

California Pest Rating Profile

***Thrips parvispinus* (Karny): A thrips**

Thysanoptera: Thripidae

Pest Rating: A

Comment Period: 08/27/2025 through 10/11/2025

Initiating Event:

This pest is occasionally intercepted on plant material (including flowers) from Hawaii and in retail stores in California. It has not been assessed with the pest rating system. Therefore, a pest rating proposal is needed.

History & Status:

Background:

Thrips parvispinus is a polyphagous pest with over 40 reported host plant species that is widely distributed in tropical or subtropical regions and is also found in greenhouses in temperate regions. Its hosts include ornamentals (including *Anthurium* and *Hoya*) and fruits and vegetables (including papaya and peppers (Manideep et al., 2025; Rachana et al., 2022; Seal et al., 2023; Sridhar et al., 2021; Sugano et al., 2013)).

Development (egg to adult) in *T. parvispinus* is more rapid at higher temperatures and is reported to require 14-29 days at temperatures from 26-18 °C (higher development rate at higher temperatures) (Le Hesran et al., 2025).

Thrips parvispinus is a pest in both field and greenhouse situations. In the field, this thrips has been reported in the following situations: Chile peppers in India (as a serious pest), papaya in Hawaii, and gardenias and peppers in Florida (Sollazzo, 2025; Sridhar et al., 2021; Sugano et al., 2013).

Thrips parvispinus is reported in the following greenhouse situations: Peppers in Spain (as a serious pest), *Anthurium* and *Hoya* in Florida, and *Anthurium* in the Netherlands (as a serious pest) (Le Hesran et al., 2025; Seal et al., 2023; Sollazzo, 2025; Spain steps up biological control research against *Thrips parvispinus*).

Damage to plants by this thrips includes discoloration and deformation of leaves and flowers, loss of flowers, and decreased fruit set. Fruit scarring is reported to be a major impact on papaya in Hawaii and greenhouse-grown peppers in Spain (Spain steps up biological control research against *Thrips parvispinus*; Sugano et al., 2013).

Thrips parvispinus was found to be capable of vectoring the Ageratum strain of tobacco streak virus (TSV-Ag) (Klose et al., 1996).

Worldwide Distribution: *Thrips parvispinus* is considered to be native to southeastern Asia (Ahmed et al., 2025). It is reported from (presumably from the field): **Africa:** Ghana, Réunion, Tanzania, Uganda; **Asia:** Bangladesh, China, India, Indonesia, Malaysia, Myanmar, Philippines, Singapore, Taiwan, Thailand; **North America:** United States (Florida; Puerto Rico); **Oceania:** Australia, Hawaii, Solomon Islands, (Ahmed et al., 2025; CABI; Sridhar et al., 2021; Sugano et al., 2013). It is also reported in greenhouse in Canada (Ontario) and Greece (Gleason et al., 2023; Mound and Collins, 2000). Reports from other European nations (e.g., Spain) appear to be mostly or entirely in greenhouses (CABI; Spain steps up biological control research against *Thrips parvispinus*).

Official Control: *Thrips parvispinus* is considered reportable by the USDA (U.S. regulated plant pest table).

California Distribution: *Thrips parvispinus* is not known to be established in California.

California Interceptions: *Thrips parvispinus* is occasionally intercepted on plant material (including flowers) from Hawaii and in retail stores in California (California Department of Food and Agriculture).

The risk *Thrips parvispinus* poses to California is evaluated below.

Consequences of Introduction:

- 1) **Climate/Host Interaction:** *Thrips parvispinus* is polyphagous and would likely find suitable host plants over much of California. However, it appears to be an outdoor pest primarily in tropical and subtropical regions. It is also a pest in greenhouses in temperate climates. This thrips may only be capable of established in southern coastal California and more widely in greenhouses. 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:** *Thrips parvispinus* is polyphagous. Therefore, it receives a **High (3)** 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:** *Thrips parvispinus* is assumed to be capable of flight. It is also likely to be spread with infested plant material. It is apparently capable of numerous generations per year. Therefore, it receives a **High (3)** 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.** *Thrips parvispinus* is reported to damage foliage and fruit of a variety of plants. It is considered reportable by the United States Department of Agriculture. It can vector tobacco streak ilarvirus. Therefore, it receives a **High (3)** in this category.

Economic Impact: A, B, C, E

- 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.** *Thrips parvispinus* is a pest of ornamental and fruit/vegetable plants in the field and greenhouse. It could trigger treatments. Therefore, this thrips receives a **High (3)** in this category.

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 *Thrips parvispinus*: High (14)

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: *Thrips parvispinus* is not known to be established 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: High (14)

Uncertainty:

There is significant uncertainty regarding the absence of this pest from California, as it is intercepted on plant material and has been found on plants in retail stores in the state. There is also significant uncertainty regarding the potential for this thrips to establish outdoors in the environment in California, at least in more than a very limited portion of the state.

Conclusion and Rating Justification:

Thrips parvispinus is a pest that could impact production of ornamental and fruit/vegetable plants in greenhouses in California. It may also be a threat to such plants grown outdoors in warmer parts of the state. It is not known to be present in California. For these reasons, an “A” rating is justified.

References:

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USDA regulated plant pest table. Accessed August 5, 2025: <https://www.aphis.usda.gov/plant-imports/regulated-pest-list>

Responsible Party:

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

***Comment Period: 08/27/2025 through 10/11/2025**

***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.

Pest Rating: A