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ENYALIUS CATENATUS (Wied's Fathead Anole) and STROBILURUS TORQUATUS (Spiny-tail Lizard). PREDATION. *Enyalius catenatus* is a medium-sized lizard found on tree trunks, shrubs, and in the leaf litter (Costa and Bérnills 2018. Herpetol. Bras. 7:11–58; Vanzolini 1972. Pap. Avul. Zool. 26:83–115), whereas *Strobilurus torquatus* is a medium-sized, arboreal lizard frequently observed close to the forest canopy and forest edges (Rodrigues et al. 1989. Rev. Bras. Genet. 12:747–759), and both species occur in the Atlantic Forest from the states of Ceará to Rio de Janeiro, Brazil (Costa and Bérnills 2018, *op. cit.*). *Attila spadiceus* (Bright-rumped Attila) is a common and widely distributed Neotropical flycatcher (Fitzpatrick et al. 2004. In Del-Hoyo et al. [eds.], Handbook of the Birds of the World: Cuckoo-Shrikes to Thrushes, Vol. 10, pp. 170–462. Lynx Editions, Barcelona) that forages in the forest understory up to the canopy and their diet consists mainly of insects and small vertebrates such as frogs and lizards (Skutch 1970. Ibis 113:316–322). Here, we describe the presence of *E. catenatus* and *S. torquatus* in diet of *A. spadiceus* chicks in Brazil.

On 9 November 2018, at 1504 h, at the Estação Ecológica de Murici (ESEC de Murici), Municipality of Murici, Alagoas, Brazil (9.2203°S, 35.8788°W; WGS 84; 457 m elev.), we observed a pair of *A. spadiceus* feeding lizards to two chicks, ca. 7–8 d old, at their nest, that was attached to a rock ca. 2 m above the ground. We observed both parents bring two lizards to the nestlings from a distance of ca. 20 m. At 1518 h the first parent landed at the nest carrying a juvenile *E. catenatus* and fed it to one of the chicks and

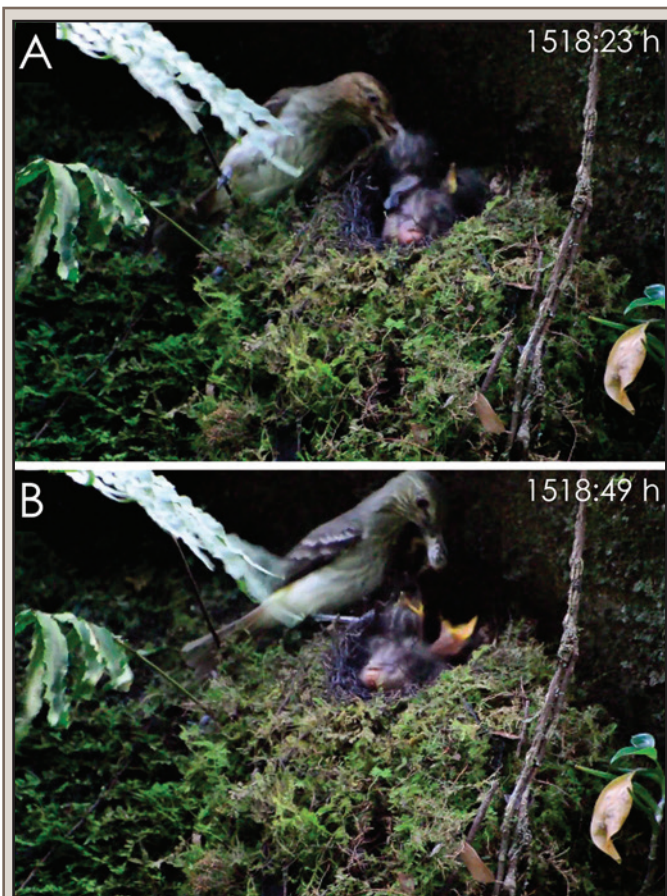


FIG. 1. Predation of *Enyalius catenatus* and *Strobilurus torquatus* by *Attila spadiceus* in the northern Atlantic Forest, Alagoas, Brazil: A) parent 1 delivering juvenile individual of *E. catenatus* to chick 1; B) parent 2 delivering individual of *S. torquatus* to chick 2.

quickly left the nest (Fig. 1A); about 20 sec later the second parent arrived at the nest with a sub-adult *S. torquatus* and gave it to the second chick (Fig. 1B); because there is no sexual dimorphism in this species, we could not differentiate which sex caught which lizard species. Both parent birds remained perched on a nearby tree and watched the chicks consume the lizards. It took 2 min for each chick to swallow their respective lizard's body with the lizard's tails sticking out of their beaks, but the chicks turned around and we could not see them finish ingestion. Small lizards such as *Anolis limifrons* and *Scincella cherriei* have been reported in the diet of *A. spadiceus* chicks from Costa Rica (Skutch 1970. Ibis 113:316–322), but to our knowledge this is the first report of *E. catenatus* and *S. torquatus* in their diet.

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GEKKO HORSFIELDII (Horsfield's Flying Gecko). PREDATION. *Gekko horsfieldii* is a large (up to 80 mm SVL) arboreal gecko associated with lowland dipterocarp forests of southeast Asia, from Myanmar to some of the islands of the Sundas, including Borneo (Das 2010. A Field Guide to the Reptiles of South-east Asia. New Holland Publishers Ltd., London. 376 pp.). Information on its predators are poorly documented, although Macat et al. (2016. Phyllomedusa 15:65–67) reported an attempted predation by the colubrid snake, *Chrysopelea paradiisi*. Here, we report predation on *G. horsfieldii* by a novel bird predator.

On 15 August 2015, at 0813 h, we observed a female Velvet-fronted Nuthatch (*Sitta frontalis*) foraging on a branch covered with thick epiphytic roots and orchids in the canopy of a mixed dipterocarp forest at the Belalong Canopy Walkway, within the Ulu Temburong National Park, Temburong District, Brunei Darussalam (4.5517°N, 115.1603°E; WGS84; 247 m elev.). The weather conditions were bright and overcast, but with good visibility allowing us to film the predation event with a Canon EOS 1D X MkIII camera, mounted with a EF500mm f4/L ISII USM lens, with 1.4x III converter, for a focal distance of 700 mm. While observing the bird we watched it capture, kill, and eventually consume a juvenile *G. horsfieldii* (Fig. 1) at a height of ca. 24 m



FIG. 1. A Velvet-fronted Nuthatch with a freshly killed *Gekko horsfieldii* at Belalong, Brunei Darussalam.

above ground. The nuthatch seized the lizard by the back of the head just behind the eyes; while subduing the lizard its tail fell off before the bird swallowed it headfirst. There are two syntopic *Gekko* species in this area, *G. horsfieldii* and *G. kuhli*, but we feel confident in our identification based on our recordings. *Gekko horsfieldii* has distinct W-shaped dorsal bars, pale labials, and lacks a broad terminal caudal flap; whereas *G. kuhli* possess a terminal caudal flap and lacks W-shaped dorsal bars.

This observation is novel for two reasons: it is the first report of avian predation of *G. horsfieldii*, and it is the first record of a Velvet-fronted Nuthatch preying on a gecko. Nuthatches are largely predators of insects and their larvae (Kwok 2009. *Acta Ecol. Sinica* 29:341–346), some species are known to eat plants, including seeds (Mohammadi et al. 2016. *J. Zool.* 299:116–124), but to our knowledge little is known about lizards in their diet.

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GLAUCOMASTIX ABAETENSIS (Sand Dune Whiptail Lizard).

DIET. *Glaucomastix abaetensis* is a diurnal teiid endemic to resting dune ecosystems on the north coast of Bahia and is distributed between the towns of Salvador and Conde, Brazil (Rosário et al. 2019. *Zootaxa* 4624:451–477). Like other teiids, they are active foragers and primarily prey on invertebrates (Dias and Rocha 2007. *Braz. J. Biol.* 67:41–46; Travassos et al. 2015. *Salamandra* 51:171–181). Here, we report a novel observation of *G. abaetensis* feeding on a reptile egg.

On 6 January 2020, at 0923 h, we saw an adult *G. abaetensis* digging into a slope along a road cut near Condominium Busca Vida, near the town of Camaçari, Brazil (12.8567°S, 38.2625°W;

WGS 84; 15 m elev.). We watched the lizard actively forage for 3 min, by moving its head and tongue flicking the soil, a common foraging behavior for teiids (Sales and Freire 2015. *J. Herpetol.* 49:579–585). Occasionally the lizard would stop at one specific site where it then began to dig into the substrate. After digging for ca. 6 min, the lizard emerged from the hole with an egg in its mouth, and it then moved out of view where it presumably consumed it. We waited 30 min to see if the lizard would return before approaching the hole and found it had excavated a nest with one remaining egg (19 mm long, 11 mm wide; Fig. 1). Due to its shape, texture, flexibility, and location of where it was deposited, we believe it was a reptile egg (Packard et al. 1977. *Biol. Ver.* 52:71–105; Packard et al. 1982. *Herpetologica.* 38:136–155; Schleich and Kästle 1988. *Reptile Egg-Shells SEM Atlas*. Gustav Fischer Verlag, New York, New York. 123 pp.). Furthermore, teiid egg size and characteristics are relatively unique and can be used to distinguish their eggs from those of other syntopic lizard subfamilies (Castro et al. 2012. *Bahia Anál. Dados* 22:561–579; Menezes and Rocha 2014. *An. Acad. Bras. Cienc.* 86:707–722), and we suspect it may have been a conspecific, or that of another teiid species.

Egg eating has been reported in other South American teiids, but because eggs are soft and digest quickly, are suspected to be an under-reported food item in standard stomach content diet studies (Mourthé 2010. *Herpetol. Rev.* 41:232–233; Albuquerque et al. 2018. *J. Herpetol.* 52:145–155). To our knowledge this is the first record of vertebrate egg eating in *G. abaetensis* and we emphasize the importance of direct field observations for a better understanding of lizard diets.

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HEMIDACTYLUS TURCICUS (Mediterranean Gecko). ENDO-

PARASITES. *Hemidactylus turcicus* is a native of western India, Somalia, the Middle East, and the Mediterranean region and is one of the most successful invasive species in the world (Kraus 2009. *Alien Reptiles and Amphibians: A Scientific Compendium and Analysis*. Springer Verlag, Berlin. 563 pp.). Since its introduction into the USA via the Port of Miami, Florida, around 1915, the range of this gecko has increased to include much of southern North America from Virginia and Florida west to California (Meshaka et al. 2006. *Herpetol. Conserv. Biol.* 1:145–150). A summation of the helminth parasites of both introduced and native *H. turcicus* was provided by McAllister and Bursley (2016. *Acta Parasitol.* 61:576–584). Here, we document a new host record for a tapeworm parasite of an introduced *H. turcicus*.

A single adult female *H. turcicus* (50 mm SVL) was collected by hand on 19 September 2020 from Mission Viejo, Orange County, California, USA (33.58938°N, 117.6643°W; WGS 84; 120 m elev.). We euthanized the lizard and preserved it in 10% formalin, and fecal samples were collected and placed in 2.5% potassium dichromate. Following fecal flotation in Sheather's sugar solution (specific gravity = 1.30), the flotation concentrate adhering to a coverslip was placed on a glass slide, examined under light microscopy, and found to contain cestode ova. We then removed

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FIG 1. Nest excavated by the *Glaucomastix abaetensis* and remaining egg in sandy soil near Camaçari, Brazil.