

## 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.

- **Report invasive species!**

**BIISC Hotline—961-3299**  
**<http://www.reportapest.org>**

### **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, and economy

Are findable, preventable, and 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)



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

**FIND THE PESTS BEFORE THEY FIND YOU**

Big Island Invasive Species Committee  
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Hawaii Early Detection Network  
USGS-PBIN-PCSU  
[www.reportapest.org](http://www.reportapest.org)

**BIISC is a public/private partnership whose mission includes:**

education, early detection, rapid response, control and eradication of invasive pests threatening agriculture, native ecosystems, industry, human health & quality of life

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

# Some UnWanted Invasive Species for North Hawaii

**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, painful 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.



**Gorse** (*Ulex europaeus*) shrub, sharp spines, dense thickets 6'. Seeds eject 9'. Fire destroys only above-ground, roots regenerate rapidly. Fire results in seed germination. Natural enemies have been released but inadequate. The plant is spreading around the flank of Mauna Kea. Haka-

**Poison Devils Pepper** (*Rauvolfia vomitoria*) agricultural weed in North Kohala, covering over 2000 acres. Nitrogen fixer, growing at 10 feet each 6 months. Trees produce thousands of red fruits which are spread by birds. BIISC is assisting with control with Kohala Watershed Partnership.



**Jerusalem thorn** (*Parkinsonia aculeata*) shrubby, thorny tree like kiawe. Unique shaped leaves, yellow flowers, shrubby weeping habit, drought tolerant, grows in wide range of soils. Dense thickets along gulches. Pointed seed pods. Seeds viable for many years, water borne.

**Rubber Vine** (*Cryptostegia spp.*) Fast growing, climbing plant, pinkish-purple flowers. Shiny dark green leaf 3" long, with triangular 4" seedpods that grow in wing-like pairs. Twines tightly around other plants, restricting their growth. Extremely poisonous, dust and sap can cause burning rashes. BIISC has controlled in Kona



**Barbadoes gooseberry** (*Pereskia aculeata*) cactus, viney habit, forms impenetrable, spiny thickets, dense smothering canopies. Woody vine, dark green alternate leaves to 4", branches to 30' covered in clusters of long, slender spines. One sighting in Kohala.

**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.



**Red-vented Bulbul** (*Pycnonotus cafer*) Black body, head, eyes, lighter gray underside, bright red feathers under tail. 8" long. Male & females similar. Only black bird in Hawaii with crest on head like a cardinal's. Major pest of agriculture and gardens. Feeds on fruits, vegetables, flower buds, insects. Spreads seeds of invasive plants.