



Distribution of Savage's Anole, *Dactyloa savagei* (Poe and Ryan 2017) (Squamata: Dactyloidae), in Costa Rica

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Savage's Anole (*Dactyloa savagei*) was described as *Anolis savagei* by Poe and Ryan (2017) when they realized that the large anoles from southern Costa Rica were distinct from the similar and closely related Decorated Anole (*Dactyloa insignis*). Nicholson et al. (2018) subsequently elevated an anoline clade to the genus *Dactyloa*, to which they assigned these species.

Savage's Anole has a limited and relatively unknown distribution in the southern Pacific area of Costa Rica that coincides with the Isthmian Pacific moist forest region of Leenders (2016, 2019). Little is known about this species due to its secretive life in the forest canopy. Only three photographs of living individuals have been published, an adult male from the type locality in the Las Cruces Reserve near San Vito de Coto Brus in Puntarenas Province (Poe and Ryan 2017), and two individuals photographed by Rick Stanley in cloud forest at an elevation of 1,690 m asl near Cerro Chirripó (09°28'21.18"N, 83°43'15"W; R. Stanley, pers. comm.). Four of Stanley's photographs were posted by Losos (2013) and two are in Leenders (2019). No new locality records have been reported until now.

Only a few localities have been mentioned for large anoles in the southern Pacific area. Two specimens are known from the type locality (Poe and Ryan 2017). Savage and Talbot (1978) and Savage (2002) mentioned the presence of the Decorated Anole (*Dactyloa insignis*) in at least in two localities near sea level, Ballena, 4 m asl (British Museum of Natural History: BMNH 1909.7.10.20) and Rincon de Osa (Colección de la Universidad de Costa Rica: UCR 4387) on the Península de Osa. However, these two localities were not confirmed by Poe and Ryan (2017), so the actual identity of those specimens was unclear. We herein provide clarification of the identity of those two specimens. We also describe two new localities on the Península de Osa that, in addition to the corroboration of the identity of UCR 4387, confirm the presence of the species on the peninsula (Fig. 1).

CBA examined the specimen from Ballena (BMNH 1909.7.10.20) from photographs sent by Patrick Campbell, Reptile Curator at the British Museum. This locality is not precise (Ballena is a beach 8 km SE Uvita, Puntarenas Province, and also is an alternative name of the town of Bahía Ballena, also in Uvita). The locality is represented in maps in Savage and Talbot (1978), Savage (2002), and Poe and Ryan (2017) as in Uvita. Both are close to the sea, and the elevation of 4 m asl is correct. However, the specimen is not *Dactyloa savagei*, as it lacks a postorbital dark blotch, instead bearing the large pale-centered, dark-outlined blotch between the



Fig. 1. Distribution of Savage's Anole (*Dactyloa savagei*) in southern Costa Rica. The yellow dot marks the type locality and red dots indicate confirmed and new localities for the species. The elevational distribution ranges from about 224 m in La Tarde on the Península de Osa to 1,690 m at the Cloudbridge Reserve near Cerro Chirripó.



Fig. 2. A Decorated Anole (*Dactyloa insignis*; BMNH 1909.7.10.20) from Ballena in Puntarenas Province, Costa Rica (elev. 4 m asl). We herein corroborate the identity of this specimen but suggest that the locality is in error as it lies well outside the known range of the species. Photographs by Patrick Campbell.

shoulder and tympanum typical of *D. insignis* (Fig. 2). The latter, however, is not known to occur in the southern Pacific area (Savage 2002; Leenders 2019). We suggest that the collection locality is in error.

CBA also examined the specimen UCR 4387 (Fig. 3), originally identified as *Dactyloa insignis*, that had been collected in 1973 from Rincón de Osa on the Osa Peninsula (UCR 4387). This individual is clearly an adult male *D. savagei* with the prominent postorbital dark blotch typical of the species and absent in *D. insignis*.

Two additional reliably identified adult males from two new localities corroborate the presence of *Dactyloa savagei* on the Peninsula de Osa, Puntarenas Province. The first individual (Fig. 4A & 4B), with the large black-outlined postorbital spot characteristic of the species, was observed by DP and tourists on 15 March 2019 at Ecoturismo La Tarde Reserve (08°34'49"N, 83°29'13"W; elev. 224 m asl), only 14.2 km south of Rincon de Osa. It was about 2 m above the ground and moving slowly toward the canopy. A second individual (Fig. 4C) was photographed at Sendero el Tigre, Dos Brazos de Río Tigre, Parque Nacional Corcovado (08°30'53.9"N, 83°25'24.4"W; elev. 435 m asl). It was 130 cm above the ground and ascended quickly into the canopy when approached and photographed. The image is not clear,

but the dark-bordered postorbital spot can be distinguished. This individual's dark-outlined golden diagonal bars on a lime-green ground color is a novel pattern that was not mentioned by either Poe and Ryan (2017) or Leenders (2019). Steven Poe and Gunther Köhler confirmed the identity of the specimens and living individuals from the photographs.

Acknowledgements

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Fig. 3. An adult male Savage's Anole (*Dactyloa savagei*; UCR 4387), from Rincón de Osa, Peninsula de Osa, Puntarenas Province, Costa Rica, that had originally been identified as *Dactyloa insignis*. Photographs by Cesar L. Barrio-Amoros.

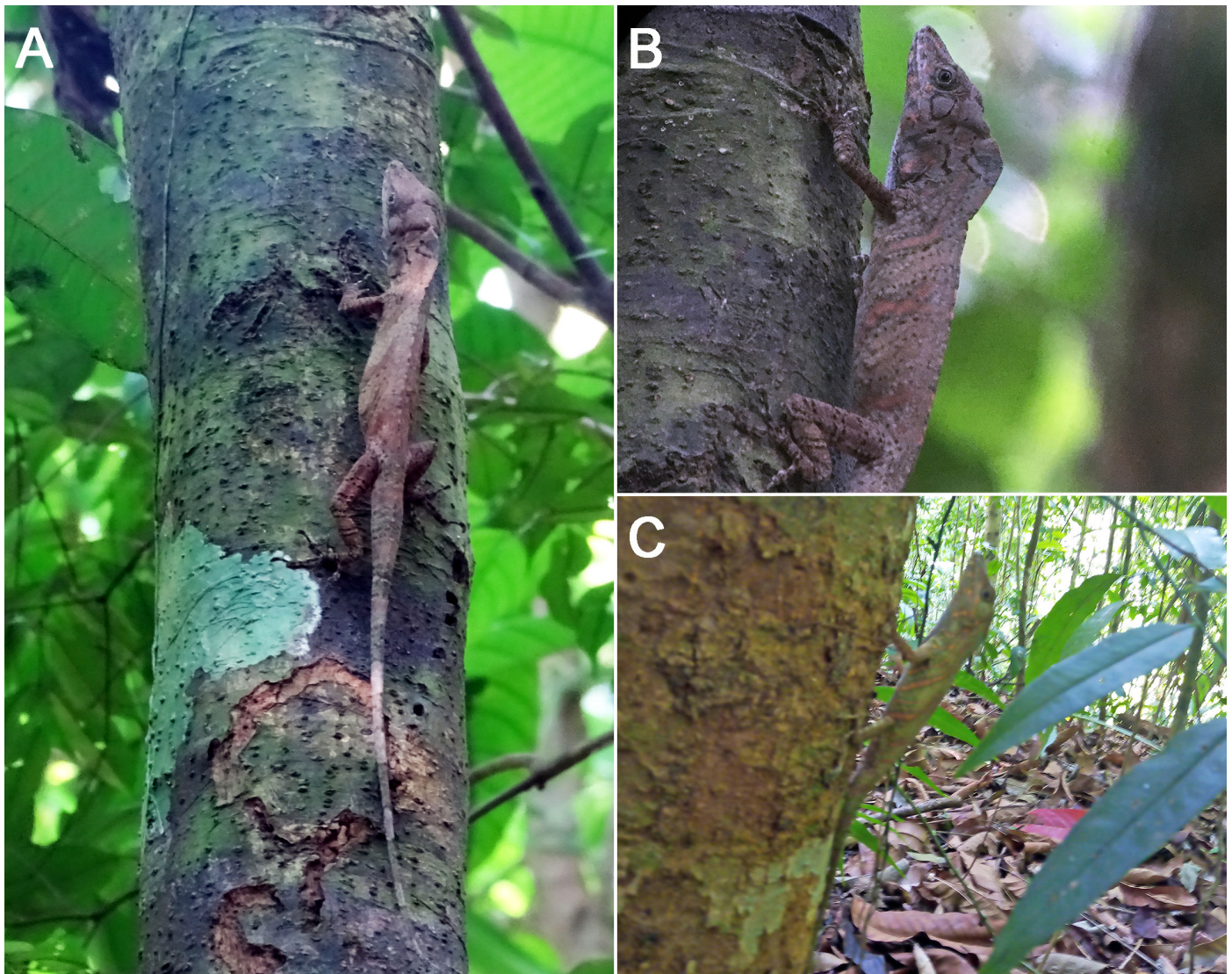


Fig. 4. An adult male Savage's Anole (*Dactyloa savagei*) at the Ecoturismo La Tarde Reserve, Puntarenas Province, Costa Rica (A, B). Photographs by John Muller. An adult Savage's Anole (*Dactyloa savagei*), presumably a male, at Sendero el Tigre, Dos Brazos de Río Tigre, Parque Nacional Corcovado, Puntarenas Province, Costa Rica (C). Photograph by Edward J. Montiel.

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