Program Name: Farm Bill, FY 14
Project Name: Mitigating the ecological and cultural effects of Laurel wilt in the Everglades
Project ID: 2826
Lead Agency: USDA-APHIS and University of Florida

Strategy and Biennial Report Objective Addressed: 2-B.4
Invasive Species Strategic Action Framework Goal: 4

Measurable Output(s): 1. Identify, propagate and preserve culturally significant swamp bay trees in south Florida. 2. Identify, propagate and screen swamp bay germplasm with putative laurel wilt-resistance for Everglades restoration 3. Ensure cross-generational sustainability of genetic resistance and local adaptation in future Everglades restoration plantings

Project Synopsis:
Laurel wilt (LW) is a highly destructive exotic disease that threatens several native Persea species with extinction and poses a major threat to cultivated avocado, a high-value commercial crop. We aim to propagate native Persea species (redbay, P. borbonia, silkbay, P. humilis and swamp bay, P. palustris) and evaluate restoration approaches to meet both ecological and cultural needs. To achieve this goal, we are focusing on the following objectives: 1) propagate and evaluate potentially resistant trees and 2) propagate culturally significant swamp bay and distribute these to the Native American community in Florida. By safeguarding the existing population of culturally significant trees prior to their loss from the disease and developing resistant germplasm for restoration efforts, we provide direct and immediate mitigation against this damaging exotic threat. The deployment of resistant trees will not only preserve the ecological and cultural functions of the species, but also reduce the potential for this species to serve as a reservoir for the disease (and its vector) that increases the risk to adjacent avocado production areas, worth more than $60 million in south Florida. In addition, the development of host resistance is critical for mitigation of the disease in the Everglades, because swamp bay is a keystone canopy species in the tree islands. In addition to Goal 6, this work supports Goal 4 as native plant nurseries and conservation agencies will be able to use resistant planting stock. Goal 5 is also supported as part of this project focuses on education, outreach and technology transfer to Native American communities who rely on swamp bay as a major component of traditional tribal medicine.

Current Status:
The project was funded in August of 2014, so the work is ongoing. Second year funding is pending approval for FY 15 Farm Bill.

Project Schedule:
Start Date: August 4, 2014         Finish Date: August 3, 2015

Detailed Project Budget Information

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