as diverse as the Cerrado, the northeastern Caatinga, and in the coastal "restinga" of the Atlantic Forest (Vitt 1983. Copeia 1983:359–366; Mesquita and Colli 2003. Copeia 2003:285–298; Santana et al. 2010. Braz. J. Biol. 70: 409–416). As in many lizard species, the diversity of endoparasites that infect *A. ocellifera* remains poorly known, with most of the existing reports concerning nematodes (e.g., Ribas et al. 1995. Ciênc. Cult. 47:88–91; Dias et al. 2005. Herpetol. J. 15:133–137; Ávila et al. 2012. Comp. Parasitol. 79:56–63; Brito et al. 2014. Parasitol. Res. 113:1163–1169) or cestodes (e.g., Brito et al. 2014, *op. cit.*). All of these previous studies applied traditional microscopic techniques to identify the parasites, although the use of molecular methods has been more widely used in recent years for this purpose (Beck et al. 2009. Int. J. Parasitol. 39:175–189). Such tools are particularly valuable regarding less common parasites or groups that occur at low parasitemia levels. Here we report the first discovery of *Proteromonas*, an intestinal protozoan parasite, in *A. ocellifera*.

Proteromonas is a genus of biflagellate commensal parasites that usually infect the large intestine of its hosts, without causing either pathologic effects or clinical disease (Mitchell 2007. *In* Baker [ed.], Flynn's Parasites of Laboratory Animals: Parasites of Amphibians, pp. 117–175. Blackwell Publishing, Oxford). Species from the genus were recorded infecting snakes (e.g. *P. lacertaeviridis*, Telford Jr. and Bursey 2003. Comp. Parasitol. 70:172–181), rodents (e.g., *P. brevifilia*), amphibians (e.g., *P. longifila*), and pond turtles (e.g., *P. regnardi*) (Mitchell 2007, *op. cit.*). Although various species have been described from lizards (e.g. *P. kakatiyae*; *P. warangalensis*, Rao et al. 1978. Acta Protozool. 17:1–7; *P. grassei*, Saratchandra and Narasimhamurti 1980. Proc. Indian Acad. Sci. 89:293–295), many recent studies consider that *P. lacertaeviridis* has a worldwide reptile host range, and that it is doubtful if the other species described from lizards are distinct (Hoff et al. 1984. Diseases of Amphibians and Reptiles. Plenum Press, New York. 784 pp.). However, there is minimal information from the Americas for these parasites, and studies are limited to North and Central America (e.g., Zimmerman and Brown 1952. Proc. Oklahoma Acad. Sci. 33:103–111; Telford Jr. and Bursey 2003, *op. cit.*). Consequently, to the best of our knowledge, currently there are no records of South American lizards infected by *Proteromonas* spp.

Lizards were collected during fieldwork for a doctoral study (Licence #39967-1, permitted by the "Instituto Chico Mendes de Conservação da Biodiversidade – ICMBio), in May 2014, at Aracati municipality (4.3342°S, 37.4611°W; WGS 84), littoral zone of Ceará state, northeast Brazil. We extracted DNA samples from tail tissue, and performed the extractions using standard High Salt methods (Sambrook et al. 1989. Molecular Cloning: a Laboratory Manual. Cold Spring Harbor Press, Cold Spring Harbor, New York. 545 pp.). The PCR reactions were performed using the primers HepF300 and HepR900, which target part of the 18S rRNA gene (Ujvari et al. 2004. J. Parasitol. 90:670–672). These primers were designed to amplify apicomplexan blood parasites of the genus *Hepatozoon*, but also amplify other protozoan parasites and even fungus from tissue samples (Maia et al. 2012. Acta Parasitol. 57:337–341). The PCR cycling consisted of 94°C for 30 seconds, followed by 60°C for 30 seconds and 72°C for 1 minute, in a total of 35 cycles (more details in Harris et al. 2011. J. Parasitol. 97:106–110). With each reaction we ran positive and negative controls. PCR products were separated on 2% agarose gels, stained with gel red, and visualized using a UV-transiluminator. Purified PCR products were sequenced in both directions.

From 44 individuals analyzed, none of the samples were positive for *Hepatozoon*. However, one adult male (SVL: 77.17 mm, deposited in the Coleção Herpetológica da Universidade Federal do Ceará – CHUFC L5516) was infected by an apparent *Proteromonas*. The sequence was 525 base pairs long (deposited in GenBank). Comparison with available data from GenBank showed a 99% similarity with an unidentified *Proteromonas* from the snake *Eirenis modestus* from Turkey (Tomé et al. 2014. Syst. Parasitol. 87:249–258), although with only 48% coverage. Similarity of 98% across the whole region was found with *Proteromonas* from tissue samples of the lizards *Acanthodactylus erythruus* (Spain) and *Pristurus carteri* (Oman, both from Maia et al. 2012, *op. cit.*).

As the occurrence of *Proteromonas* is expected in the large intestine, Maia et al. (2012, *op. cit.*) hypothesized that parasites present in the feces could contaminate the skin of the tail tip, since lizards often defecate when handled. In most of the literature *Proteromonas* is considered a purely intestinal parasite, although it has also been recorded from the blood of Dice Snakes, *Natrix tessellata* (Vakker 1970. Parasite Fauna of Reptiles of South Kazakhstan and its Role in Circulation of Some Helminths of Man and Animals–Autosynopsis of Ph.D. Dissertation in Biology, Alma-Ata [in Russian]). This, together with these recent findings from tissue samples, suggests an alternative hypothesis that the trophic stages may be able to invade tissues. Undoubtedly, the manner in which the *Proteromonas* organisms infect reptiles requires further investigation. Further data are also needed regarding its prevalence and infection dynamics within other *A. ocellifera* populations, as well as other reptiles in South America. Finally, the 18S rRNA fragment amplified is too slow evolving to be very useful to interpret the diversity between specimens. The use of faster evolving markers may be helpful in disentangling the systematics of this parasite group.

Our record reinforces the value of using molecular techniques to investigate the diversity of endoparasites, especially in uncommon species. Additionally, it opens a new avenue of investigation regarding parasite diversity in South American lizards.

DJAN ZANCHI-SILVA (e-mail: djanzanchi@gmail.com), **MARIA JULIANA BORGES-LEITE** (e-mail: jborgesleite@gmail.com), and **DIVA MARIA BORGES-NOJOSA**, Núcleo Regional de Ofiologia da Universidade Federal do Ceará (NUROF-UFC), Campus do Pici, Centro de Ciências, Bloco 905, Pici, CEP 60.455-760, Fortaleza, Ceará, Brazil (e-mail: dmbnojosa@yahoo.com.br); **DAVID JAMES HARRIS**, CIBIO, Centro de Investigação em Biodiversidade e Recursos Genéticos, Campus Agrário de Vairão, 4485-661 Vairão, Portugal (e-mail: james@cibio.up.pt).

***ANOLIS EQUESTRIS* (Cuban Knight Anole). PREY.** *Anolis equestris* is native to Cuba and was introduced to Florida, USA (Meshaka et. al. 2004. The Exotic Amphibians and Reptiles of Florida. Krieger Publishing Co., Malabar, Florida. 166 pp.). This species is considered an opportunistic omnivore and is known to consume fruits, seeds, insects, and small vertebrates (Meshaka et al. 2004, *op. cit.*; Camposano et al. 2008. Iguana 15:212–219). *Anolis equestris* is primarily arboreal and diurnal, tending to perch on tree trunks from mid-morning to late afternoon (Meshaka et al. 2004, *op. cit.*). This species has been observed consuming lizards of other exotic species in southern Florida, including those with which it lacks a coevolutionary history, such as *A. distichus* (Stroud 2013. Herpetol. Rev. 44:661) and *Hemidactylus garnotii* (Meshaka et al. 2004, *op. cit.*).

Hemidactylus mabouia (the Tropical House Gecko or Wood Slave) is native to Africa and has been introduced to many locations, including southern Florida, USA (Meshaka et al. 2004, *op. cit.*). *Hemidactylus mabouia* occupies edificarian and arboreal habitats and is abundant and widely distributed in southern Florida (Krysko and Daniels 2005. Carib. J. Sci. 41:28–36). While this species is primarily nocturnal, it is occasionally observed basking during the day (Meshaka et al. 2004, *op. cit.*). An *A. equestris* has been observed with a gecko identified as *H. mabouia* in its mouth (Nicholson and Richards 1999. Anolis Newsletter V:95–98). However, consumption was not confirmed, and *Hemidactylus* geckos are difficult to identify without a specimen in hand (Krysko and Daniels 2005, *op. cit.*). Here we report a predation event of *A. equestris* on *H. mabouia*.

On 18 September 2016 at approximately 1100 h, we observed an adult *A. equestris* completely consume a lizard while perched at a height of ~2 m on a Gumbo Limbo (*Bursera simaruba*) tree in a remnant forest patch at the Montgomery Botanical Center (25.660°N, 80.283°W; WGS 84). A brief pursuit of the *A. equestris* induced it to regurgitate its prey item, which we collected and identified as *H. mabouia* (Krysko and Daniels 2005, *op. cit.*). The body of the *H. mabouia* showed evidence of trauma from multiple bites and was missing a significant portion of its tail, which the *A. equestris* presumably retained. To our knowledge, this is the first recorded observation of *A. equestris* preying on *H. mabouia*.

CHRISTOPHER J. THAWLEY (e-mail: cthawley@gmail.com), **ANDREW C. BATTLES** (e-mail: andrewcbattles@gmail.com), **SOZOS N. MICHAELIDES** (e-mail: msozos@gmail.com), and **JASON J. KOLBE**, Department of Biological Sciences, University of Rhode Island, 120 Flagg Rd., Kingston, Rhode Island 02881, USA (e-mail: jjkolbe@uri.edu).

***ANOLIS PULCHELLUS* (Puerto Rican Grass-bush Anole) and *SPHAERODACTYLUS MACROLEPIS* (Big-scaled Dwarf Gecko). PREDATOR-PREY INTERACTION.** Many primarily insectivorous lizards will eat other vertebrates on occasion, a behavior that has been reported in many species of *Anolis*. One unifying generality is that such carnivory is size structured, with the predator usually being substantially larger than the prey (Gerber 1999. *In* Losos and Leal [eds.], Anolis Newsletter V, pp. 28–39. Washington University, Saint Louis, Missouri). Not surprisingly, reports of anole carnivory pertain primarily to middle-sized and larger anoles. Here we report carnivory by a small anole of the species *A. pulchellus*. To our knowledge, this is the first instance of carnivory reported for this species and one of few for any similar-sized anole (the record noted by Henderson and Powell 2009. Natural History of West Indian Reptiles and Amphibians. University Press of Florida, Gainesville, Florida. 495 pp. is based on the observations reported here).

We observed a female *A. pulchellus* (SVL ca. 38 mm) capture and consume a *Sphaerodactylus macrolepis* (SVL ca.18 mm) in the leaf litter at approximately 1430 h on 25 September 2006, on Guana Island, British Virgin Islands, near the head of the Liao Wei Ping Trail at roughly 18.47916°N, 64.57444°W (WGS 84). The anole jumped from a low perch (ca. 20 cm above the ground) to the ground and bit the gecko, which escaped and fled 15–20 cm to the opening of an ant nest. The anole attacked the gecko again, seized it in its mouth and carried it approximately 10 cm up a vine, a distance of 15–20 cm from the site of attack. Initially, the anole held the gecko upside down (i.e., dorsal surface facing down), biting it between the fore and hind limbs on the left side. Eventually the anole worked its grasp posterior to the base of the tail, still on the left side. At this point, parts of both the base of the tail and the left hind limb were in the anole's mouth (Fig. 1). The anole then manipulated the gecko so that it was no longer upside down, but rotated about its long axis by roughly 90 degrees (the ventral surface of the gecko was then oriented forward relative to the anole) at which point it was biting the gecko at the base of the tail and possibly by the left hind limb; the anole eventually manipulated the gecko so that it held it tail-first in its mouth, dorsal side up, at which point the anole proceeded to ingest the gecko tail first (during this time, the tail itself broke off and was carried away by ants, which had been biting the gecko in several places since shortly after it was captured by the anole). Total time from capture to complete ingestion was approximately five minutes.

Fig. 1. Female *Anolis pulchellus* in the process of ingesting a *Sphaerodactylus macrolepis*.

Predation on *Sphaerodactylus* geckos has been reported in anoles of only a few species, none of which are as small as *Anolis pulchellus* (Henderson and Powell 2009. Natural History of West Indian Reptiles and Amphibians. University Press of Florida, Gainesville, Florida. 495 pp.). However, given the size discrepancy between the lizards in these two clades and their extensive coexistence across the Caribbean, we suspect that such interactions may occur with some frequency. Moreover, the high population densities of some *Sphaerodactylus* geckos (e.g., Rodda et al. 2001. J. Trop. Ecol. 17:331–338) and the diurnal activity of several species (Allen and Powell 2014. Herpetol. Conserv. Biol. 9:590–600) suggest that they may be important prey items for anoles.

KEVIN DE QUEIROZ, National Museum of Natural History, Smithsonian Institution, Washington, District of Columbia 20560, USA (e-mail: dequeirozk@si.edu); **JONATHAN B. LOSOS**, Museum of Comparative Zoology and Department of Organismic and Evolutionary Biology, Harvard University, Cambridge, Massachusetts 02138, USA (e-mail: jlosos@oeb.harvard.edu).

***ARISTELLIGER PRAESIGNIS* (Jamaican Croaking Lizard). MAXIMUM SIZE.** *Aristelliger praesignis* is a large, nocturnal, and semi-arboreal sphaerodactylid gecko native to Jamaica, the Cayman Islands, and Swan Island (Schwartz and Henderson 1991. Amphibians and Reptiles of the West Indies. University of Florida Press, Gainesville, Florida. 714 pp.). Although only one *Aristelliger* is currently recognized on Jamaica, there are multiple deeply divergent, species-level taxa within *A. praesignis* as presently construed (Cloud 2013. Unpublished Master's Thesis, Pennsylvania State University, State College, Pennsylvania). Boulenger (1885. Catalogue of the Lizards in the British Museum [Natural History] I. Geckonidae, Eublepharidae,