

Plant Industry Biosecurity: The Invasive Species Response Principles in Action

Plant Industry Division

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Pest Interceptions



	Parcels Inspected	Treated	Destroyed	Insects	NKO Insects	Diseases	NKO Diseases
2010	9,011,818	4,698	16,948	2,483	584	1,065	601
2011	9,106,144	2,899	15,302	1,667	354	912	613
2012	8,712,725	5,634	18,599	2,040	316	1,111	671
2023	19,403,431	734	14,607	537	0	346	1

Plant Quarantine Inspectors

Ability to identify species to determine entry status:

Over 150 prohibited animals (snakes, eels, bats, fishes, birds)

1800 restricted animals

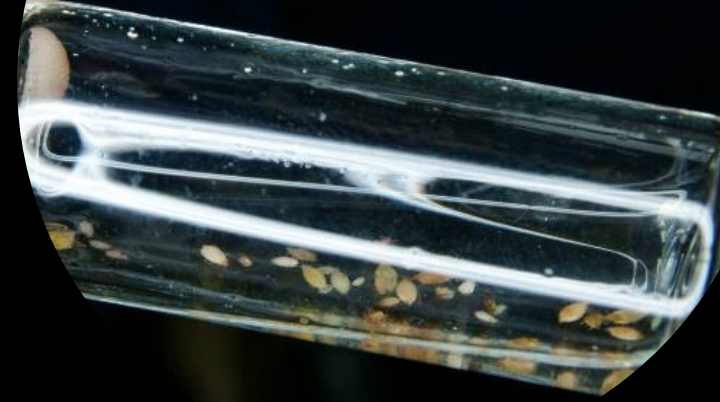
1800 conditionally approved fish

1500 genera and over 30,000 species of plants (prohibited, restricted, noxious)



PQ Duties

Inspecting passengers and cargo to find the pests and determining which ones must be destroyed and which ones can be released





- When we import food, we import invasive species:

- From one IMPORTED box organically grown lettuce: 36 different species of leafhoppers, aphids, lacewings, beetles, ants, thrips, plant bugs, loopers, spiders, and wasps, of which 19 were “NKO” These insects will affect Hawaii farms.





Brown Tree Snake

- Since 1981, there has been 8 confirmed interceptions of BTS in Hawaii—all associated with aircraft arrivals from Guam.
 - Cost: \$1.7 billion per year
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Coqui Frog Statistics:

- Total responses in 2023 – 121
 - Occur across the entire island – Pupukeya, Waimanalo, Kaneohe, Palolo, Waipio, Kapolei, Pearl City, Waialua
 - About 70% of responses occurring in Waimanalo and Palolo.
- Total Frogs Captured in 2023 – 1,083



Existing populations in Palolo Valley and at the Mauka end of Kaulukanu Street in Waimanalo, with the initial infestation located approximately 1/3rd of a mile from the road in a naturalized area.

- In Waimanalo, working with partners to install a test pipeline to determine if citric acid can be deployed into the area using ground spraying.
- In Palolo Valley, three treatments have occurred and are ongoing.

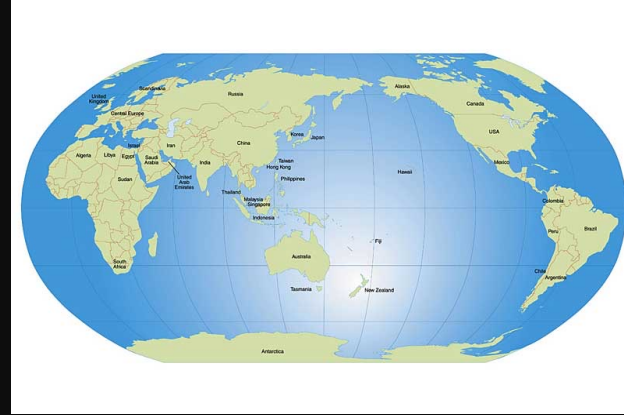
Remember that **ANYTHING** can harbor Coqui, if commodity originates from an infested area.

- Coqui have been captured on boats, vehicles, heavy machinery, pipes, port-a-pottys, electrical wires.

Report Suspect Coqui calls or captures. The Department will respond to all credible reports.

- Call the toll-free statewide Pest Hotline - 643-PEST (7378).
- There are things that can sound like Coqui. Take recordings/videos of the sound or suspected captured frog.





- **Red Imported Fire Ant**

- Two interceptions, one through air cargo and the second one through maritime cargo.

- Estimated Cost: \$6 billion per year



Find It

PQ Activities:

Inspections of material entering the state or interisland

Certification/Compliance Programs

PPC Activities

Certification programs

Survey programs

Reports from the public



IDENTIFY IT

Plant Pest Control

Renders definitive
identifications

Identity

Tells us risks

Potential impacts

Methods of control



Kill It

PPC

Develop control tactics
Evaluate/Research control programs

Pesticide

Evaluate PPC recommendations for compliance
Recommend alternative chemistries
Obtain exemptions, assist with labels and licenses



Commercial Hot Shower Chamber

used by Hawaii's Nursery Industry

Refrigerated freight container modified to deliver a hot shower (109-120 °F) via FullJet nozzles at 70 gpm.



80 plants in one load

110 full cone nozzles

Hot water storage tank

113 F for 5 min effective against coqui frogs

Needs



Plant Quarantine

Move inspectors from cargo fee to general fund



Pesticides

Move staff from PURF to general fund



Plant Pest Control

Rebuild entire program- more science staff!



Division: revamp and modernize

PI is the oldest program in the Department and still have Big Sugar era program structures