

**Proposal Title:** Development of naio thrips (*Myoporum* thrips: *Klambothrips myopori*) early detection and rapid response plans for the islands of Kauai, Maui and Molokai

**Award Amount:** \$6,215

**Awardee:** State of Hawaii Dept. of Land and Natural Resources, Division of Forestry and Wildlife (DLNR-DOFAW)

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**Partners:** Hawaii Department of Agriculture (HDOA), Kauai Invasive Species Committee (KISC), Maui Invasive Species Committee (MISC), Molokai Invasive Species Committee (MoMISC),

**Project Objective:**

The purpose of developing early detection and rapid response plans for naio thrips (*Klambothrips myopori*) on Kauai, Maui and Molokai is to provide organization and facilitate cooperation between relevant resource management agencies and collaborators in the event that naio thrips are detected outside of Hawaii Island. The movement of this pest species will result in a significant biological and structural loss to native habitats, as well as ornamental plantings. Developing and implementing island-specific early detection and rapid response plans increases the likelihood of early detection and successful eradication of this damaging pest species.

**Background:**

DLNR-DOFAW staff proposed to develop island-specific early detection and rapid response plans (EDRRP) for naio thrips for the islands of Kauai, Maui and Molokai, in coordination with relevant partners. Naio thrips or *Myoporum* thrips is an insect pest which originates from Tasmania. The insect was first found attacking naio plants (*Myoporum sandwicense*) on Hawaii Island in 2008. Naio is native to Hawaii and is both culturally and ecologically important, as well as a popular landscaping plant. Feeding by the thrips causes distortion in young leaves and galling. High levels of infestation cause leaf and branch dieback, and can eventually result in tree mortality. Naio thrips can disperse over long distances via wind, and may be unintentionally transported by people on goods, specifically plant stock and landscape waste. The objective of each plan was to outline a multi-agency approach for detecting and controlling naio thrips in urban, agricultural and natural landscapes on islands where the pest is not currently present. Plans include maps of all known naio populations, and methodologies to monitor and respond to detection of this pest.

**Proposed Deliverables:**

- Kauai naio thrips early detection and rapid response plan
- Maui naio thrips early detection and rapid response plan
- Molokai naio thrips early detection and rapid response plan
- Maps of existing *Myoporum* populations on each island

**Summary of Activities and Deliverables:**

As a result of changes in staff availability, project deliverables were not completed in the project period originally proposed. Naio thrips EDRRP's were completed for the islands of Maui and Kauai and submitted to MISC and KISC for final approval in January 2015. Unfortunately, it was not feasible to complete a naio thrips EDRRP for the island of Molokai during this timeframe. Efforts are currently underway to map naio populations on Molokai, and update the EDRRP template to reflect specific monitoring and response needs. The plan is expected to be completed later this year.

While a total budget of \$6,215.00 was awarded to complete the three naio thrips EDRRP's, only \$490.00 was spent towards these efforts. Funds were allocated to support DLNR and partner agency staff time for surveying and mapping *Myoporum* populations, as well as six interisland trips by DLNR staff. However, both DLNR and partner agency staff offered to use existing funds to survey and map *Myoporum* populations, and only two interisland trips were completed. These EDRRP's are drafted to be living documents, and will be updated by ISC staff as new distribution, monitoring, control, and contact information becomes available. Maps are included as figures in each of the plans, and will be updated as additional *Myoporum* populations are reported or eliminated.

### **Maui**

**August 2013** – Maui Naio Thrips EDRRP development meeting held at the Kahului DOFAW Baseyard.

**August 2013 to October 2014** – Surveys conducted to identify and map populations of *Myoporum*.

**November 2014** – GIS maps of *Myoporum* locations generated by MISC.

**December 2014** – Draft of plan provided to MISC and partners for review.

**January 2015** – Final draft of plan provided to MISC.

### **Kauai**

**September 2013** - Kauai Naio Thrips EDRRP development meeting was held at the Kauai DOFAW office.

**September 2013 – October 2014** – Surveys conducted to identify and map populations of *Myoporum*.

**November 2014** – GIS maps of *Myoporum* locations generated by KISC.

**December 2014** - Draft of plan provided to KISC and partners for review.

**January 2015** – Final draft of plan provided to KISC.