



## Definitions & Background

### What is an “invasive” species?

**Invasive species are plants, animals, insects, bacteria, viruses, and fungi that are brought to Hawai‘i by humans.**

**These invaders reproduce quickly, spread rapidly, and cause serious economical, human and environmental damage to our fragile natural land and marine ecosystems and human society.**

### **WHY DOESN'T GOVERNMENT DO MORE TO STOP INVASIVE SPECIES?**

#### **Border protection systems must:**

- Be strongly supported by the public and policy makers.
- Have enough funding and staff for adequate prevention.
- Not be too restrictive of commerce.
- Hawaii is hampered by its isolated location, high logistical costs, and relatively small market size in trade negotiations.
- Hawaii's unique ecosystems are particularly vulnerable to invasive introduced species.
- Existing laws containing noxious weed lists are dominated by weeds causing problems for mainland agriculture.

### **Task Force & Political Action for BioSecurity is Needed**



## What is Early Detection?

Early detection and rapid response are widely regarded as the most cost-effective approaches to dealing with invasive species. By detecting potentially harmful species early and responding rapidly to control small populations, we can prevent such species from becoming established.

BIISC has a two man crew of botanists that has completed 1,500 survey miles in 24 months of roadside surveys.

**BUT THE BIG ISLAND HAS THOUSANDS OF MILES MORE, AND THEY CAN'T SEE THE BACKYARDS. WE NEED CITIZENS HELP!**

### **How is the watch list of species selected for early detection teams?**

#### **Factors:**

Have a substantial negative impact on local ecosystems, humans, economy and are findable, preventable, actionable .

#### **Categories**

- *Eradicable* (low-no populations in the region)
- *Species for survey/map* (species that need delineating surveys and distribution documented)
- *Species to avoid/remove* (already spreading, sometimes sold commercially but should not be planted, should be controlled when possible)



## **JOIN THE EYES AND EARS EARLY DETECTION TEAM**

**FIND THE PESTS BEFORE THEY FIND YOU**



**Hawaii Early Detection Network**  
[www.reportapest.org](http://www.reportapest.org)

**Big Island Invasive Species Committee**  
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[www.bigislandisc.org](http://www.bigislandisc.org)

**Hotline: (808) 961-3299**

**BIISC is a public/private partnership whose mission includes:**  
education, early detection, rapid response, control and eradication of invasive pests



# Some **UnWanted** Invasive Species for Volcano



**Little Fire Ant** (*Wasmannia auropunctata*) East Hawai'i is infested, new sites have been found in Kona and Maui. Tree-nesting ant with a very painful sting, can have very negative impacts on agriculture, homes, and tourism. Control is difficult. Test all incoming plants or soil with chopsticks dipped in peanut butter.



**Pampas grass** (*Cortaderia spp.*) ornamental bunchgrass, white-pink flower plumes, large tussocks. Has been sighted in Waimea. Narrow, sharp, saw-toothed leaves. Plant can reach 15', creating access issues. Fire prone, drought tolerant, can flourish in wet areas. It produces millions of wind-dispersed seeds.

**Coqui** (*Eleutherodactylus coqui*) small frogs native to Puerto Rico, stowaways in nursery plants, hitch rides on vehicles from infested areas. They threaten native insects which feed native birds and pollinate native plants. The coqui frogs' loud nocturnal calls disturb sleep and tourists.



**Hiptage** (*Hiptage benghalensis*) Climbing woody vine (or shrub) with white yellowish hairs on leaves & fragrant pink-white flowers with yellow marks. Unique papery three-winged fruit. This pretty plant has jumped the fence in Florida and Kauai, and is invading both dry and wet forest.

**Tree of Heaven** (*Ailanthus altissima*) is a fast growing tree (up to 13 ft/yr) which contains poisonous compounds that prevent other plants from growing. It has smooth grey bark and chestnut colored twigs with heart-shaped leaf scars. Large compound leaves with distinctive gland at base. Papery seeds. All parts smell bad.



**Miconia** (*Miconia calvescens*) has gone wild Hamakua to Puna, but Hawaii Volcanoes can still be protected! Keep this weed out of your neighborhood. Easily identifiable by its "leaf within a leaf" vein pattern and dark green velvety leaves with bright purple undersides.

**Jasminum polyanthum** (*Jasminum polyanthum*) is a fast growing vine easily recognized by its opposite oriented palmately compound leaves and its fragrant, allergenic flowers. This beautiful plant can reproduce from a small stem or root fragment, making it hard to remove once established. If you see this plant— let us know!



**Cherokee rose** (*Rosa laevigata*) is a fast growing, thorny, climbing rose that can grow 12 ft tall and produces dramatic white flowers. This plant can quickly jump the garden fence and forms impenetrable brambles that cut off access for people and animals. Control is very difficult as it tangles among plants.

**Smokebush** (*Buddleja madagascariensis*) ornamental climbing shrub, can grow into tree canopy, 3-5" gray-green leaves, clusters of small orange flowers. Invades disturbed areas and creates dense thickets that exclude other native plant species. Numerous seeds are dispersed by wind and birds. Sites have been treated by BIISC.



**Purple Cestrum** (*Cestrum elagans*) is a shrub in the Nightshade family that is a toxic plant and can aggressively outgrow native vegetation. It has alternate, narrow, simple leaves and drooping flowers that range from reddish to purple. This plant has jumped the fence in South Africa, Australia, and New Zealand to invade natural areas.