

Invasive plant no sweet thing

Kia'i Moku

By Lissa Fox



In 1883 a few seeds from a beautiful fragrant tree were brought to a botanical garden

in Eastern Jamaica. After just 60 years it had become the most common tree in the Jamaica's eastern forests. This tree shaded out native plants. The altered forests couldn't withstand Jamaica's severe storms the same way native forests could. The open canopy of the native rainforest provided enough sunlight for a healthy understory, important for water retention. After the forest was invaded a dense canopy of leaves blocked out so much light that the understory was eliminated. Sound familiar? This is not a story about miconia, though the effects of the Jamaican invasion were nearly identical. The plant that invaded Jamaica is commonly called sweet pittosporum, or Victorian box, known as *Pittosporum undulatum* in Latin. In 1875 a few sweet pittosporum plants were also brought to Hawai'i Island. Sometime after that they were planted on Maui.

Why would anyone bring a plant like that to Maui?

Like miconia, it was brought in as an ornamental plant. With sweet smelling, creamy white flowers it's tempting to plant it in your yard. It is a small tree, only 30 feet high, that grows very densely, making it ideal for a privacy hedge or windbreak, with dark green leaves resembling those of a macadamia nut. But don't be misled—it won't be confined to a nice hedge for long.

Maui Invasive Species Committee field staff, Chris Candito, knows this all too well. After working for several months to remove the few small populations of sweet pittosporum in upcountry Maui, he was nearly done, or at least thought he was. He turned to go home one Friday



Sweet pittosporum, or Victorian box, casts a destructive shadow on native plants. (Photo by MISC)

afternoon only to discover a gulch filled with sweet pittosporum as far as he could see. The discovery was disheartening. These plants were most likely spread by birds that had eaten the seeds of a sweet pittosporum in someone's yard.

Sweet pittosporum is native to southeastern Australia. Like many plants that we consider invasive, it is a "generalist" meaning that it's not terribly picky about its habitat. It thrives in a range of conditions, from rainforests to dry grasslands and in temperatures ranging from warm to cool. Sweet pittosporum is also considered highly invasive in South Africa and New Zealand. It produces a fruit that's tasty to birds, ensuring that its seeds are dispersed long distances. As the leaves of sweet pittosporum break down in the soil they release chemicals that inhibit the germination of other plants. This gives sweet pittosporum an advantage against other plants, so much of an advantage that it can invade the forest of another aggressive tree, the eucalyptus.

Sweet pittosporum is so weedy

that it is even considered invasive in its native home of Australia. The tree is expanding out of its historical range as a result of years of fire suppression and the introduction of the European blackbird, which spreads the plant by eating the seeds and flies much greater distances than Australia's native birds.

On Maui the spread of sweet pittosporum is because it was not widely planted. Yet control is very difficult. The trees and shrubs must be cut down and removed. Chipping the plant will only result in the sticky seeds getting stuck in the chipper and then being spread elsewhere. Sweet pittosporum is apparently not very susceptible to disease in its native environment, so finding an effective biocontrol agent is unlikely. The presence of other native pittosporum species in the Hawaiian Islands means that biocontrol is probably not a viable option anyway.

Even though sweet pittosporum is a daunting pest, Candito hasn't given up hope. He sees the possibility for a success story. Sweet pittosporum on Maui is "completely eradicable if people

cooperate." If all plants are removed on Maui, we can prevent what happened in Jamaica, South Africa, and New Zealand. Sweet pittosporum is listed as a noxious weed in the state of Hawai'i, meaning that it is illegal to propagate or sell it. If you have this species growing in your yard please call the Maui Invasive Species Committee at 573-6472 (MISC). We will be happy to come control it and help Candito write a happy end to the story of sweet pittosporum on Maui.

• *Lissa Fox is the Ho'ike O Haleakala outreach liaison representing the Maui Invasive Species Committee, or MISC. "Kia'i Moku," (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.*