

California Pest Rating Proposal

Kallitaxila granulata (Stål): A planthopper

Hemiptera: Tropiduchidae

Current Rating: A

Proposed Rating: B

Comment Period: 10/22/2025 - 12/06/2025

Initiating Event:

Kallitaxila granulata was found in the environment in Imperial and Riverside counties. It is currently rated "A," which is not consistent with establishment in the state. Therefore, a new pest rating proposal is needed.

History & Status:

Background: *Kallitaxila granulata* is a polyphagous planthopper. It has been reported to occur on plants in the following families: Anacardiaceae (*Mangifera*), Asteraceae, Euphorbiaceae, Fabaceae, Lamiaceae, Moraceae, Myrtaceae, Rubiaceae (*Coffea*), Rutaceae (*Citrus*), Thymelaeaceae, Verbenaceae (Asche, 2001; Bellis et al., 2004). Presumably, at least some of these represent the insect feeding on the plant. No reports were found of this planthopper causing damage to plants.

Worldwide Distribution: Kallitaxila granulata is reported to occur in: Asia: China, Philippines; North

America: Mexico; Oceania: Christmas Island, Isla de Pascua, Hawaii (Asche, 2001; Bellis et al., 2004;

Campodonico, 2016; Cham et al., 2019; Wang et al., 2012; Yang et al., 2001).

<u>Official Control:</u> *Kallitaxila granulata* is considered reportable by the United States Department of Agriculture (U.S. regulated plant pest table).



<u>California Distribution:</u> In 2012, *Kallitaxila granulata* was found in the environment in Imperial County and in Riverside County (on citrus) (California Department of Food and Agriculture).

<u>California Interceptions:</u> Kallitaxila granulata is intercepted frequently on plant material, including flowers, from Hawaii (California Department of Food and Agriculture).

The risk Kallitaxila granulata poses to California is evaluated below.

Consequences of Introduction:

- 1) **Climate/Host Interaction:** *Kallitaxila granulata* appears to primarily be a tropical species. It is polyphagous. 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:** *Kallitaxila granulata* 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:** *Kallitaxila granulata* is frequently intercepted on plant material, so there is a risk of such movement within California. 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**. *Kallitaxila granulata* is considered reportable by the United States Department of Agriculture, and growers may apply treatments to control this insect and avoid trade impacts. Therefore, it receives a **Medium (2)** in this category.

Economic Impact: 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: 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**. As mentioned under Economic Impact, growers may treat to control this insect. Therefore, *K. granulata* receives a **Medium (2)** in this category.

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

Environmental Impact: D

- 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: Medium (2)

- 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 Kallitaxila granulata: 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**: *Kallitaxila granulata* was found in the environment in Imperial and Riverside counties. It receives a **Low (-1)** 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 (10)



Uncertainty:

The known distribution of *K. granulata* is quite limited. It is assumed that the potential host range is much broader than what is reported and likely includes crop and ornamental plants in California. There is uncertainty regarding the potential for impacts to plants in California. This uncertainty, however, seems low, given that not a single report of impacts due to this species was found in the literature.

Conclusion and Rating Justification:

Kallitaxila granulata is a polyphagous planthopper, and as such, it poses some level of risk to crop and native plants in California. However, reports of damage have not been found, and this insect has been found in two counties in southern California. For these reasons, a "B" rating is justified.

References:

Asche, M. 2001. New state records of immigrant planthoppers in Hawaii (Homoptera: Fulgoroidea). Proceedings of the Hawaiian Entomological Society 34:185-187.

Bellis, G. A., Donaldson, J. F., Carver, M., Hancock, D. L., and Fletcher, M. J. 2004. Records of insect pests on Christmas Island and the Cocos (Keeling) Islands, Indian Ocean. Australia Entomologist 31:93-102.

California Department of Food and Agriculture. Pest and damage record database. Accessed September 19, 2025:

https://pdr.cdfa.ca.gov/PDR/pdrmainmenu.aspx

Campodonico, J. F. 2016. Sobre la presencia de *Kallitaxila granulata* (Stål, 1870) (Hemiptera: Fulgoroidea: Tropiduchidae) en la Isla de Pascua (Chile). Arquivos Entomolóxicos 16:213-215.

Cham, A. K., Luna-Esquivel, G., Robles-Bermúdez, A., Ríos-Velasco, C., Coronado-Blanco, J. M., and Cambero-Campos, O. J. 2019. Insects associated with the soursop (*Annona muricata* L.) crop in Nayarit, Mexico. Florida Entomologist 102:359-365.

U.S. regulated plant pest table. Accessed September 23, 2025: https://www.aphis.usda.gov/plant-imports/regulated-pest-list

Wang, R.-R., Wan, X.-Y., and Bourgoin, T. 2012. Ultrastructure of sensory equipments on the heads of *Kallitaxila granulata* (Stål) (Hemiptera: Fulgoromorpha: Tropiduchidae). Microscopy Research & Technique https://doi.org/10.1002/jemt.22113

Yang, P., Alyokhin, A., and Messing, R. 2001. Patterns of oviposition and parasitism of eggs of Kallitaxila granulata (Homoptera: Tropiduchidae), a newly invasive planthopper in Hawaii. Proceedings of the Hawaiian Entomological Society 35:77-83.



Responsible Party:

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

*Comment Period: 10/22/2025 - 12/06/2025

*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.

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: B