An instance of a brown anole (*Anolis sagrei* Duméril & Bibron, 1837) feeding on the sap of a banana plant (*Musa sapientum* L.)

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The brown anole (*Anolis sagrei*) is primarily a predator of arthropods and some small mollusks (Rodriguez Schettino, 1999; Huang et al., 2008; Norval et al., 2010), although some large males occasionally also consume smaller lizards (Campbell and Gerber, 1996; Gerber, 1999; Nicholson, Paterson and Richards, 2000; Norval, 2007; Krysko and Wasilewski, 2012). On rare occasions, individuals of *A. sagrei* have also been observed feeding on fruit (Holbrook, 2012). Herein we report on an *A. sagrei* specimen in Taiwan, where this species is an exotic invasive lizard species (Norval et al., 2002; Chang, 2007), feeding on sap.

On March 08, 2013, at ca. 10:30, an adult male *A. sagrei* (ca. 60 mm SVL) was observed near the base of a wooden pole, which was planted at a 45º angle to support a banana plant (*Musa sapientum* L.) that was growing in a agricultural field in Santzepu, Sheishan District, Chiayi County, Taiwan (23º25’42”N, 120º28’31”E). When attempts were made to get a close-up photograph of the lizard, it fled up the support pole and onto the *M. sapientum* pseudostem, where it positioned itself in a typical head-down perching posture. When the lizard was approached again for a close-up photograph, it engaged in head-bobbing, push-ups, and dewlap extension displays for ca. 30 seconds (Fig. 1). The lizard then lowered its head and licked the sap that was flowing down the *M. sapientum* pseudostem, from where a leaf was cut. After ca. 10 seconds, the lizard discontinued the licking of the sap and leapt to a neighboring *M. sapientum* pseudostem, where it sought shelter among dead leaves.

The observed display behavior resembled the pursuit-deterrent signals of *Anolis cristatellus* (Leal, 1999), and probably had the same function, so most likely had little to do with the actual feeding event. Irrespective of whether the male *A. sagrei* described herein utilized the sap as a source of nourishment or hydration, observations of such behavior should be reported. Several anole species have been implicated in frugivory (Herrel et al., 2004; Vega-Castillo and Puente-Rolón, 2011) and/or nectivory (e.g. Losos, 2009; Colón Archilla, 2010, and the references therein). And although several lizards, like some geckos (Snyder, Snyder and Bauer, 2008; and the references therein), and the northern curly-tail lizard (*Leiocephalus carinatus*) (Smith, Pieper and Iverson, 2008), have been reported to feed on sap, to our knowledge, this is the first reported instance of an *A. sagrei* specimen feeding on *M. sapientum* sap.

During gut content examinations of preserved specimens, the presence of floral parts can be an indication of nectivory, but nectar and sap would be virtually undetectable (Snyder, Snyder and Bauer, 2008). Therefore, in order to improve our understanding of lizard diets and foraging behavior, the description of feeding events in which lizards are observed consuming nectar, sap, or other liquids, should be reported in as much detail as possible.

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References


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