

California Pest Rating Proposal

Klambothrips myopori Mound & Morris: thrips

Thysanoptera: Phlaeothripidae

Current Rating: Q

Proposed Rating: C

Comment Period: **04/04/2022 – 05/19/2022**

Initiating Event:

Klambothrips myopori is widespread in California but has not been rated. A pest rating proposal is needed.

History & Status:

Background: *Klambothrips myopori* feeds on the terminal growth of *Myoporum*, causing dramatic gall-like distortions in the leaves (Arakelian, 2007; Kaufman et al., 2018). This damage leads to dieback and death of the plants. It appears to be limited to *Myoporum*, and its hosts include *Myoporum laetum* and *M. sandwicense* (Mound and Morris, 2007). On the Big Island of Hawaii, the native naio (*Myoporum sandwicense*), which is restricted to that island, is heavily infested and at some sites more than 70 percent of naio trees had died as a result of this thrips (Kaufman et al., 2018).

Worldwide Distribution: *Klambothrips myopori* is native to Tasmania (Kaufmann et al., 2018). It has been introduced to and is reported from: **North America:** United States (California); **Oceania:** Hawaii. (California Department of Food and Agriculture; Kaufman et al., 2018; Mound and Morris, 2007).

Official Control: *Klambothrips myopori* is not known to be under official control.

California Distribution: *Klambothrips myopori* has been found in Alameda, Contra Costa, Los Angeles, Marin, Napa, Orange, Riverside, San Benito, San Diego, San Mateo, San Luis Obispo, Santa Barbara, Santa Clara, Santa Cruz, Solano, and Yolo counties (California Department of Food and Agriculture).

California Interceptions: *Klambothrips myopori* has not been intercepted (California Department of Food and Agriculture).

The risk *Klambothrips myopori* poses to California is evaluated below.

Consequences of Introduction:

- 1) **Climate/Host Interaction:** *Myoporum laetum*, a host of *K. myopori*, is commonly grown along roadsides in California. *Myoporum* species, including *M. laetum*, *M. parviflorum*, and *M. sandwicense*, are grown in California as ornamentals and groundcover (R. Price, pers. comm.). *Klambothrips myopori* is already widespread in California. Therefore, *K. myopori* receives a **High (3)** in this category.
 - Low (1) Not likely to establish in California; or likely to establish in very limited areas.
 - Medium (2) may be able to establish in a larger but limited part of California.
 - **High (3) likely to establish a widespread distribution in California.**

- 2) **Known Pest Host Range:** *Klambothrips myopori* is limited to a single genus of plant. Therefore, it receives a **Low (1)** in this category.
 - **Low (1) has a very limited host range.**
 - Medium (2) has a moderate host range.

– High (3) has a wide host range.

3) **Pest Reproductive and Dispersal Potential:** *Klambothrips myopori* feeds on a plant that is grown widely along roadways in California, which likely facilitates dispersal in the state. Therefore, it receives a **Medium (2)** in this category.

– Low (1) does not have high reproductive or dispersal potential.

– **Medium (2) has either high reproductive or dispersal potential.**

– High (3) has both high reproduction and dispersal potential.

4) **Economic Impact.** Feeding by *K. myopori* causes dieback and death of *Myoporum* species. Hosts include ornamentals grown in California. Therefore, it receives a **Medium (2)** in this category.

Economic Impact: A, B

A. The pest could lower crop yield.

B. The pest could lower crop value (includes increasing crop production costs).

C. The pest could trigger the loss of markets (includes quarantines).

D. The pest could negatively change normal cultural practices.

E. The pest can vector, or is vectored, by another pestiferous organism.

F. The organism is injurious or poisonous to agriculturally important animals.

G. The organism can interfere with the delivery or supply of water for agricultural uses.

Economic Impact Score: Medium

– Low (1) causes 0 or 1 of these impacts.

– **Medium (2) causes 2 of these impacts.**

– High (3) causes 3 or more of these impacts.

- 5) **Environmental Impact.** *Klambothrips myopori* causes damage to ornamental plants, which could trigger treatments. There are no native *Myoporum* in California. Therefore, *K. myopori* receives a **High (3)** in this category.

Environmental Impact: High

- A. The pest could have a significant environmental impact such as lowering biodiversity, disrupting natural communities, or changing ecosystem processes.
- B. The pest could directly affect threatened or endangered species.
- C. The pest could impact threatened or endangered species by disrupting critical habitats.
- D. The pest could trigger additional official or private treatment programs.**
- E. The pest significantly impacts cultural practices, home/urban gardening or ornamental plantings.**

Environmental Impact Score: High (3)

- Low (1) causes none of the above to occur.
- Medium (2) causes one of the above to occur.
- **High (3) causes two or more of the above to occur.**

Consequences of Introduction to California for *Klambothrips myopori*: Medium (11)

Add up the total score and include it here.

–Low = 5-8 points

–**Medium = 9-12 points**

–High = 13-15 points

- 6) **Post Entry Distribution and Survey Information:** *Klambothrips myopori* has been reported from 16 California counties, from Yolo in the north to San Diego in the south. It receives a **High (-3)** in this category.

–Not established (0) Pest never detected in California, or known only from incursions.

–Low (-1) Pest has a localized distribution in California, or is established in one suitable climate/host area (region).

–Medium (-2) Pest is widespread in California but not fully established in the endangered area, or pest established in two contiguous suitable climate/host areas.

–High (-3) Pest has fully established in the endangered area, or pest is reported in more than two contiguous or non-contiguous suitable climate/host areas.

Final Score:

7) The final score is the consequences of introduction score minus the post entry distribution and survey information score: Low (8)

Uncertainty:

There is low uncertainty with this proposal.

Conclusion and Rating Justification:

Klambothrips myopori causes significant damage, including dieback and plant death, to *Myoporum* species. These are widespread ornamentals in California. However, this thrips is already widespread in the state and its movement is likely facilitated by one of its host plants being planted along roadways. Native California plants do not appear to be threatened. For these reasons, a “C” rating is justified.

References:

Arakelian, G. 2007. *Myoporum* thrips (*Klambothrips myopori*). Accessed March 10, 2022:
http://file.lacounty.gov/SDSInter/acwm/215662_MyoporumThrips.pdf

California Department of Food and Agriculture. Pest and damage record database. Accessed March 10, 2021:
<https://pdr.cdfa.ca.gov/PDR/pdrmainmenu.aspx>

Kaufman, L. V., Parsons, E., Zarders, D., King, C., and Hauff, R. 2018. Chapter 9. Monitoring *Myoporum* thrips, *Klambothrips myopori* (Thysanoptera: Phlaeothripidae), in Hawaii (project WC-EM-B-10-02). Forest Health Monitoring.

Mound, L. A. and Morris, D. C. 2007. A new thrips pest of *Myoporum* cultivars in California, in a new genus of leaf-galling Australian Phlaeothripidae (Thysanoptera). *Zootaxa* 1495:35-45.

Responsible Party:

Kyle Beucke, 1220 N Street, Sacramento, CA 95814, 916-698-3034, [permits\[@\]cdfa.ca.gov](mailto:permits[@]cdfa.ca.gov)

***Comment Period: 04/04/2022 – 05/19/2022**

*NOTE:

You must be registered and logged in to post a comment. If you have registered and have not received the registration confirmation, please contact us at [permits\[@\]cdfa.ca.gov](mailto:permits[@]cdfa.ca.gov).

Comment Format:

- ❖ Comments should refer to the appropriate California Pest Rating Proposal Form subsection(s) being commented on, as shown below.

Example Comment:

Consequences of Introduction: 1. Climate/Host Interaction: [Your comment that relates to “Climate/Host Interaction” here.]

- ❖ Posted comments will not be able to be viewed immediately.

- ❖ Comments may not be posted if they:

Contain inappropriate language which is not germane to the pest rating proposal;

Contains defamatory, false, inaccurate, abusive, obscene, pornographic, sexually oriented, threatening, racially offensive, discriminatory or illegal material;

Violates agency regulations prohibiting sexual harassment or other forms of discrimination;

Violates agency regulations prohibiting workplace violence, including threats.

- ❖ Comments may be edited prior to posting to ensure they are entirely germane.

- ❖ Posted comments shall be those which have been approved in content and posted to the website to be viewed, not just submitted.

Proposed Pest Rating: C