

Thorny invader thwarted thanks to a trained eye

Kia'i Moku

By Joylynn Paman



When Kula resident and Haleakala National Park employee,

Steve Anderson, was startled by a cat fight in his landlord's yard, he ran to break it up. To his dismay, he never got to the cat fight.

On his way he was clawed to a halt by very thorny plants. The plants that snagged him were all too familiar but he had never seen them on Maui. Although his arm was turning red from the sharp scratches, he was more alarmed about these plants than either the cat fight or his wounds.

For good reason. When Anderson worked on the Big Island, he had seen what the thorny plants could do to native forests.

The culprit was yellow Himalayan raspberry (*Rubus ellipticus*), an invasive plant species that is so widespread in some parts of Hawai'i Volcanoes National Park that control is feasible only in limited areas. He knew that heavy infestations were threatening native plants on the Big Island and had damaged grazing pastures there, but it was not known to be established on Maui.

It wasn't surprising he hadn't noticed them before.

The plants were growing out of native *hapu'u* ferns that had been harvested on the Big Island and purchased for landscaping on Maui. They were covered with wine colored thorns and had light green, oval-shaped leaves that grew in a three-leaflet pattern.

Yellow Himalayan raspberry is a rambling shrub that can remain relatively short, but given the chance, can grow like a vine over 50 feet tall. It is covered with prickles in addition to the thorns.

The leaves average two to three inches long, have saw-like edges with rounded tips,

and are also covered with prickles.

Yellow Himalayan raspberry is the only raspberry with small yellowish fruit in Hawai'i. Fortunately, these Kula plants had not yet bloomed or produced fruit.

Originally from the foothills of the Himalayas in India, yellow Himalayan raspberry may be the most threatening raspberry that we have in the islands. In fact, the Global Invasive Species Database notes that this species was "nominat-ed as among 100 of the 'World's Worst' invaders."

Within Maui County, this pest has the potential to invade agriculture areas, pastures, grasslands, wet shady rainforests and mesic (moist) forests.

This extremely thorny plant forms impenetrable thickets and outcompetes native plant species.

One of the species that can be displaced by this invader is the native Hawaiian raspberry (*Rubus hawaiiensis*), also known as 'akala. The *akala* is free of thorns and produces exceptionally large red (but tart!) edible fruit. 'Akala is also the only native berry that loses its leaves in the winter.

Spread primarily by birds, this aggressive raspberry can become established in tree-tops and forked branches of tall trees.

Each plant can produce thousands of berries which birds and small mammals eat, leaving behind viable seeds wherever they travel. Yellow Himalayan raspberry can also make its way to the forest floor where it is spread by feral pigs.

It is also very difficult to control. If the tap root is dug up, dozens of small shoots can radiate out from the shallow underground runners left behind.

Unfortunately, birds, pigs,

and small mammals aren't the only way this plant spreads. Of particular concern is the potential spread throughout the state through the movement of

infested *hapu'u* ferns from the Big Island. Even though the outside of the *hapu'u* trunks are cleaned before shipping, seeds and hearty rootstock of this plant hitch rides deep within the trunks, in plant parts, and in mulch.

The seeds and roots can easily make their way to Maui County and sprout in their new home.

Lucky for Maui, Anderson understood the urgency of nipping this pest in the bud. He notified MISC and with persistent effort, the plants were controlled. With early detection and rapid response, we can prevent the establishment of yellow Himalayan raspberry within Maui County and avoid having our forests overtaken. Check your yard for this thorny pest, especially if you have *hapu'u* ferns.

If you discover a suspect plant, report it to the Maui Invasive Species Committee at 573-MISC (6472). Do not plant yellow Himalayan raspberry in your garden. It is listed as a State of Hawai'i noxious weed and it is against



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Photos by Forest & Kim Starr (USGS).

the law to transport.

Always inspect new plants that you purchase. You never know when the next pest may be hitching a free ride to the Valley Isle.

☛ "Kia'i Moku" (or "Guarding the Island") is prepared by the Maui Invasive Species Committee to provide information on protecting the island from invasive plants and animals that can threaten the island's environment, economy and quality of life. Joylynn Paman, is public relations and education specialist with the MISC.