcatus*), the Shortbearded Anole (*A. chamaeleonides*), the Cuban Giant Anole (*A. equestris*), and the Escambray Twig Anole (*A. garridoi*). Estrada (1994) reported a total of nine species for these mountains and commented on the notable absence of *A. isolepis* and other species in the area. For example, the Escambray Twig Anole was only recently recorded in Lomas de Banao Ecological Reserve (Rodríguez-Cabrera et al. 2022). That species was first described by Díaz et al. (1996), with A.R. Estrada as the second author; consequently, as it was not mentioned, even as an undescribed species, by Estrada (1994), we suspect that it also went unnoticed in the area until very recently.

In sharp contrast with most protected areas of Cuba, the herpetofauna of Lomas de Banao Ecological Reserve has received considerable attention (Garrido et al. 1991; Estrada 1994; Rodríguez-Cabrera 2018; Rodríguez-Cabrera et al. 2020a, 2020b, 2020c, 2022; Torres and Rodríguez-Cabrera 2020). The fact that *A. isolepis* was not previously documented for this area reinforces the hypothesis that this species has very secretive habits and that it can go undetected even in relatively well-studied areas. The latter suggests that it might be more common than previously thought.

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