
***Poliaspoides formosana* (Takahashi) (Hemiptera: Diaspididae), an adventive armored scale on bamboo in Florida, USA¹**

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INTRODUCTION: The armored scale genus *Poliaspoides* MacGillivray contains four species, three of which are thus far recorded exclusively from various bamboo species (Poaceae) (Ulgenturk and Pellizzari 2013). The genus appears to be an Oriental and/or Australasian endemic, but *P. formosana* (Takahashi) now occurs in the Afrotropical region, including continental Africa (Kenya, Mozambique and South Africa) and the islands of Mauritius and Reunion (Miller *et al.* 2013a). In November 2011 and August 2012, specimens of *P. formosana* were collected from bamboo at a nursery in Charlotte County, and at a second nursery in January 2013 in Miami-Dade County, and confirmed by Dug Miller, Systematic Entomology Laboratory (retired) as a NEW HEMISPHERE RECORD. Several of the Charlotte County samples were also infested with an undescribed species of armored scale in the genus *Froggattiella* MacGillivray, a small genus of five bamboo-infesting species that also has a primarily Oriental distribution (Aono 2009).

BIOLOGY AND DESCRIPTION: Female *Poliaspoides formosana* are highly variable in body length. Adults are identified by the presence of a vulva and perivulvar pores (Fig. 1A). The body wall and thus the shape of the scale undergo extreme expansion as the eggs develop (Fig. 1B). The body wall then contracts (Fig. 1C) as the crawlers are subsequently expelled. Specimens of both *P. formosana* and the undescribed species of *Froggattiella* were tightly embedded between the bamboo leaf petiole and stem, often in close proximity, and will be difficult to find unless the leaf is peeled from the stem. Similar species known from Florida, such as *Froggattiella penicillata* (Green) and species in the genus *Odonaspis* Leonardi, develop on different parts of the bamboo plant, such as around the nodes, and are more obvious. *Poliaspoides simplex* (Green), thus far known only from India and Sri Lanka and *Poliaspoides bambusae* Ulgenturk and Pellizzari, described from indoor ornamental bamboo plants in Turkey, are the only other *Poliaspoides* known from bamboo (Miller *et al.* 2013b, c). Bamboo plants are very common in international plant trade, which has resulted in the transport of many bamboo pests. The recently described *P. bambusae* is yet another example of a species that is almost certainly native to eastern or southern Asia, but was first described from another region, in this case Eurasia (Turkey).

DISTRIBUTION: In the United States, *P. formosana* is known from only two nurseries (Charlotte and Miami-Dade). Wider inspection of *Bambusa* and related genera throughout the state will almost certainly reveal a wider distribution. In particular, the plant region where the leaf blade and petiole deviate from the stem should be peeled away, and the inner surface of the petiole inspected for elongate, paper-like scale covers.

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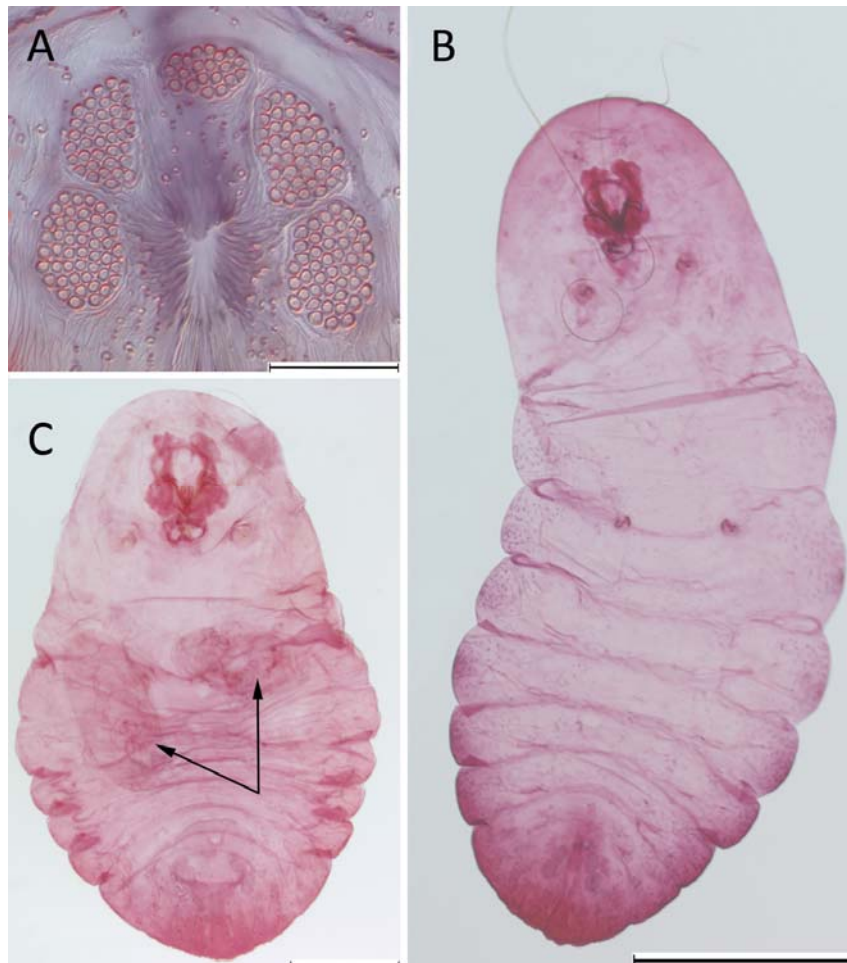


Fig. 1. Female *Poliaspoides formosana*. (A) close-up of perivulvar pores and vulva, Scale-bar = 50 µm; (B) greatly distended female, Scale-bar = 500 µm; (C) contracted female, still harboring crawlers (arrows), Scale bar = 200 µm. Photograph credit: Ian Stocks²