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## Geographic Distribution: *Anolis sagrei* (Brown Anole). USA: Arizona.

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## SQUAMATA — LIZARDS

**ANOLIS SAGREI (Brown Anole).** USA: ARIZONA: MARICOPA CO.: Phoenix, 8640 S 19<sup>th</sup> Ave (33.367°N, 112.101°W; WGS 84). 7 April 2022. Andrew T. Holycross. Verified by Thomas Jones. Arizona State University (ASUHEP 000646; photo voucher). New state and county record (Meshaka et al. 2022. *Exotic Amphibians and Reptiles of the United States*. University Press of Florida, Gainesville, Florida. xiii + 245 pp.). An adult *A. sagrei* was photographed on a passion fruit vine (*Passiflora* sp.) trellis on the outdoor grounds of a plant nursery in south Phoenix. We asked the nursery employees about the lizard, and they reported that these lizards have been commonly seen on the outdoor nursery grounds for over three years, since 2019, and have observed mating behavior, suggesting it is an established population.

PIMA CO.: 3384 E River Rd, Tucson (32.276°N, 110.924°W; WGS 84). 1 May 2022. Addie Leimroth. Verified by Thomas Jones. ASUHEP 000618 (photo voucher). Multiple *A. sagrei* were observed inside a greenhouse and one adult male outside the greenhouse at a plant nursery. On 3 May 2022, two of us (RDB, KEH) collected specimens (ASUHEC 037778–037781) from this location including two males (52, 57 mm SVL) and two females (42, 45 mm SVL). During the 3 May 2022 visit, we saw more than 30 *A. sagrei*, both juveniles and adults, over ca. 2 h, verifying they are abundant and reproducing. Nursery employees reported seeing the lizards for the last four years, since 2018, in the greenhouses, but not outside. We confirmed this nursery receives plant shipments from Florida and either stow-away lizards or their eggs buried in the potted plant soil resulted in this introduction (Norval et al. 2013. *IRCF Rept. Amphib.* 20:199–202).

We were originally alerted to the possible presence of *A. sagrei* in Arizona when two of us (LPC, DNR) discovered an adult male (ASUHEC 037387; 45 mm SVL) in a cold-packed crate of cantaloupes (*Cucumis melo melo* var. *cantalupo*) packed in (and shipped from) Arizona by a California company. The shipment was intercepted on 17 September 2021 at the Live Oak, Agricultural Interdiction Station No. 6B, U.S. Interstate 10 Eastbound, Suwannee County, Florida, USA (30.3492°N, 83.1541°W; WGS 84). The destination of the melons was a produce company in Melbourne, Brevard County, Florida, but the origination of the shipment in Arizona suggests *A. sagrei* might occur at or near a shipping center or agricultural field in Arizona.

These observations represent the first vouchered records of *A. sagrei* at two locations in Arizona, one in Tucson and one in Phoenix (Meshaka et al. 2022, *op. cit.*), and raise the possibility of a third population at the unspecified location of a shipping center or agricultural field in Arizona. This species has a high probability of becoming established in conducive microclimates in newly invaded regions (Latella and Poe 2009. *Biol. Invasions* 13:845–856), and their presence in multiple sites in Arizona for at least the last 3–5 years suggests it's becoming established. For example, since 2019 there have been 13 *A. sagrei* records in Arizona reported on iNaturalist ([www.inaturalist.org](http://www.inaturalist.org), 17 Aug 2022), primarily from locations near the vouchered localities reported here. *Anolis sagrei* is a Cuban and Bahamian species that is among the most successful invasive lizard species and has

become established in numerous countries in the Americas and Asia (Kolbe et al. 2007. *Conserv. Biol.* 21:1612–1625; Kraus 2009. *Alien Reptiles and Amphibians: A Scientific Compendium and Analysis*. Springer, Dordrecht. x + 563 pp. + CD ROM). In the USA, nonindigenous populations exist in South Carolina, Georgia, and Florida, westward through the Gulf states and into Texas, with additional populations in Hawaii and southern California (Meshaka et al. 2022, *op. cit.*). It is unclear if the Arizona *A. sagrei* will spread beyond the urban areas where they currently occur, or if they will impact native lizard species, but there is evidence that *A. sagrei* are displacing native *Sceloporus occidentalis* in Orange County, California (Fisher et al. 2020. *PeerJ* 8:e8937).

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