



First North American record of the Palaearctic rhinophorid *Stevenia deceptoria* (Loew) (Diptera: Rhinophoridae)

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The Rhinophoridae (Diptera) have a cosmopolitan distribution and a known fauna of about 150 species (Cerretti & Pape 2007). So far as known, all species are parasitoids of terrestrial woodlice (sow bugs) of the order Isopoda (Oniscoidea) (Pape 2010). Female rhinophorids lay eggs in the vicinity of potential hosts and the planidial first instars parasitize sow bugs as they pass by (Pape 1998).

The only rhinophorids native to North America belong to the genera *Apomorphyto* Cerretti, Lo Giudice & Pape (with one described species from Costa Rica and an undetermined species from Nicaragua) and *Bezzimyia* Townsend (Pape 2010; Cerretti *et al.* 2014). *Bezzimyia* is a mostly Neotropical genus of 17 known species with two species reaching the southern United States (Texas and Arizona) (Pape & Arnaud 2001). Recently, the monophyly of *Bezzimyia* was called into question but the limits of the genus have yet to be formally revised (Cerretti *et al.* 2014). Two rhinophorids are well known as introductions from the Palaearctic Region, *Melanophora roralis* (Linnaeus) and *Phyto discrepans* Pandellé, with the former widespread in eastern North America, West Indies and South America (Crosskey 1977; Pape 2010) and the latter known only from Newfoundland (Canada) (Wood 1987). A key to separate the two species was given by Wood (1987).

The genus *Stevenia* Robineau-Desvoidy is currently known from 23 species, all native to the Old World and most diverse in the West Palaearctic Region (Cerretti & Pape 2007). One species native to Europe and North Africa, *Stevenia deceptoria* (Loew), was reported recently as an introduction to Argentina by Mulieri *et al.* (2010). The authors recorded the species from several locations within Buenos Aires Province and hypothesized that it became established through the introduction of parasitized woodlice originating from the Palaearctic Region. Introduced woodlice are common in the New World (Jass & Klausmeier 2000) and parasitized immigrants or transported puparia most likely account for the presence of all three exotic rhinophorid species in North America. Mulieri *et al.* (2010) summarized the Palaearctic distribution of *S. deceptoria*, gave locality records of the species in Argentina, and provided a key to the five genera of Rhinophoridae known from the New World.

Here we report another finding of *Stevenia deceptoria* in the Americas, this time from Ohio in North America. All records are from a single locality, the backyard of author GAD. Specimens were caught in a six metre Malaise trap (BioQuip® Products, Inc.) and killed in the trap head using a small piece of Hot Shot® No-Pest® Strip [active ingredient 2,2-dichlorovinyl dimethyl phosphate 18.6%]. Trap samples were frozen and later sorted, with selected Diptera subsequently pinned and labeled. The first two specimens of *S. deceptoria* to be detected were removed, pinned, and labeled by JEOH and identified as *S. deceptoria* by PC (Cerretti & Pape 2007) (one of these specimens is shown in Fig. 1). Additional specimens were later found in earlier and later samples by GAD. Specimens are housed in the Canadian National Collection of Insects, Ottawa, Canada (CNC) and the personal collection of Gregory Dahlem, Cincinnati, USA (GAD).

Specimen data. *Locality:* United States, Ohio, Hamilton County, Anderson Township, 39°4.93'N 84°24.37'W [Cincinnati], suburban backyard, coll. G.A. Dahlem. *Dates and specimens:* 28.v.2013, 3 ♀♀ (GAD); 30.v.2013, 1 ♂ (GAD); 12.vii.2013, 2 ♀♀ (GAD); 4.viii.2014, 1 ♀ (GAD); 27.v.2015, 1 ♀ (CNC); 5.vi.2015, 1 ♀ (CNC); 22.vi.2015, 2 ♀♀ (GAD); 23.vi.2015, 1 ♀ (GAD); 24.vi.2015, 2 ♀♀ (GAD).

The backyard habitat where specimens of *S. deceptoria* were captured is rectangular in shape and about 1050 square