

California Pest Rating Profile for Acizzia conspicua (Tuthill): a psyllid Hemiptera: Psyllidae Pest Rating: C

Comment Period: 05/07/2024 - 06/21/2024

Initiating Event:

Acizzia conspicua was found in the environment in California. It has not yet been through the pest rating process. Therefore, a pest rating proposal is needed.

History & Status:

Background: The only reported host plants of *Acizzia conspicua* are *Acacia melanoxylon* and *Acacia longifolia* (Martoni, 2017; Tuthill, 1952). Martoni (2017) suggested that the host status of *A. melanoxylon* was in doubt.

Acacia species are used for ornamental and ground-stabilization purposes in California. Some species are considered weedy (D. Kelch, pers. comm.). *Acacia melanoxylon* is considered invasive in California (California Invasive Plant Council, 2024).

One species of plant formerly in the genus Acacia is native to California: *Senegalia greggii*. This plant is not considered threatened or endangered and it occurs mainly in the desert.

<u>Worldwide Distribution:</u> *Acizzia conspicua* is native to Australia and was introduced to New Zealand (Atlas of living Australia, 2024; Martoni, 2017; Tuthill, 1952).



<u>Official Control</u>: *Acizzia conspicua* is not known to be under official control anywhere.

<u>California Distribution</u>: *Acizzia conspicua* was found on a yellow panel trap in a residential area in Pinole, Contra Costa County, California in March 2024.

<u>California Interceptions</u>: *Acizzia conspicua* has not been intercepted in California (California Department of Food and Agriculture).

The risk Acizzia conspicua poses to California is evaluated below.

Consequences of Introduction:

- Climate/Host Interaction: Acizzia conspicua is found in Australia in areas with temperate and Mediterranean climates. Acacia species are used for ornamental and ground stabilization purposes in California. It appears likely this insect could establish widely in California. Therefore, it 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.
- Known Pest Host Range: Acizzia conspicua is only known to feed on Acacia species. 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:** *Acizzia conspicua* can presumably fly. 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:** *Acizzia conspicua* is not reported to cause impacts to its host plants. Economic risk to California appears to be negligible. Therefore, it receives a **Low (1)** in this category.

Economic Impact:

- 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: Low

- 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: It is possible, though there is no evidence to support it, that *A. conspicua* may be able to feed on the California desert plant *Senegalia greggii*. However, *A. conspicua* is not known to be present in desert climates. Therefore, it appears unlikely that native California plants



would be impacted by this insect. As significant impacts have not been reported for any host plants, *A. conspicua* appears unlikely to impact plantings or to trigger treatments. Therefore, *A. conspicua* receives a **Low (1)** in this category.

Environmental Impact:

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: Low (1)

- 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 Acizzia conspicua: Low (8)

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:** *Acizzia conspicua* was found in the environment in Contra Costa County and is considered established there. 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

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survey information score: Low (7)
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Uncertainty:

This psyllid may be more widely distributed in California.

Conclusion and Rating Justification:

Acizzia conspicua appears to pose a very low risk to California. It is reported to have a very narrow host range and is not known to significantly impact those hosts. It is established in Contra Costa County. For these reasons, a "C" rating is justified.

References:

Atlas of living Australia. Accessed April 8, 2024: https://bie.ala.org.au/species/https://biodiversity.org.au/afd/taxa/3b7a6585-b9b0-4858-9290-<u>366f313c8cf2</u>

California Department of Food and Agriculture. Pest and damage record database. Accessed April 8, 2024: https://pdr.cdfa.ca.gov/PDR/pdrmainmenu.aspx

California Invasive Plant Council. Accessed April 8, 2024: https://www.cal-ipc.org/plants/profile/acacia-melanoxylon-profile/

Martoni, F. 2017. Biodiversity, evolution and microbiome of the New Zealand Psylloidea (Hemiptera: Sternorrhyncha). Ph.D. thesis, Lincoln University, Christchurch, New Zealand.



Tuthill, L. D. 1952. On the Psyllidae of New Zealand (Homoptera). Pacific Science 6:83-125.

Responsible Party:

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***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.

Pest Rating: C