

# UF/IFAS Research Leads to Insect Control of Invasive Brazilian Pepper Tree

**Brazilian pepper trees, an invasive species that occupy about 700,000 acres in Florida, grow up to 30 feet tall and take over space where native plants should be.** These pepper trees are encroaching on nearly all terrestrial ecosystems in central and south Florida. The Brazilian pepper tree, native to Brazil, Argentina and Paraguay, is among the most abundant invasive species in the Florida Everglades, according to research cited in a [document](#) published by the University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) Extension.

Pepper trees deprive animals such as white-tailed deer, the Florida panther and migratory birds of food and shelter.

Until now, people have used chemicals to control the spread of the pepper trees, or simply cut them down. For about 30 years, scientists — including several from UF/IFAS — searched for the right bug or combination of insects for a less-intrusive way to mitigate Brazilian pepper trees.

UF/IFAS scientists include Carey Minter and Bill Overholt — entomologists at the UF/IFAS Indian River Research and Education Center in Fort Pierce — and James Cuda, an entomologist based at UF/IFAS in Gainesville.

Minter and others from UF/IFAS have worked with a national coalition of scientists to develop what's called "biological control" of Brazilian pepper trees. That control consists of two insect species.

UF/IFAS scientists have found a thrips called *Pseudophilothrips ichini* and a leaf-galler called

*Calophya latiforceps* that appear to effectively consume the pepper tree. Researchers received approval recently from the USDA Animal and Plant Health Inspection Service (APHIS) to release the insects to see how well they'll mitigate Brazilian pepper trees.

To gain approval from USDA-APHIS, scientists had to show that the insects consumed only the Brazilian pepper tree — and not chew up surrounding plants or animals. UF/IFAS and the USDA scientists brought the insects to quarantine laboratories at the UF/IFAS Indian River Research and Education Center and the USDA facility in Fort Lauderdale. There, they found the insects could help control the Brazilian pepper tree.

- Here's what will happen after the release in Davie:
  - » **Researchers plan** to give the beneficial insects to residents if they prove effective in tests on publicly owned lands.
  - » **The first** phase of the testing will start this month, when scientists will let some of the insects loose at the UF/IFAS Indian River Research and Education Center in Fort Pierce, Florida, the Southwest Florida Research and Education Center in Immokalee, Florida. They'll release more of the beneficial insects on other publicly owned lands this summer.
  - » **Next year**, in phase two, they'll put the insects into more publicly owned lands and on large ranches in South Florida.
  - » **In the** third year, they plan to let the insects loose in residential areas.

---

For more information, click [here](#) or contact Carey Minter-Killian at [c.minteerkillian@ufl.edu](mailto:c.minteerkillian@ufl.edu).

#### Media contacts:

Lourdes Rodriguez | 954-577-6363 | 954-242-8439 (cell) | [rodriguezl@ufl.edu](mailto:rodriguezl@ufl.edu)

Brad Buck | 813-757-2224 | 352-875-2641 (cell) | [bradbuck@ufl.edu](mailto:bradbuck@ufl.edu)

---