

***Oecetis inconspicua* (Walker) (Trichoptera: Leptoceridae) added to the caddisfly fauna of Monroe County, Florida**

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ABSTRACT.—The first collection of *Oecetis inconspicua* (Walker) (Trichoptera: Leptoceridae) from the Florida Keys (Monroe County, Florida) is reported. Specimens were collected from Flamingo Island (Marathon), Key Largo, and Long Key. This is the fifth caddisfly species known from the Florida Keys and the only species not in the family Hydroptilidae.

Keywords: geographic distribution; island; surveillance; aquatic insect; species inventory

INTRODUCTION

The Florida Keys Mosquito Control District maintains a surveillance program to monitor species composition and relative abundance of the mosquitoes of the Florida Keys, Monroe County, Florida. Examination of bycatch in light traps set for mosquito control surveillance has revealed a number of new national, state, county, and locality records for a number of arthropod species, including potential agricultural pests (Hribar, 2020). Reported here are recent collections of a new county record for a long-horned caddisfly (Trichoptera: Leptoceridae), *Oecetis inconspicua* (Walker), only the fifth caddisfly species known from the Florida Keys.

MATERIAL AND METHODS

Light traps (Clarke Mosquito Control, St. Charles, IL) were placed weekly in known mosquito habitats, always in the same site and position. Traps are deployed in the late afternoon and retrieved the following morning. After mosquitoes are sorted and counted, other organisms may be examined. The species determination by AKR was based on the examination of the genitalia and its close match with published figures. All specimens were deposited into the aquatic insect collection at Florida A&M University, Tallahassee, an affiliate of the Florida State Collection of Arthropods.

RESULTS

Oecetis inconspicua (Walker) (Trichoptera: Leptoceridae) was collected in light traps on three different dates from three different islands. Collection data for the

new records is as follows with measurements taken from anterior margin of head to wing tip:

USA: Florida: Monroe Co.: Flamingo Island (Marathon), 3 Sep 2019, V. Seaverns, 1 male (6.75 mm); Long Key, 23 Nov 2020, K. Pointer, 2 females (6.25–6.50 mm); Key Largo, 1 Dec 2020, L. Frishman, 1 male (6.50 mm).

DISCUSSION

Oecetis inconspicua is widely distributed throughout Canada, the United States, and islands of the Caribbean, and extends south through Mexico and Central America to the Amazon Basin of Brazil and Bolivia (Botosaneanu, 2002; Holzenthal and Calor, 2017; Rasmussen and Morse, 2020). In Florida, it is known to occur throughout the peninsula and panhandle (Pescador et al., 2004). Larvae of *Oecetis* utilize a wide variety of habitats, including lakes, streams, and rivers (Ross, 1944; Floyd, 1995); pupation has been observed on molluscs (Anderson and Vinikour, 1984). Adults of *Oecetis* have been collected in coastal areas which suggests at least some species may be halotolerant (Floyd, 1995). The collection dates suggest that the period of adult activity of *Oecetis inconspicua* in the Florida Keys is later in the year than in more northern areas. In Illinois, adults emerge from May to October (Ross, 1944) and in Oklahoma from April to October (Bowles and Mathis, 1992). Rasmussen (2004) documented the occurrence of *O. inconspicua* adults throughout spring, summer and fall seasons (March to November) in ravine ecosystems in northern Florida. Floyd (1995) and Zhou et al. (2011) presented morphological and genetic evidence that this apparently widespread species is actually a complex of different species.

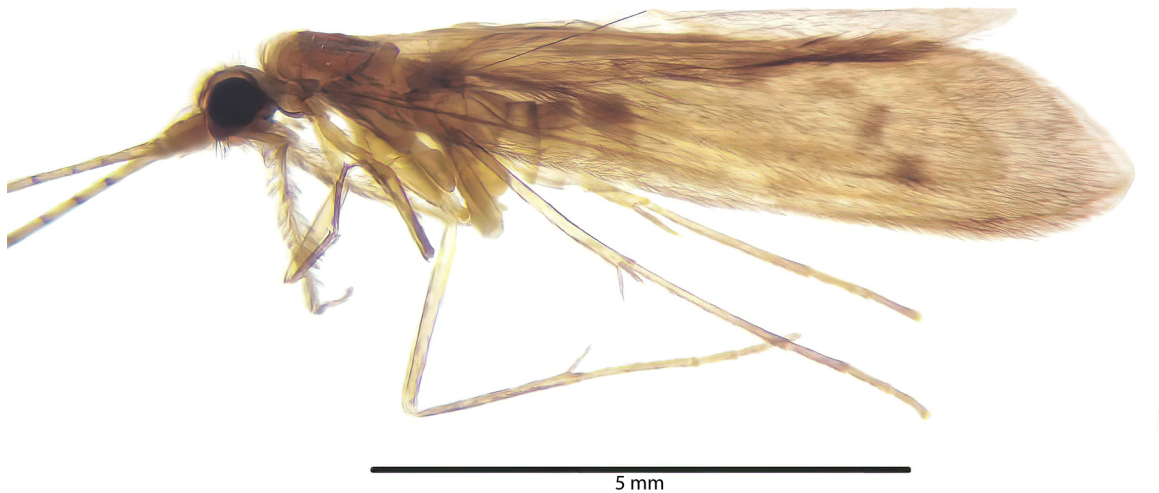


Fig. 1. *Oecetis inconspicua*, male captured from Key Largo, Florida. Photo by Alexander Orfinger.



Fig. 2. Habitat associated with light-trap sites for *Oecetis inconspicua* on Flamingo Island, Marathon (A) and Long Key (B–C), Florida.

Other caddisflies known from Monroe County are all in the family Hydroptilidae, namely: *Orthotrichia cristata* Morton, *Oxyethira glasa* (Ross), *Oxyethira zeronia* (Ross) (reported as *O. walteri* Denning), and *Oxyethira simulatrix* Flint, all collected on Big Pine Key (Blickle, 1962; Harris et al., 2012; Harris and Rasmussen, 2019). The records reported herein are from three different islands and collections were made over a year apart. It is unknown whether *Oecetis inconspicua* is established in the Florida Keys or if it has repeatedly strayed into the island chain.

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