



Figure 1. Adult *Klambothrips myopori* Mound & Morris. Length of the adult thrips is 2-2.5 mm

Naio Thrips

Klambothrips myopori Mound & Morris

(Thysanoptera: Phlaeothripidae)

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Introduction. Samples of heavily galled naio, *Myoporum sandwicense*, were collected from the Waikoloa area of Hawaii Island on March 20, 2009, and submitted to the University of Hawaii (UH). Specimens of a black thrips (Figure 1) extracted from the samples were tentatively identified as *Klambothrips myopori* Mound and Morris by both the UH and Hawaii Department of Agriculture (HDOA). This identification was confirmed by G. Watson of the California Department of Food and Agriculture (CDFA) and S. Nakahara (Thysanoptera) Systematic Entomology Laboratory, Agricultural Research Service, US Department of Agriculture.

This thrips, having a Hawaii common name of “naio thrips” is known in California as the myoporum thrips. The collection at Waikoloa represents a new record of this species in Hawaii. At Waikoloa, this thrips was observed to cause heavy galling to the terminals and young leaves of naio (Figure 2).

Description. Adult naio thrips are dark brown to black, small (2-2.5 mm), elongated insects (Figure 1). Immature thrips are similarly shaped but appearing orange or yellow (Figure 3).



Figure 2. A naio plant with severe gall-like damage caused by *Klambothrips myopori* Mound & Morris



Figure 3. Immature naio thrips

Background. In 2005, a new exotic thrips species was found in California and was causing extensive damage to landscape and nursery stock of *Myoporum*. Thrips specimens provided to Australia's Commonwealth Scientific and Industrial Research Organization (CSIRO) revealed a new undescribed species. The thrips were described by Mound and Morris (2007) and given the name *Klambothrips myopori* Mound and Morris.

Hosts and damage. It is expected that many species of *Myoporum* will be susceptible, with some cultivars showing some degree of resistance; however research on this thrips is very limited. In Hawaii, naio thrips have been observed attacking both the prostrate (naio papa) and upright forms of the indigenous *Myoporum sandwicense*.

Damage by the naio thrips includes severe gall-like distortion of the new leaves and terminals. Stunting of terminal growth occurs and leaf curling or folding is common. Often thrips populations can be found within the folds of leaves (Bethke and Shaw, 2007). Due to their tendency to live in the leaf folds, thrips populations are sometimes very difficult to treat with pesticides.

Surveys in Hawaii uncovered other insects occurring on naio: an endemic delphacid planthopper (*Aloha myoporicola* Kirkaldy), a black flower-feeding weevil, several species of dark flower thrips, a whitefly, a mealybug, and a scale. Identifications of these insects are pending.

Distribution. In Hawaii, infestations are known on the north-western part of the island of Hawaii from Kona Palisades through Waikoloa and up to Waimea. Continuing surveys have not revealed the presence of the naio thrips on other neighboring islands.

Detection. The naio thrips causes noticeable damage to myoporum. Any leaf curling or gall-like symptoms should be brought to the attention of the HDOA or Cooperative Extension Offices.

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