

WHAT YOU CAN DO TO HELP



Protect our native ecosystems from invasive species.

Photo: The Nature Conservancy

The invasive species described in this brochure have been found on other islands but are not yet present on Moloka'i.

We need your help in keeping our island safe from these pests. Here is a list of things you can do to protect Moloka'i.

1. Clean your shoes, clothes, and bags of mud clumps and other debris which may carry hitchhiking seeds or plant material.
2. Take all plants, fruits, vegetables and animals to agriculture stations on the outer islands to check for pests before bringing it to Moloka'i.
3. Help minimize the introduction of invasive species by not moving plants inter-island. Purchase plants that are raised on Moloka'i.
4. Call MoMISC as soon as possible if you see any of these target species on Moloka'i.

MoMISC Mission Statement

To prevent and control introduced
invasive pests from becoming established or
widespread on Moloka'i.

MoMISC Partners

The Nature Conservancy of Hawai'i
Kalaupapa National Historical Park
Hawai'i Division of Aquatic Resources
Hawai'i Division of Forestry and Wildlife
Molokai-Lāna'i Soil and Water Conservation District
USDA - Plant Material Center
USDA - Protective Plant Quarantine
USDA - Natural Resources Conservation Service
University of Hawai'i College of Tropical Agriculture
and Human Resources Cooperative Extension Service



MoMISC
Molokai/Maui Invasive Species Committee

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STOP THE SPREAD OF INVASIVE SPECIES TO MOLOKA'I



Ivy Gourd (Photo by Forest and Kim Starr)

**Moloka'i is under the constant
threat of the introduction of new
invasive species.**

**Help keep Ivy Gourd and other
species from making Moloka'i
their newest home.**

**Report unusual or invasive species to
MoMISC**

(Moloka'i/Maui Invasive Species Committee)

(808) 553-5236 ext. 204

Invasive Species Currently Not on Moloka'i

Miconia (*Miconia calvescens*)



Miconia can grow up to 50' tall. It is easily identified by the leaf's bright purple undersides, three prominent leaf veins and large length up to 3'!

Miconia shades out and kills other plants trying to grow below. It can create a monotypic (dominated by one species) forest, killing native habitat. Its shallow root system contributes to erosion affecting the streams and ocean.

Inkberry (*Ardisia elliptica*)

Inkberry has dark green eye-shaped leaves that are 2"-3" in length with a leathery texture. Its small pink flowers have 5 petals and grow in large clusters. The ripe fruit are dark purple or black, and unripe fruit are red.



Inkberry forms dense monotypic stands that crowd out native species.

Bush beardgrass (*Schizachyrium condensatum*)



Bush beardgrass grows in dense clumps that produce large tufted seed heads and grows up to 3' tall.

The dense clumps can take over pasture lands and displace native plants. This bush also promotes fire and is drought tolerant.

Fireweed (*Senecio madagascariensis*)

Fireweed is a poisonous flowering weed in the sunflower family. Its yellow flowers have 13 petal-like rays. Each plant can produce up to 200 flowers with 100-150 seeds per flower.



Fireweed is a major threat to agriculture because it is poisonous to horses, cattle, and other livestock and can dominate pasture lands.

Ivy Gourd (*Coccinia grandis*)



Ivy gourd is a vine from Asia, Africa, and India. Its 2"-3" leaves are heart shaped. The white flowers have 5 petals, up to 2" across. Its fruits are red and shaped like cucumbers.



Ivy gourd rapidly forms solid blankets that smother the ground, shrubs, power poles, and tall trees. It can grow up to 4" per day!

Himalayan Blackberry (*Rubus discolor*)

Himalayan blackberry is a very thorny vine native to Western Europe. It has pink or white flowers, stems with huge thorns, and leaves with 3 leaflets. The round fruit is black and shiny when ripe. It is similar to the blackberry we have in our forest on Moloka'i but it's leaves are thicker, leathery, and hairy.



Himalayan blackberry forms dense impenetrable thickets that exclude other native plant species, and make access difficult for hunters, hikers, and other visitors. Thickets produce 7,000-13,000 seeds per square meter, which remain dormant for years.

Apple Snail (*Pomacea canaliculata*)



Apple snails vary from yellow and green to brown and may have dark spiral bands. They lay large red egg clusters.

Apple snails threaten aquatic life by feeding on aquatic plants such as taro, causing much damage and reduced crop yields. They rapidly reproduce laying 200-600 eggs per cluster.

Asiatic Clam (*Corbicula fluminea*)

Asiatic clams grow up to 1.5" to 2" long.

This freshwater clam can clog drain valves, plastic pipes, and sprinkler heads, making it necessary to manually flush systems regularly. They live between two to four years. These clams are hermaphroditic. Diseases can be transmitted to humans if eaten.



Banana Bunchy Top Virus

Banana bunchy top virus is a plant disease that causes banana leaves to have a "bunched" look with yellow narrow brittle edges. Banana stalks have dark green streaks.



Infected banana plants will produce small fruit or none at all, posing a threat to the banana industry. It causes stunted leaves and shoots and is spread by aphids.



Coqui Frog (*Eleutherodactylus coqui*)

Coqui frogs are dark brown in color and can grow up to 1" long, about the size of a quarter.

The tiny frogs consume massive quantities of food including native insects. They can reach high densities up to 10,000 frogs per acre. They disrupt the evening peace and drive property prices down with their loud "Ko-Kee" call at night.

Brown Tree Snake (*Boiga irregularis*)

Brown tree snakes grow up to 3'-5' long and weigh up to 5.5 lbs. They are greenish brown in color.

These and other snakes are predators of our native birds and can cause injury to humans. They eat birds, lizards and small mammals.



Red-vented Bulbul (*Pyconotus cafer*)

Red-vented bulbul are 8" tall with a white rump and abdomen. They have a crimson color under their tail.

These birds are serious pests in the garden and agriculture by damaging fruits and vegetables. It is listed by the State as Injurious to Wildlife because they compete with native birds for food.

Red Imported Fire Ant (*Solenopsis invicta*)

Red imported fire ants are 3-6 mm long. Their head is the same size of their rump.

These ants are very invasive and their stings can injure or kill wildlife, livestock, and pets. They have been known to destroy crops and injure humans. Their stings cause painful blisters.

