

Mexican Bromeliad Weevil Report

April – June 2014

Teresa M. Cooper¹, Ronald D. Cave¹, and J. Howard Frank²

¹Indian River Research & Education Center, UF, Ft. Pierce, FL

²Entomology & Nematology Department, UF, Gainesville, FL

Research on the host bromeliad effect on the Mexican bromeliad weevil's oviposition rate, growth and development, and survival continues. We have collected much data on pineapple tops as well as on Central American and Florida forms of *Tillandsia utriculata*. We are in the process of organizing and analyzing the data. We will continue with this research over the next several months. The trip to Belize (to examine a Central American *T. utriculata* population coexisting with the Mexican bromeliad weevil) is planned for late October, early November, but no dates have yet been set. I am still in the process of getting permits from Belize and from the U.S. to be able to bring *T. utriculata* samples and plants as well as bromeliad-eating weevils back from Belize to Ft. Pierce, Florida.



Myakka Lake

on 25 June 2014; and one Florida *T. utriculata* was sampled at Horse Corral at Myakka River State Park on 9 July 2014.

All samples were sent to Ryan Moraski at the Florida Museum of Natural History.

Three field trips have been made to Myakka River State Park (25 June and 2 and 9 July 2014) to get *T. utriculata* samples as well as to count the *T. fasciculata* and *T. utriculata* populations in those areas of the park that were monitored for mortality caused by the Mexican bromeliad weevil, from 2001 to 2005. Because this was such a large research site and included so much area and so

We continue to collect samples from Florida *T. utriculata* and Central American *T. utriculata*, with the goal to determine if these two forms of *T. utriculata* are the same species, using DNA analysis. Eight Central American *T. utriculata*, purchased from Russell's Bromeliads, were sampled on 2 April 2014; five Florida *T. utriculata* plants were sampled at Fakahatchee Strand Preserve State Park on 18 June 2014; six Florida *T. utriculata* were sampled at Deer Prairie Slough at Myakka River State Park



Tillandsia utriculata at Clay Gully in Myakka River State Park.

many bromeliads, revisiting and recounting the bromeliad populations will require several trips.

Trips are planned for Wednesdays of each week until all data are collected. There are still *T. fasciculata* and *T. utriculata* plants growing in the park, but at reduced numbers.

T. fasciculata at Clay Gully in Myakka River State Park.



Publications and Presentations

Cooper TM, Frank JH. 2014. Description of the larval instars of *Lixadmontia franki* (Diptera: Tachinidae). Florida Entomologist (In press).

Cooper TM. Identifying and describing insects. Presentation at the Cade Museum in Gainesville, Florida on 23 June 2014.