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IGUANA DELICATISSIMA (Lesser Antillean Iguana). ECTO-PARASITISM. Iguana delicatissima is a large, long-lived (up to 25 yrs) herbivorous generalist inhabiting less than 10 main islands in the Lesser Antilles from Anguilla to Martinique. Iguana delicatissima is primarily arboreal except on extreme xeric islands with limited tree diversity. Its historic range has been reduced dramatically because of habitat loss, non-native predators and competitors, hunting, road mortality, and genetic introgression with I. iguana. Consequently, I. delicatissima is listed as Endangered by the IUCN – the World Conservation Union (IUCN 2010. IUCN Red List of Threatened Species. Version 2010.4. <www.iucnredlist.org>. 13 June 2011).

Here we provide the first report of parasitism on I. delicatissima by the scale mite, Hirstiella stamii (Acariformes: Pterygosomatidae). To our knowledge, this is only the second ectoparasite (Kohls 1969. J. Med. Entomol. 6:439-442) reported for the species. From April to September 2009, and from April to June 2010, we captured and recorded body measurements from 906 subadult and adult I. delicatissima inhabiting the island of Dominica, West Indies. We also documented the presence of white, scale-like patches on the heads and dewlaps of 170 (18.8%) iguanas. Parasitized iguanas ranged in SVL from 16.3-36.3 cm (mean = 27.4, SD = 4.1), and body mass from 150–2050 g (mean = 928.3, SD = 347.5). Patches ranged in diameter from 2-10 mm and were located typically on the subocular, postocular, temporal, nasal, and/or canthal scales (Fig. 1). Patches also were located dorsally on the head in the region of the frontal, parietal, and/or interparietal scales. In five occurrences, patches were recorded on the dewlap. Voucher mite specimens are housed at the Museum of Biological Diversity, The Ohio State University with accession numbers OSAL0102567-70 (females), OSAL0102571 (male), and OSAL0102572-74 (larvae).

This is the first report of *I. delicatissima* parasitized by *H. stamii*. The mite was recorded previously from captive *I. iguana*

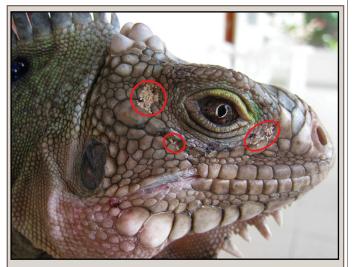


Fig. 1. Example of site attachment by the scale mite, *Hirstiella stamii*, on the head of *Iguana delicatissima* inhabiting the island of Dominica, West Indies. Patches circled in red.

at the Amsterdam Zoological Gardens in the Netherlands (Jack 1961. Ann. Mag. Nat. Hist. 13:305–314) and from non-native, wild-caught *I. iguana* in Florida, United States (Corn et al. 2011. J. Med. Entomol. 48:94–100).

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IGUANA IGUANA (Green Iguana). PREDATION. Double-toothed Kites (*Harpagus bidentatus*) are known to eat lizards, including juvenile *Iguana iguana* (Greene et al. 1978. J. Herpetol. 12:169–176). Double-Toothed Kites often forage by following monkeys (Egler 1991. Wilson Bull. 103:510–512; Fontaine 1980. Auk 97:94–98), capturing prey that the monkeys have flushed out of the brush by their movements. We did not find any reports of these kites taking prey directly from primates.

On 13 June 2011 at 1110 h, we captured two hatchling iguanas on the south edge of Bohio Reach, Panama Canal, Barro Colorado Natural Monument, Panamá (9.191111°N, 79.846111°W). Hatchlings were <0.25 m off the ground and 0.5 m apart in a patch of Canal Grass (Saccharum spontaneum) ca. 0.5 m from the water's edge. Each of us held one hatchling as we processed them in our boat (ca. 3 m from site of capture). During processing, we observed a Double-toothed Kite swoop from a tree ca. 4 m from us, appearing to watch our activity. The kite was initially perched ca. 6 m in a tree and swooped to a branch 2 m off the ground, loudly rustling the leaves. Upon attempting to release the first iguana (72 mm SVL, 11.4 g) onto a rock 3 m from the grass, it ran back into the lap of BAW. Thereafter, BAW walked the iguana to the grass to release it, during which time the kite flew toward his hand, hitting his hand with its wing, and directly snatching the iguana with its talons in a quick motion. The kite flew into nearby trees and out of sight with the iguana in its talons.

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LANKASCINCUS FALLAX (Peters' Litter Skink). REPRODUCTION. *Lankascincus fallax* is a subfossorial skink endemic to Sri Lanka (Somaweera and Somaweera 2009. Lizards of Sri Lanka, A Colour Guide with Field Keys. Edition Chimaira, Frankfurt am Main. 303 pp.). The purpose of this note is to present information on the reproductive biology of *L. fallax*.

Thirty-one *L. fallax* (15 males, mean SVL = $39.3 \text{ mm} \pm 2.2 \text{ SD}$, range = 36--45 mm; 16 females, mean SVL = $39.1 \text{ mm} \pm 2.4 \text{ SD}$,

range = 35–43 mm) were examined from the following localities: Central Province (7.2631°N, 80.6028°E), CCA (= Christopher C. Austin, field number) 1745, 2361, 2362, 2368, 2383, 2407–2411, 2413, 2416–2418, 2422–2424, 2448, 2453; North Central Province (8.3500°N, 80.3833°E), CCA 2375–2377, 2386, 2387, 2391, 2392; North Western Province (7.7500°N, 80.1667°E), CCA 2425, 2426; Sabaragamuwa Province (6.7500°N, 80.5000°E), CCA 2445; Southern Province (7.9500°N, 80.7500°E), CCA 2452; Western Province (7.1807°N, 79.8841°E), CCA 2359. *Lankascincus fallax* were collected in August 1999 and November 2002 and were deposited in the herpetology collection of the National Museum of Sri Lanka, Colombo, Sri Lanka.

For histological examination, the left gonad was removed to check for yolk deposition in females and spermiogenesis (sperm formation) in males. Counts were made of enlarged ovarian follicles (3 mm diameter) or oviductal eggs. Tissues were embedded in paraffin, sectioned at 5 μ m using a rotary microtome and stained with hematoxylin followed by eosin counterstain.

All males of *L. fallax* were from November and were undergoing spermiogenesis. The smallest spermiogenic male measured 36 mm SVL (CCA 2413). Fifteen females of *L. fallax* were from November, one was from August. All were reproductively active, with 13 containing oviductal eggs and two containing enlarged follicles (> 4 mm). Mean clutch size for fifteen females was 1.8 ± 0.44, range: 1–2. Three females with two oviductal eggs, each (CCA 2383, 2387, 2391) were undergoing concomitant yolk deposition for a subsequent clutch indicating *L. fallax* produces multiple clutches annually. The smallest reproductively active female *L. fallax* measured 35 mm SVL (two oviductal eggs, CCA 2453).

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LEPIDODACTYLUS LUGUBRIS (Mourning Gecko). FORAGING MOVEMENT. Lepidodactylus lugubris is a small (45 mm) gecko native to Indo-Australia. The species has been widely introduced in tropical areas throughout the world, including the Bocas del Toro islands of the Republic of Panama. This species is predominantly a nocturnal insectivore. However, individuals are known to supplement their diet with nectar and ripe fruit, and have been observed to forego insects when feeding on nectar (Perry and Ritter 1999. Herpetol. Rev. 30:166–167). They have also been documented to change their typical behavior to gain access to sugar sources (McCoid and Hensley 1993. Herpetol. Rev. 22:8–9). Thus, sugar and nectar may serve as a behaviorally influential dietary resource for this species.

A small population of *L. lugubris* located on Isla Coln at the Bocas Del Toro Biological Station in the Republic of Panama was noted to undergo mass concerted movements at dusk from their daytime retreat within a building to a nearby *Morinda citrifolia* tree. Within the tree, individuals were observed consuming

excretions from the pores of the fruit, as well as nectar from the flowers. After initial observation, I removed all vegetation in contact with the building that was originating from, or in the vicinity of, the M. citrifolia tree. In place of the vegetation, I constructed a series of four rope bridges (diameter: 3.2 mm) that served to ensure access to the tree was limited to crossing the rope bridge. One rope bridge connected a building beam to the shortened M. citrifolia branch at their previous point of tree entry. The other three bridges were connected to nearby vegetation lacking fruit or flowers to ensure movement was non-random. The same building beam was connected to a mango tree (Mangifera indica) and to two independent, unidentified woody shrubs. After the first two nights it became apparent that geckos were only using the bridge connected to *M. citrifolia*, so additional bridges were not monitored on subsequent nights. Due to the diameter of the rope, individuals were only able to cross single-file, simplifying quantification. I recorded their movements across the M. citrifolia rope bridge at dusk for six days from the period of 30 June to 7 July 2005 (1830-2030 h) and from 0530-0630 h on 8 July 2005. Crossing individuals were marked on their back with a water-based, non-toxic permanent paint marker, similar to DECO-COLOR® paint markers. The number of marked and unmarked individuals was recorded each night.

The majority of movement occurred during or immediately after dusk. Movements after that period were less frequent and greatly interspersed. Over a standardized period of two hours following dusk, a mean of 39 (range: 35-54) geckos were observed to cross to the M. citrifolia each night. With the exception of the first night when all individuals were new to the altered pathway, approximately half of the individuals recorded crossing each night were unmarked. This suggests that individuals readily adapt behavior to gain access to foraging resources, and do not forage in the tree every night. On the morning of 8 July 2005, 69 individuals returned. I also observed marked individuals up to 12.49 m straight line distance from the crossing point, feeding under building lights in concert with Hemidactylus frenatus (House Gecko; native to southeastern Asia, widely introduced elsewhere). No H. frenatus individuals were observed to cross into the M. citrifolia tree.

The distance I observed marked individuals from the *M. citrifolia* crossing point suggests geckos were willing to move over a considerable distance of open space to gain access to nectar, and that nectar is an important food source for this population. Petren and Case (1998. Proc. Natl. Acad. Sci. 95:11739–11744) found that increasing topographic complexity of foraging areas drastically reduced competition between *L. lugubris* and *H. frenatus*. The presence of *H. frenatus* at the structurally simple insect feeding stations used by *L. lugubris* and their absence at the structurally complex *M. citrifolia* may indicate the observed phenomenon is one strategy used by *L. lugubris* to reduce interspecific competitive interactions.

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LIOLAEMUS ESPINOZAI. PREDATION. *Liolaemus espinozai* has only been recently described and little is known about its natural history. It is found southeast of the Nevados del Aconquija in Catamarca province, Argentina, 2200–2800 m elev. (Abdala 2005.