'Akulikuli Blooms Make Lei & Roots Clean Ala Wai

By Heidi Bornhorst, is a sustainable-landscape consultant. Write her at islandlife@honoluluadvertiser.com

Question: What are we going to do when all the 'akulikuli plants filtering pollution on the Ala Wai start flowering like crazy and all the lei makers want to paddle out and pick 'em and string 'em? Will it look like Holland with overflowing flowers along the river? That would be a gorgeous and fabulous way to keep this urban body of precious water clean.

Answer: Can't keep the hula dancers and lei cultivators down, can we? There are several plants here in Hawai'i that we call 'akulikuli.

The lei-making one, 'akulikuli lei, grows best in high, cool sunny areas of Hawai'i, up in Waimea on the Big Island and Lana'i City. It is in the Aizoaceae family and is from South Africa.

This is a classic old-time lei. The gift of a lei 'akulikuli was given to me once in March of 1985. We were on Lana'i with a hiking group led by famed Hawai'i naturalist and educator Lorrin Gill. Nalani Blaisdell's auntie lived there. It was my birthday, so Auntie gave Nalani and I each a lei of precious 'akulikuli.

They were plush, pink ones and they matched the flush of our cheeks from hiking Lana'i'ilah and all around in the choice forests of Lana'i. The flowers are really cool — they open only on sunny days and close up and go moemoe (to sleep) at night. On cloudy days the buds are kind of hilahila (shy) and they won't open up fully.

As a lei, if you are gentle, it can last for a couple of days. Wear it in the day and let it "rest" at night, since the flowers will be closed up. The blossom colors are really pretty and lush: pinks, purples, oranges and whites.

'Akulikuli kula is a weed, called Portulaca oleracea by scientists. It is a famine food and salad green to some people. Pigs and pet rabbits like to eat it.

The 'akulikuli that they're growing on floating, toxin-sucking-up mats in the Ala Wai is an indigenous Hawaiian plant. That means it is native to Hawai'i, got here without the hand of man, and is found all over the subtropical world, usually in coastal areas.

That 'akulikuli is Sesuvium portulacastrum. It has small single flowers, among the leaves. Flowers can be white to pink to lavender. Come to think of it, they'd make very cute, tiny lei by a patient lei maker with delicate fingers.

Check out the floating mats. They are at the Diamond Head end of the canal, anchored on the mauka side. They are very pretty and attract waterfowl such as ducks, ducklings, and even a native auku'u or black-crowned night heron.
'Akulikuli Cleansing of Ala Wai Under Way

By Dan Nakano
Advertiser Staff Writer

Workers and volunteers returned to the Ala Wai Canal yesterday to float a new crop of 'akulikuli plants designed to offset the urban pollution plaguing the canal.

A dozen set of hands methodically punched 800 'akulikuli plugs, each an inch long, into bubble-wrap platforms that measure 5 feet wide by 100 feet long. Crews then rowed out into the Ala Wai and lashed the six platforms together in a project that's intended to reduce the levels of nitrogen, phosphorous and algae in the main channel of the canal.

Workers previously launched 20 floating platforms in the Ala Wai's drainage canal.

After a total of 40 to 80 rafts are in place — stretching more than 3,000 feet — the health of the Ala Wai should show dramatic improvement within three months, said Chad Durkin, project manager for Natural Systems Inc., which last month received approval from the state Board of Land and Natural Resources for the $500,000 project.

The idea is to create a new community of plants, roots, bacteria and microorganisms that will draw in nitrogen, phosphorus and algae and essentially starve the algae currently blooming in the Ala Wai, Durkin said.

The "floating phytoremediation platforms" — as they're called — also remove toxic metals, suspended solids and other man-made pollutants that have accumulated in the Ala Wai from decades of rainwater runoff.

Durkin has also helped nearby Iolani School students form a Phytoremediation Club where they regularly measure water samples of the Manoa-Palolo stream that runs behind their school and feeds into the Ala Wai.
Iolani sophomore Kyle Fooks, 16, said he doesn't know how to spell "phytoremediation" but he knows that it means helping the environment.

He helps record oxygen and salinity levels of the Manoa-Palolo stream and came out yesterday to get his hands dirty poking 'akulikuli plants into the floating platforms.

"It only seems normal to help with this project," Kyle said. "I'm interested in science and the environment. And I don't like the fact that the Ala Wai is so dirty."

His friend and classmate, Alex Chun, 16, normally would have been asleep while all of the work was going on.

"I don't wake up until 12 on Saturdays," Alex said.

But Alex, who works out on the Ala Wai as a member of the Iolani paddling team, showed up at 8 a.m. because "I've always heard from my dad how the Ala Wai used to be so clean and healthy. Now it's all polluted."

Durkin, 28, said that his work with Hawai'i students is as important as the Ala Wai project.

"Ultimately, any change is going to come from the next generation," Durkin said, as his 2-year-old daughter, Mehana, played with the plugs.

The morning began with a blessing and prayer by William Kaina, retired kahu of Kawaiaha'o Church, who thanked God "for helping us discover the 'akulikuli plants that we now use to keep our water and environment clean."

Kaina also thanked God for creating the indigenous plants "so that we didn't have to go so far to help us here at home."

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