

Maui naio could face threat from thrips

KIA'I MOKU

By Lissa Fox



A little over one year ago, a landscaper in Waikoloa on Hawaii Island, noticed something unusual happening to the native naio in a landscape planting. The new leaves were deformed, curled and folded into a gall-like distortion. Word spread to the Hawaii Department of Agriculture who collected specimens of the plants and found tiny black insects called thrips living inside. The insects were identified as *Klambothrips myopori*, or “naio thrips” named for their preference of feeding on the native naio, or *myoporum* species.

No one knows how the naio thrips made it to Hawaii, nor exactly where they are native (likely Australia or New Zealand), but one thing is for certain: naio thrips in California have caused complete defoliation and the occasional death of *myoporum* species. *Myoporum* are represented in Hawaii by the native naio trees.

Recognized by its dark grey furrowed bark, lance-shaped leaves, and plentiful pinkish-white flowers, it is no wonder naio is often used for landscaping. It's an attractive, drought-tolerant plant that grows in various forms: from a tall tree to the low-growing and shrubby variety called naio papa.

Naio is one of the most common trees in the native Hawaiian forest, next to ohia and koa. It thrives in a variety of habitats ranging from sea-level

to 10,000 feet, though tending to be more common on the leeward sides of the islands.

At the turn of the century, the most spectacular trees were found above Makawao and on the southern slopes of Haleakala. They reached a height of 50-60 ft with a diameter of 3 ft. The naio that once dominated dryland forest ecosystem of leeward Haleakala lent their name to the ahupuaa of Kanaio—literally: “the naio.” Hawaiians once used the wood for housing timbers and fishing torches.

The aroma of the naio wood is similar to that of sandalwood, a trait not overlooked by sandalwood traders of the early 1800's. Sandalwood was being harvested and shipped to China by the boatload--6,000 trees at a time, and, during the height of harvesting between 1821-1822, 4 million pounds per year. Not surprisingly, the sandalwood supply was quickly being exhausted and a naio was sent as a substitute. It was rejected, an act that lent naio its common name of “bastard sandalwood,” but saved the species from potential extinction.

Naio now faces a less visible though more serious threat from the naio thrips. On Hawaii Island the population of



Above: Distinct galling on naio indicates the presence of thrips, not known to be on Maui.

Left: *Klambothrips myopori* have been attacking naio on the Big Island.

naio thrips is too widespread to eradicate, and they are beginning to impact naio in natural areas. The naio and mamane forest found on the upper elevations of Mauna Kea on Hawaii Island is the last remaining habitat for the endangered palila, a seed-eating Hawaiian honeycreeper.

On Maui, naio is used in landscaping and is widespread in natural areas. Dieback due to naio thrips could result in a wide range of damage to native ecosystems.

Naio thrips have not been found on Maui, but there is a high likelihood of them mak-

ing their way here. If you have naio in your yard, keep an eye out for the symptoms of naio thrips: deformed leaves and “galling” on the new growth. Call the Department of Agriculture at 643-PEST.

■ *Lissa Fox is public relations and education specialist for the Maui Invasive Species Committee. “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.*