

How You Can Help

Report Miconia to the Hotline!

If you see Miconia, especially in the more remote areas, please call the Hotline to report it: 961-3299.

If your property contains Miconia and you need help removing it, you can help by granting us permission to access it.

Decontaminate!

If you have been near a big Miconia tree, or in an area with lots of seedlings, make sure all of your clothing, cuffs, shoes and tools are free from debris and mud, which can harbor tiny Miconia seeds. Clean them at the site, before you track them elsewhere.

Volunteer!

If you can contribute some of your time, even one Saturday morning, to help stop this Miconia invasion by working with a group of volunteers, please call Operation Miconia's Volunteer Coordinator at 974-4140.

MAHALO!

For More Information—See the Web
Page: [www.hear.org/MiconiaInHawaii/
index.html](http://www.hear.org/MiconiaInHawaii/index.html)



Operation Miconia is a partnership of State and Federal agencies, Private and non-profit organizations, including:

State Dept. of Agriculture, Plant
Pathogen Quarantine Facility

State Dept. of Land and
Natural Resources

Research Corporation of the Univ. of Hawaii

U.H. Pacific Cooperative
Studies Unit

U.S. Forest Service

Hawaii Volcanoes National Park

U.S.G.S. Biological Resources Division

Kamehameha Schools

Campbell Estate

and others.



The Big Island's

War On The Purple Plague A Control Strategy



**Operation Miconia
Hotline: 961-3299**

**HAWAII FIELD OPERATIONS
DEPARTMENT OF AGRICULTURE
PLANT QUARANTINE BUILDING
16 EAST LANIKAULA ST. (Corner of Kilauea Ave.)
HILO, HI 96720-4302
PHONE: (808) 974-4140
FAX: 974-4148
E-mail: miconia@aloha.net**

Miconia Threat in Hawaii

Miconia (*M. calvescens*) is a fast growing tree from tropical South America that has been spreading in Hawaii since the late 1950's.

Miconia groves can reach heights of 50 feet, producing 100% shade, which kills native forests, pastures and farmlands.

A single Miconia tree can produce millions of seeds per year. The sand-sized seeds are found in small berries that are eaten and dispersed by birds. The seeds are viable in the soil for at least eight years!

In Tahiti, Miconia has destroyed nearly 70% of the native forests, resulting in a disastrous loss of biodiversity, increased erosion and landslides.

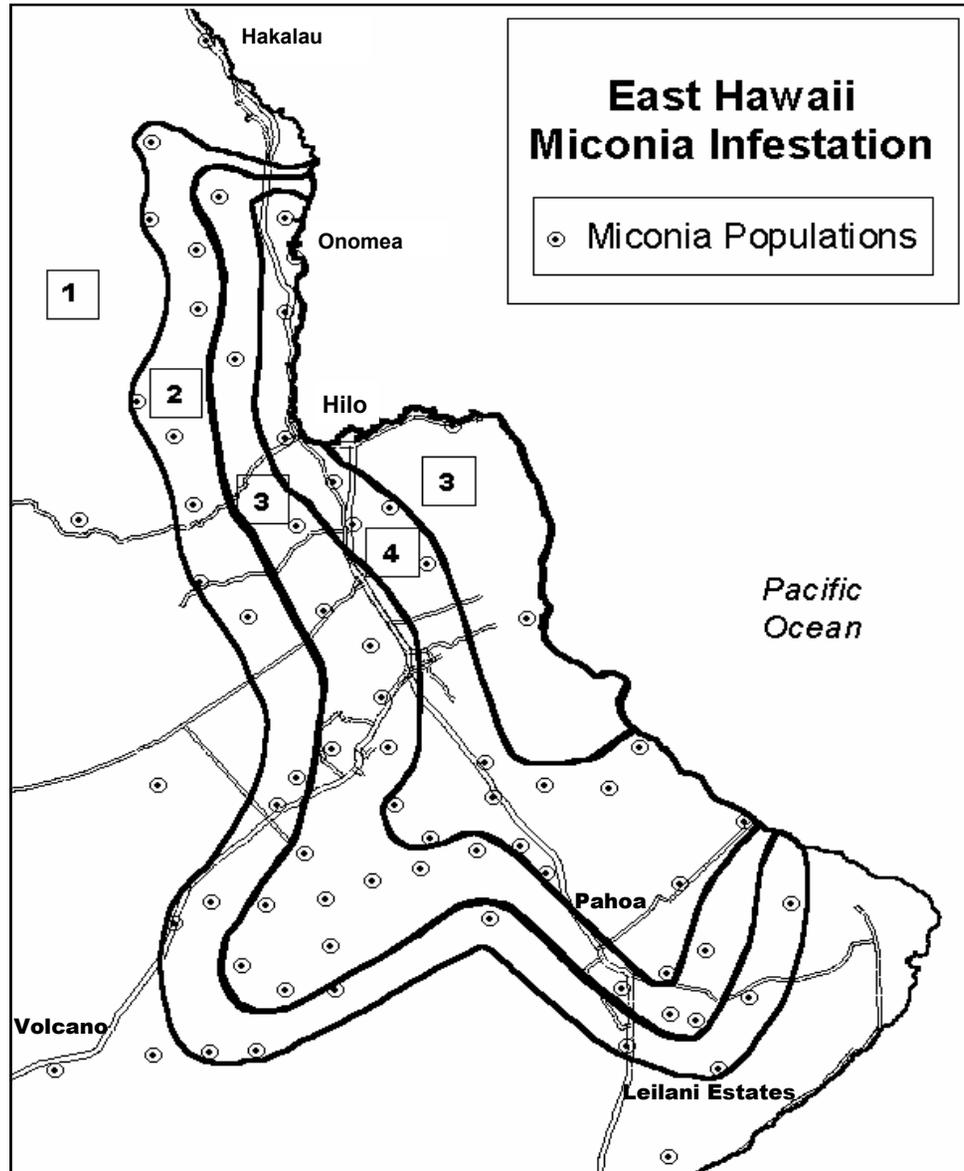
On the Big Island, Miconia currently infests over 25,000 acres. If left unchecked it could eventually occupy more than 1 million acres.

The Miconia Invasion as a Forest Fire

Controlling miconia on the Big Island can be compared to fighting a wildfire. Firefighters start at the perimeter, creating a buffer to stop the fire's spread. To ensure containment of the fire, "hot spots" that flare up outside the buffers must be found and extinguished. After the fire is well contained, then the interior can be put out.

The origin of the Miconia wildfire on the Big Island is located in Onomea, along the scenic Hamakua Coast. From there it has spread far and wide by birds as well as people who planted it as an ornamental.

It is ironic that in the core, where the Miconia plants are the easiest to find, the priority for removal is the lowest. That is because the perimeter is still expanding and if it is not stopped, Miconia will contaminate all the forests and endanger their diverse species.



East Hawaii Miconia Infestation

○ Miconia Populations

Priority Areas For Miconia Control

1 The **Exterior** of the East Hawaii Miconia infestation. The goal: Detect and Destroy the isolated, spot infestations and "Keep it Clean!"

2 The **Perimeter** of the infestation. The goal: Create a Miconia-free buffer zone and "Stop the Spread!"

3 The **Interior** of the infestation. The goal: Crew and Volunteers work to "Reduce It!"

4 The **Core** of the infestation. The goal: Volunteers and Biocontrol work to "Reduce it!"

Fighting the Purple Plague

Our crews search for and destroy Miconia in the rugged and remote areas of the **Exterior** and **Perimeter**. Most of the surveys are conducted on foot, but rappelling gear and helicopters are also utilized. Large areas surrounding flowering trees are searched and Miconia is killed wherever it is found, by uprooting when possible, and with an herbicide when necessary. Control efforts are directed and tracked using a GIS computer mapping system and GPS units.

Biocontrol Agents

Researchers are combing the tropical forests of Central and South America – Miconia's native land – in search of its natural enemies. HDOA's Plant Pathogen Quarantine Facility has released a fungus in the **Core** of the population, where plants are most dense. The fungus, which lives only on Miconia leaves, is successfully causing leaves to drop prematurely.