Program Name: **Enhancement of Fruit Fly Immature Stage ID and Taxonomy**
Project ID: 2509
Lead Agency: Florida Department of Agriculture and Consumer Services Division of Plant Industry

Strategy and Biennial Report Objective Addressed: 2-B.1
Invasive Species Strategic Action Framework Goal: 1

Project Synopsis: This project will build upon our recent accomplishments in collecting a large number of research specimens and a large diversity of *Anastrepha* species (50+) from two different faunistic regions of the Neotropics: the central Andean region (Peru) and Central America (Panama). New collections total over 10,000 adult and immature stage specimens of high quality that are suitable for both morphological and DNA analysis. We discovered previously unknown pest species attacking guava and an edible *Annona* relative in Peru. Additionally, we have sequence data that provides good diagnostic separation of 3 distinct lineages in the *A. fraterculus* complex. The northern (Mexico - Central America) and southern populations (Argentina - southern Brazil) are genetically well defined, while populations in the middle zone (Andean - Amazon regions) may include further taxonomic subdivisions.

This project will increase our capability for rapid and accurate identification of immature stages of pest fruit flies. As invasive fruit flies spread through global commerce in infested commodities, the entire international plant protection community will benefit from better diagnostic data. Domestic beneficiaries include especially the sentinel states of Florida and California which bear the brunt of invasive fruit fly introductions. The survey element of the project will improve offshore agency capabilities in determining economic and alternate host plants of pest species and applying mitigation strategies to export programs, thus reducing numbers of fruit fly colonization events and associated quarantines that negatively impact numerous specialty crops.

Current Status: Ongoing (project up for renewal annually)

Project Schedule:
Start Date: 9/25/2013; 9/25/14
Finish Date: 9/24/2014; 9/24/15

Detailed Project Budget Information

	2014	2015	2016	2017	2018	Balance to Complete	Total
Federal	$164,200	$249,550					
SFWMD							
Local							
Total	**$164,200**	**$249,550**					**$413,750**

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