

California Pest Rating Proposal

***Histura perseavora* Brown and Hoddle: Avocado destroyer**

Lepidoptera: Tortricidae

Current Rating: Q

Proposed Rating: A

Comment Period: 07/07/2026-08/21/2026

Initiating Event:

Histura perseavora is a potential pest of avocado in California. It has not been through the pest rating proposal system. A pest rating proposal is needed.

History & Status:

Background: *Histura perseavora* is a small (forewing length up to 5.5 mm) moth (Tortricid ID). It is reported to tunnel into and feed on mature avocado fruit and pedicels, inflicting “considerable” damage,” at middle elevations (above 1,450 meters above sea level) (Brown and Hoddle, 2010; Hoddle and Brown, 2010). Brown and Hoddle (2010) obtained samples from fruit harvested from trees. According to Guerra and Cano (2019), they only found this pest on avocado on the ground, not on the tree. However, the damage caused by *H. perseavora* is similar to that caused by *Stenoma catenifer*, and that damage causes premature fruit drop, which may explain why infested fruit is often found on the ground (Brown and Hoddle, 2010).

Worldwide Distribution: **Central America:** Guatemala (Hoddle and Brown, 2010).

Official Control: *Histura perseavora* would likely be considered reportable by the United States Department of Agriculture.

California Distribution: *Histura perseavora* is not known to be present in California.

California Interceptions: *Histura perseavora* has not been intercepted in California.

The risk *Histura perseavora* poses to California is evaluated below.

Consequences of Introduction:

- 1) **Climate/Host Interaction:** *Histura perseavora* may require a subtropical (or at least relatively warm) climate. It feeds on avocado, an important crop and common tree in residential areas. Therefore, it receives a **Medium (2)** 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:** Avocado is the only known host of *Histura perseavora*. 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:** *Histura perseavora* could be moved with infested avocados, and it can presumably fly as well. 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.** *Histura perseavora* is reported to feed on avocado fruit, so yield losses and increased production costs could result if this insect became established in California. Therefore, it receives a **High (3)** in this category.

Economic Impact: A, B, C

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: High

– 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.** *Histura perseavora* could impact backyard avocado and trigger treatments in California. Therefore, it receives a **High (3)** in this category.

Evaluate the environmental impact of the pest on California using the criteria below.

Environmental Impact: D, E

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 *Histura perseavora*: 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: *Histura perseavora* is not known to be in California. It receives a **Not established (0)** 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: Medium (11)

Uncertainty:

There is uncertainty regarding the potential for *H. perseavora* to establish in California and impact avocados here.

Conclusion and Rating Justification:

Histura perseavora is a potential pest of avocado in California. It is not known to be in California. For these reasons, an “A” rating is justified.

References:

Brown, J. W., and Hoddle, M. S. 2010. A new species of *Histura* Razowski (Lepidoptera: Tortricidae: Polyorthini) from Guatemala attacking avocados (*Persea americana*) (Lauraceae). Proceedings of the Entomological Society of Washington 112:10-21.

Guerra, M. A. A., and Cano, E. 2019. Proyecto para la identificación de plagas y enfermedades e implementación de programas de manejo integrado de plagas para el cultivo de aguacate Hass (*Persea americana* Mill.) en los departamentos de Quetzaltenango, San Marcos y Huehuetenango en el Altiplano Occidental de Guatemala. Instituto Interamericano de Cooperación para la Agricultura.

Hoddle, M. S., and Brown, J. W. 2010. Lepidoptera associated with avocado fruit in Guatemala. Florida Entomologist 93:649-650.

Tortricid ID. Accessed May 19, 2026:

<https://idtools.org/tortricid/index.cfm?packageID=1169&entityID=6965>

Responsible Party:

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***Comment Period: 07/07/2026-08/21/2026**

***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: A