

PEST ALERT

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Bambusaspis minuta (Takahashi), a bamboo pit scale detected in central Florida

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INTRODUCTION

On September 1, 2024, FDACS-DPI inspector Chase Groninger collected pit scale insects on bamboo leaves (*Bambusa multiplex* (Lour.) Raeusch. ex Schult.f.) from a garden in Lakes Wales, Florida. These unknown diminutive pit scales were subsequently slide-mounted and identified as *Bambusaspis minuta* (Takahashi) (Hemiptera: Asterolecaniidae), a **new western hemisphere record**. *Bambusaspis minuta* is a species of pit scale of Asian origin, recorded from China, India, Japan, Taiwan, Thailand and Vietnam (Russell 1941; García Morales et al. 2016). This pit scale had not been detected in Florida previously to our knowledge and this is the first collection from the Florida landscape in our records (Polk County, 09032024-08858). Additional specimens were collected from a garden in Orlando, Florida in October 2024 (Orange County, 10292024-10708). Like other members of its genus, this species specializes on bamboos, including *Bambusa* spp. and *Dendrocalamus* spp. (Russell 1941; García Morales et al. 2016).

SURVEY AND IDENTIFICATION

This bamboo pit scale species settles to feed on the underside of the host leaves. Small chlorotic spots caused by the scale's feeding may be visible from the tops of leaves. The test, or scale cover, is transparent, yellow to light brown in color, circular or ovoid in shape, and often has a few long, dorsal glassine wax protrusions (Fig. 1). The test of this tiny species measures merely 0.50–0.75 mm in length. The adult female body inside the test is legless, round and yellow in color, often with a dorsal pair of orange spots, and measures 0.40–0.75 mm long.

An additional four species of *Bambusaspis* pit scales have been recorded on bamboo in Florida (García Morales et al. 2016). The external morphology of these species is very similar, and specimens should be slide-mounted to confirm identification. *Bambusaspis minuta* adult females are generally much smaller than the other bamboo pit scales found in Florida, but size is not a reliable way to distinguish species (e.g., immatures of the larger species will also be small). Slide-mounted specimens can be differentiated from other *Bambusaspis* species in Florida by having: only a few large eight-shaped pores on the dorsum, a single row of marginal eight-shaped pores, marginal quinquelocular pores, elongate dorsal tubular ducts, the apex of abdomen with four setae, and the anal ring with six setae (Fig. 2). Specimens can be sent to DPI's Entomology section for positive identification. Forms and instruction for sample submission can be found at www.FDACS.gov/DPIsamples.

REFERENCES

- García Morales, M., Denno, B.D., Miller, D.R., Miller, G.L., Ben-Dov, Y., Hardy, N.B. (2016). ScaleNet: A literature-based model of scale insect biology and systematics. Database. doi: 10.1093/database/bav118. <http://scalenet.info>.
- Russell, L.M. (1941). A classification of the scale insect genus *Asterolecanium*. United States Department of Agriculture, Miscellaneous Publications 424: 1–319.



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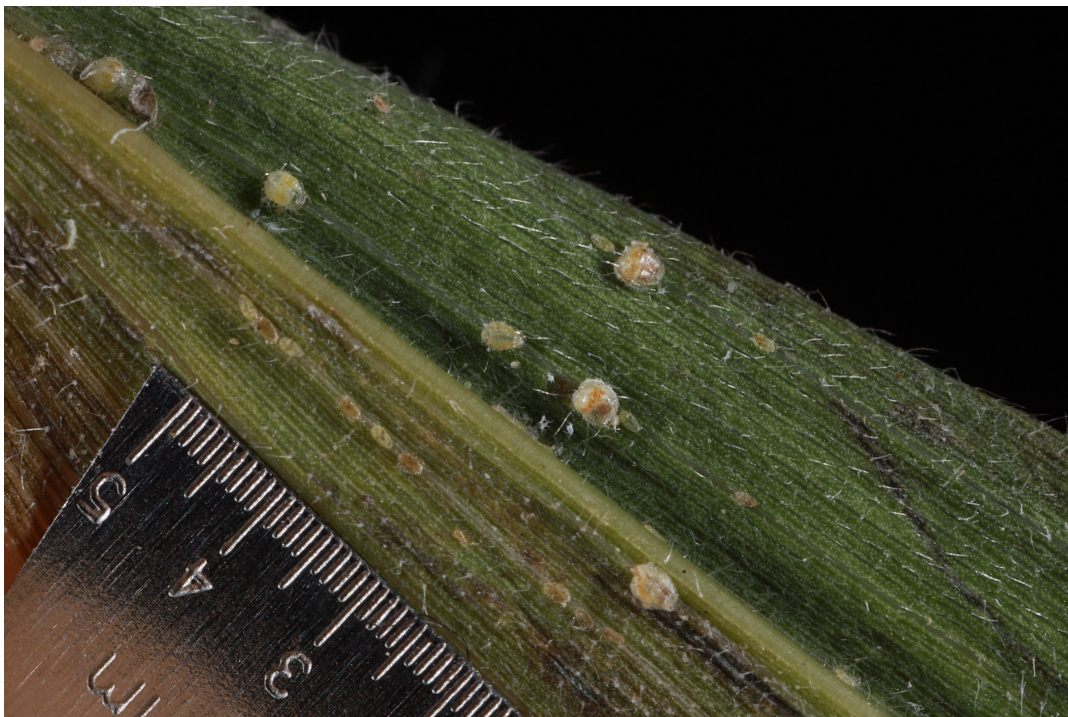


Figure 1. *Bambusaspis minuta* (Takahashi) adult females and first-instar crawlers that have settled at their feeding sites. The scale bar represents millimeters.
Photo by Erin C. Powell, FDACS-DPI.



Figure 2. A slide-mounted adult female of *Bambusaspis minuta* (Takahashi).
Photo by Erin C. Powell, FDACS-DPI.