



FIG. 1. Average tail reflectance spectrum of a juvenile *Ameiva festiva*.

likely generated via a structural mechanism (through blue light scattering as it passes through skin chromatophore cells). As blue tail coloration is restricted to juveniles, it is unlikely to serve a role in sexual signaling. Information about the primary predators of adult and juvenile *A. festiva* is generally lacking, although some studies report that snakes might be important predators of *A. festiva* (Sorrel 2009. *Copeia* 2009:105–109) and other co-occurring *Ameiva* species (Hirth 1963. *Ecol. Monogr.* 33:83–112). Nevertheless, if blue tails do indeed function to misdirect predator strikes in juvenile *A. festiva*, the tail's conspicuous coloration suggests that visual predators (e.g., birds) might also be important during this life stage.

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ANOLIS UNILOBATUS. SURFACE TENSION. *Anolis unilobatus* is a small anoline lizard that ranges from southern Mexico to Costa Rica (Köhler and Vesely 2010. *Herpetologica* 66:207–228). They can often be found on fences where they are usually perched head down on the posts, especially near bushes. At some locations they can reach high densities (Köhler and Vesely, *op. cit.*). Several species of *Anolis* exhibit aquatic activity, perching near bodies of water to either hunt or escape from predators by swimming or diving (Robinson 1962. *Copeia* 1962:640–642; Brandon et al. 1966. *Herpetologica* 22:156–157; Beuttell and Losos 1999. *Herpetol. Monogr.* 13:1–28; Leal and Losos 2000. *J. Herpetol.* 34:318–322; Birt et al. 2001. *J. Herpetol.* 35:161–166). Herein, I report for the first time use of water as an alternative mechanism against threat in *A. unilobatus*.

At 1054 h on 29 November 2017, in ejido Copoya, Municipio de Tuxtla Gutiérrez, Chiapas, México (16.71730°N, 93.12820°W, WGS 84; 868 m elev.), I observed a subadult male *A. unilobatus* perched on a fallen branch at 1 m above ground level. The vegetation in the area is tropical dry forest, with temporary bodies of water during the rainy season. When I approached, the lizard jumped and fell onto the surface of a small pond, remaining suspended by its limbs and tail on the water's surface. After remaining immobile for less than a minute and suspended on the water surface, the lizard swam ca. 60 cm in a straight line on the surface to the shore. Swimming motions consisted of rapid undulatory movements of the body and tail with adpressed limbs. Although *A. unilobatus* is not an inhabitant of aquatic habitats, this could imply that the use of water as a refuge is

a facultative phenomenon as Powell and Parmerlee (1993. *Herpetol. Rev.* 24:59) mention for *A. chlorocyanus*, and the small size at the subadult stage might facilitate suspension on water and surface swimming.

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CHALCIDES OCELLATUS (Ocellated Skink). DIET. A specimen of *Chalcides ocellatus* was collected at Mishor Yamin, Israel (31.00397°N, 35.10713°E) on 22 June 2012. The specimen, an adult male with a total length of 132 mm (snout–vent length 82 mm, tail length 50 mm, mass 11.8 g), was deposited in the Steinhardt Museum of Natural History (Tel Aviv, Israel) as TAU 16357. Dissection of the *C. ocellatus* specimen revealed a *Mesalina guttulata* (Small-spotted Lizard, TAU 17847) within its digestive tract (Fig. 1). The head and tip of the tail of the *M. guttulata* are missing (presumably digested during the intervening period between initial predation and time of collection). The total length of the remaining *M. guttulata* specimen was 44 mm from base of neck to broken tail tip (base of neck to cloaca: 22.7 mm; cloaca to broken tip of tail 21.3 mm). This means the *M. guttulata* was no less than a third of the total length of the *C. ocellatus*, and in all likelihood larger with the inclusion of its head and, potentially, its tail.

In Israel *C. ocellatus* is noted to primarily feed on various arthropods, occasionally supplementing its diet with fruit (Bar and Haimovitch 2011. *A Field Guide to Reptiles and Amphibians of Israel*. Pazbar LTD, Herzliya. 246 pp.). In other parts of its distribution, instances have been reported of it preying on *Podarcis filfolensis* (Filfol Wall Lizard) and conspecific juveniles (Carretero et al. 2010. *Bonn Zool. Bull.* 57:111–118). However, saurophagy has not been reported for this species from Israel. This new finding strengthens our understanding of *C. ocellatus* as an opportunistic omnivore.



FIG. 1. *Chalcides ocellatus* (left) with a partially digested *Mesalina guttulata*, removed from its stomach (right).

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CYRTODACTYLUS PULCHELLUS (Malayan Forest Gecko). EN-DOPARASITE. *Cyrtodactylus pulchellus* ranges from southern Thailand throughout much of Peninsular Malaysia; it is nocturnal and scansorial, restricting its activity to rocks, trees, or root systems (Grismer 2011. *Lizards of Peninsular Malaysia, Singapore and their Adjacent Archipelagos*. Edition Chimaira, Frankfurt am Main, Germany. 728 pp.). We know of no reports of endoparasites from *C. pulchellus*. Here we report the presence of one species of Nematoda, thereby establishing the helminth list for this gecko.

One female *C. pulchellus* (SVL = 111 mm), from Peninsular Malaysia, Penang State, Pulau Pinang. Air Terjun Titi, Kerawang (5.40388°N, 100.22333°E, WGS 84; 257 m elev.) and deposited in the herpetological collection of La Sierra University (LSUHC), Riverside, California, USA as LSUHC 10022 was examined. The specimen had been collected in March 2011 by hand, was euthanized within 12 h of capture, preserved in 10% formalin, and stored in 70% ethanol. The body cavity was opened by a longitudinal incision, and the digestive tract was removed and opened. The esophagus, stomach, small intestine, and large intestine were examined for helminths under a dissecting microscope. Only one nematode was found (small intestine) which was placed on a glass slide in a drop of lactophenol, a coverslip added, and identification made from this temporary wet mount utilizing Anderson et al. (2009. *Keys to the Nematode Parasites of Vertebrates*, Archival Volume. CAB International, Wallingford, Oxfordshire. 463 pp.) and Gibbons (2010. *Keys to the Nematode Parasites of Vertebrates*, Supplementary Volume. CAB International, Wallingford, Oxfordshire, UK. 416 pp.). The nematode was identified as a male *Rhabdoconia* sp. and subsequently deposited in the Harold W. Manter Parasitology Laboratory (HWML), The University of Nebraska, Lincoln, Nebraska, USA as HWML 92091.

We have assigned our specimen to *Rhabdoconia* because the cylindrical, elongated pharynx is dilated anteriorly to form a well-defined funnel-shaped buccal cavity armed with sclerotized rods projecting anteriorly as teeth. In addition, caudal alae are absent, gubernaculum is absent, and spicules are unequal and dissimilar.

Rhabdoconia is a speciose genus considered by Asmatullah-Kakar et al. (2012. *Pakistan J. Zool.* 44:95–99) to contain over 160 species. Members of *Rhabdoconia* are commonly found as parasites of freshwater fishes, less frequently in marine fish from all zoogeographical realms (Bilqees 1979. *Zool. Scripta* 88:107–110; Lakshmi 2001. *Bol. Chileno Parasitol.* 57:3–4; Moravec 2007. *Folia Parasitol.* 55:144–160; Moravec 2010. *Acta Parasitol.* 55:144–160).

Rhabdoconia sp. in *C. pulchellus* is a new host record and the first report of this genus from a lizard.

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HOLBROOKIA LACERATA (Spot-tailed Earless Lizard). BURYING BEHAVIOR. Burying behavior is well documented within the phrynosomatid sand lizards, but no literature exists on the burying habits of *Holbrookia lacerata*. Other members of this clade prefer sandy soils and are known to bury in soft soils to avoid

extreme temperatures and predation, and to lay eggs (Axtell 1956. *Bull. Chicago Acad. Sci.* 10:163–179; Brennan and Holycross 2009. *A Field Guide to the Amphibians and Reptiles in Arizona*. Arizona Game and Fish Department, Phoenix. 150 pp.; Hibbitts and Hibbitts 2015. *Texas Lizards: A Field Guide*. University of Texas Press, Austin. 351 pp.). *Uma notata* (Colorado Desert Fringe-toed Lizard) have been documented burying themselves in coarse pebbly sand (Pough 1970. *Copeia* 1970:145). However, clay soils are preferred by *H. lacerata* (Hibbitts and Hibbitts, *op. cit.*).

Over the course of a telemetry study on *H. lacerata* from May to July 2017, a number of individuals were discovered buried in multiple substrates and under varied weather conditions. All lizards used in the study were adults. Two sites were used for this study: one located in Crockett County, Texas, USA (ca. 30.9300°N, 101.1916°W; WGS 84) and another located in Val Verde County, Texas, USA (ca. 29.3712°N, 100.7722°W; WGS 84). Lizards from these sites represent two separate subspecies: *H. l. lacerata* (Northern Spot-tailed Earless Lizard) at the Crockett County site and *H. l. subcaudalis* (Southern Spot-tailed Earless Lizard) at the Val Verde County site. The Crockett County site consists of a mixture of Chihuahuan thornscrub and arid grasslands. The Val Verde County site is heavily modified and consists of a mowed airfield surrounded by Chihuahuan thornscrub. Both sites are primarily clay soils intermixed with varied amounts of limestone.

In Val Verde County, eight individual lizards were observed at least partially buried a combined total of 37 times. Many of these events were sequential encounters in the exact same location. Assuming these represented times the lizards did not become active and then rebury themselves at the same location, lizards were discovered buried 17 times. Five lizards were female, two of which were gravid during and after our observations. With respect to weather, 78% of encounters with buried lizards occurred during overcast or rainy conditions, while the remaining observations were made during sunny conditions. Lizards never buried more than 1 cm deep, and were occasionally partially exposed. One female lizard was documented twice buried into a harvester ant (*Pogonomyrmex* sp.) mound. Four lizards were recorded buried along caliche roads in shallow, relatively loose gravel. Two lizards were discovered buried in the detritus and shallow soil occupying cracks in an abandoned asphalt runway. Additionally, 325 of 578 total observations (56.2%) of lizards were found completely hidden underneath thick forbs or grass bunches but not buried. Most of these lizards were hiding in detritus, primarily dead grass, beneath the plants. In total, lizards were hidden 62.6% of encounters.

In Crockett County, 10 individual lizards were observed at least partially buried a combined total of 82 times. Excluding sequential encounters in the same exact location, lizards were observed buried 40 times. Six of these lizards were female, and four were male. Five of the females were gravid during burying observations. In contrast to Val Verde County, only 25% of encounters with buried lizards in Crockett County occurred under overcast or rainy conditions. Lizards were recorded buried, or actively burying, in caliche roads 13 times. Additionally, 144 of 475 total observations (30.3%) of lizards were found completely hidden beneath thick forbs or grass bunches, and under dry cattle feces in three cases. Similar to the Val Verde County site, detritus beneath the plants were used as cover. In total, lizards were hidden 47.6% of encounters. Burying behavior at both sites seemed to coincide with longer periods of inactivity (i.e. cool, overcast days). Short-term refuge use was most often just the cover of vegetation or detritus.