



SHORT NOTE

First North American Records of the Old-World Tramp Ant *Sylophopsis sechellensis* (Hymenoptera: Formicidae)

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Abstract

Sylophopsis sechellensis (Emery) (formerly *Monomorium sechellense*) (Hymenoptera: Formicidae) is a small, inconspicuous ant species native to the Old-World tropics. *Sylophopsis sechellensis* is widespread in Asia and Australia, and on islands the Indian, Pacific, and Atlantic Oceans. In the New World, all published records come from West Indian islands. Here, I report the first records of *S. sechellensis* from North America: from four sites in Miami-Dade and Broward counties, Florida, more than 1500 km from the closest records in the West Indies. The ants of Florida have been well-studied in the past, so *S. sechellensis* appears to be a recent arrival.

Sylophopsis (Hymenoptera: Formicidae) is a genus of small, inconspicuous ants, with 21 valid species (Bolton 2020). Most *Sylophopsis* species are known only from the Afrotropical bioregion. *Sylophopsis sechellensis* (Emery), however, has achieved broad distribution in Asia and Australia, and on islands the Indian, Pacific, and Atlantic Oceans (Wetterer & Sharaf, 2017). In the New World, all published records of *S. sechellensis* come from West Indian islands (Wetterer & Sharaf, 2017). Here, I report the first records of *S. sechellensis* from North America.

Sylophopsis workers are small, monomorphic, yellow to light brown in color, and have 12-segmented antennae with 3-segmented terminal clubs (Bolton, 1987). *Sylophopsis* workers resemble small *Solenopsis* thief ants. However, the two genera can be distinguished easily because *Solenopsis* workers have 2-segmented terminal clubs. Like most *Sylophopsis* species, *S. sechellensis* workers have tiny eyes. One character,

however, that distinguishes *S. sechellensis* from other members of the genus is that its entire mesopleuron is matte and reticulate punctate, whereas in all other described *Sylophopsis* species the mesopleuron is glossy and smooth. This character easily separates *S. sechellensis* from the only other *Sylophopsis* species known from the New World, *Sylophopsis subcoeca* Emery.

Materials and Methods

I surveyed ants at sites in peninsular Florida primarily using two methods: vegetation beating for arboreal ants and leaf litter extraction for subterranean ants. For the litter samples, I sampled mostly under slash pine (*Pinus elliottii* Engelman), where the leaf litter is typically 10-30 cm thick. In earlier research, Wetterer et al. (2018) found a non-native trap jaw ant, *Anochetus mayri*, was common in slash pine litter in southeastern Florida.



Results

I collected *Sylophopsis sechellensis* through litter extraction at four sites in southeast Florida (Fig 1), spanning 46 km from southwest to northeast (geo-coordinates and dates in parentheses): Miami-Dade Co.; University Park; FIU Preserve, slash pine (25.755, -80.379, 23-Sep-19). Broward Co.; Fort Lauderdale; 28th Terrace, vacant lot, slash pine (26.093, -80.181, 25-Sep-19). Miami-Dade Co.; Westview; NW 107th Street, vacant lot, leaf litter (25.8721, -80.2267, 17-Nov-19). Broward Co.; Fort Lauderdale; Sailboat Bend Park, slash pine (26.1179, -80.1607, 19-Nov-19). Mostafa

Sharaf (King Saud University, Saudi Arabia) confirmed my identification of these *Sylophopsis sechellensis* specimens. Pinned vouchers will be deposited in the United States National Museum, the Florida State Collection of Arthropods, Archbold Biological Station, and the personal collections of Mostafa Sharaf and James K. Wetterer.

Wetterer and Sharaf (2017) reported *S. sechellensis* from 12 West Indian islands (Barbados, Guadeloupe, Grenada, Martinique, Mona, Puerto Rico, St Croix, St Lucia, St Martin, St Thomas, St Vincent, and Trinidad). Subsequently, I re-examined specimens I collected at Montpellier Botanical Gardens on Nevis (17.123, -62.595, 14-May-07) and determined

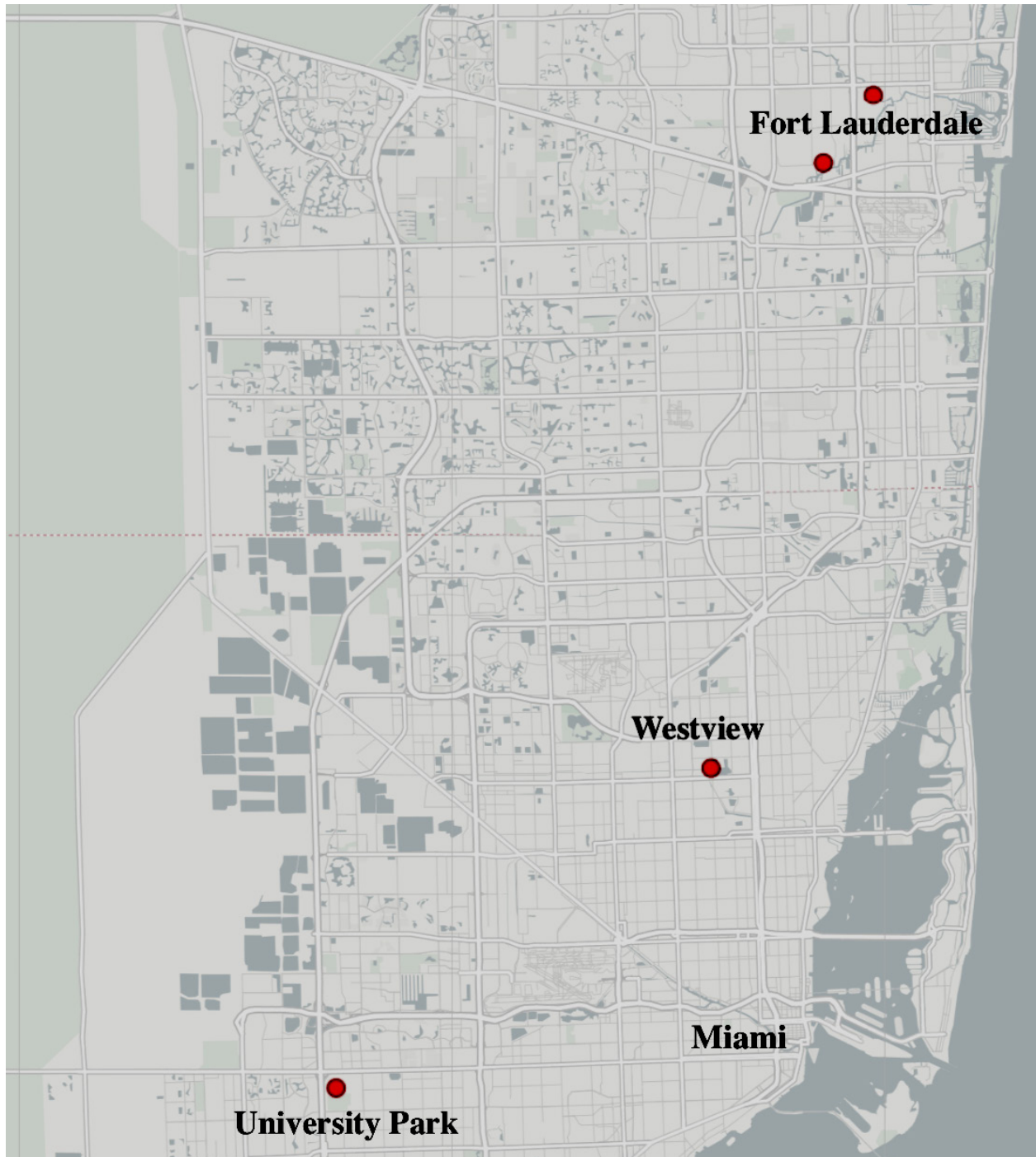


Fig 1. Records of *Sylophopsis sechellensis* in Florida (map made using carto.com).

them to be a mix of both *S. sechellensis* and *S. subcoeca*. In addition, although Deyrup (2016) reported that he collected *S. subcoeca* on Dominica, these specimens (Cabrits National Park; 15.587, -61.474; 2-May-2006) were actually misidentified *S. sechellensis* (M. Deyrup, pers. comm.).

Discussion

Syllophopsis sechellensis has widespread records from the Old-World tropics and subtropics, particularly from islands (Wetterer & Sharaf, 2017). *Syllophopsis sechellensis* is certainly exotic to the New World, where it was first found in 2003 on the island of Barbados (Wetterer et al., 2016). *Syllophopsis sechellensis* is now known from 14 West Indian islands (see Results). The first North American records of *S. sechellensis*, which I report here, are from four sites in Miami-Dade and Broward counties, southeast Florida, more than 1500 km from the closest records of this species in the West Indies. The ant fauna of Florida has been well-studied in the past (Deyrup, 2016), so *S. sechellensis* appears to be a recent arrival.

Because it is small and subterranean, *S. sechellensis* can be easily overlooked and it may have a broader range in the New World than is currently known. Although all known records of *S. sechellensis* in the New World are relatively recent, some earlier specimens of *S. sechellensis* from the New World may have been misidentified as *S. subcoeca* (see Results). How far *S. sechellensis* will spread in Florida remains to be seen. *Syllophopsis sechellensis* is not known as a pest species and it seems unlikely that it will become one. It is just one more addition to the growing list of non-native ant species with established populations in Florida.

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