

# Lygodium Research in Progress

PROJECT TITLE	LOCATION	PROJECT LEADER	RESEARCH OBJECTIVES	CONTACT INFORMATION
Biological Control of <i>Lygodium microphyllum</i>	Southern Florida	Robert W. Pemberton	Discover, permit, mass rear, and release biocontrol agents for <i>L. microphyllum</i> . Also evaluating impact of established biocontrols in different communities	Invasive Plant Research Laboratory USDA–Agricultural Research Service 3225 College Ave. Ft. Lauderdale, FL 33314 bobpem@saa.ars.usda.gov
<i>Lygodium microphyllum</i> : functional basis for geographical variations	Southern Florida and Queensland, Australia	John Volin	Evaluate the ecophysiology and soil characteristics of field-grown <i>L. microphyllum</i> in Florida and its native range. Evaluate physiological and hormonal processes regulating <i>L. microphyllum</i> growth.	Department of Biological Sciences Florida Atlantic University 2912 College Avenue Davie, FL 33314 jvolin@fau.edu
Detailed <i>Lygodium</i> Assessment in the Everglades Protection Area	Water Conservation Area 2B/3, Broward Co., FL	John Volin and Mary Ann Furedi	Survey <i>L. microphyllum</i> infestations in WCA-3A and WCA-2B.	
Evaluation of new and current herbicides to treat <i>Lygodium microphyllum</i>	Alachua Co., FL	Jeff Hutchinson and Ken Langeland	Herbicide trials to find more efficient control of <i>L. microphyllum</i> .	University of Florida–IFAS Center for Aquatic and Invasive Plants 7922 NW 71 St. Gainesville, FL 32653 (352) 392-9981 JHutchinson@ifas.ufl.edu
Evaluation potential of <i>Lygodium microphyllum</i> resistance to the acetolactate synthase herbicide, metsulfuron methyl (Escort XP)	Alachua Co., FL	Jeff Hutchinson and Ken Langeland	Expose <i>L. microphyllum</i> spores to different rates of metsulfuron methyl and other herbicides to determine if herbicide resistance can occur.	
The effects of repeated aerial herbicide application on <i>Lygodium microphyllum</i> and native vegetation	Palm Beach Co., FL	Jeff Hutchinson and Ken Langeland	Three year study of target and non-target responses to aerial herbicide (glyphosate and metsulfuron methyl).	
Translocation of herbicides in <i>Lygodium microphyllum</i> .	Alachua Co., FL	Jeff Hutchinson and Ken Langeland	Isotope tracing study to determine movement of herbicides (glyphosate, metsulfuron methyl, and triclopyr) in <i>L. microphyllum</i> .	
<i>Lygodium microphyllum</i> : Herbicide Field Trials	Jonathan Dickinson State Park, Martin Co., FL	Philip Myers	Field evaluations of the herbicides Rodeo, Escort and Plateau on <i>L. microphyllum</i> control.	Division of Recreation and Parks, Florida Department of Environmental Protection 13798 SE Federal Hwy. Hobe Sound, FL 33455 (561) 546-0900
Control of Japanese climbing fern in North Florida forests	Calhoun County, FL	Andrea Van Loan and Greg MacDonald	Evaluation of 16 herbicide treatments for efficacy in reducing cover of <i>L. japonicum</i> in North Florida forests.	Florida Division of Forestry P.O. Box 147100 Gainesville, FL 32614 (352) 372-3505 ext. 429 vanloaa@doacs.state.fl.us
Evaluation of Site Characteristics Associated with Varying Levels of <i>L. japonicum</i> Invasion in North Florida forests	North Florida (Santa Rosa, Liberty and Calhoun Counties)	Andrea Van Loan and Jarek Nowak	Studying site characteristics and environmental conditions associated with <i>L. japonicum</i> in three forest types.	
Effect of Common Agricultural Quarantine Treatments on <i>L. japonicum</i> Spore Germination Levels	Alachua County, FL	Andrea Van Loan	Evaluation of fumigation, heat, and herbicide treatments on <i>L. japonicum</i> spore germination rates.	