CALIFORNIA DEPARTMENT OF FOOD & AGRICULTURE

California Pest Rating Profile

Tagosodes orizicolus (Muir): rice

delphacid Hemiptera: Delphacidae

Pest Rating: A

Comment Period: 03/26/2026– 05/10/2026

Initiating Event:

Tagosodes orizicolus, a serious pest of rice, has been reported in Texas. There may be an increased risk of this pest being introduced to California. Therefore, a pest rating proposal is needed.

History & Status:

Background: Adult *Tagosodes orizicolus* is approximately 0.25 inch in length. The female lays eggs in leaf tissues. Rice (*Oryza sativa*) is reported to be the main host, although other grass species are reported to be hosts as well (Sarkar and Bernaola, 2026).

Although feeding and oviposition damage rice plants, this insect is also reported to be the most important vector of rice hoja blanca virus (RHBV) in Central and South America. This virus causes the disease Hoja Blanca, a symptom of which is pale yellow chlorosis of the leaves (Mariani and De Remes Lenicov, 2000/2001). Rice yield losses of up to 75% resulting from RHBV are reported (Morales and Jennings, 2010 in Khanal and Zhou, 2025). RHBV is not known to be in California (T. Tian, pers. comm.), but it was reported in Texas, as was *T. orizicolus* (Khanal and Zhou, 2025; Texas A&M AgriLife tackles rice delphacid devastation). González and López (1977) found that *T. orizicolus* can vertically transfer the virus to its offspring, which means that movement of adults, nymphs, or eggs of *T. orizicolus* could move the virus as well.

Worldwide Distribution: **Central America:** Nicaragua; **North America:** United States (Texas); **South America:** Brazil, Colombia (Dávila and Centeno, 2025; Meneses et al., 2005; Rodrigues, 2024; Texas A&M AgriLife tackles rice delphacid devastation).

Official Control: *Tagosodes orizicolus* would likely be considered reportable if it was intercepted by the United States Department of Agriculture, although the species does not appear on the U.S. regulated plant pest table (U.S. regulated plant pest table). This insect is a quarantine pest in Cambodia and Vietnam (Endemic and quarantine pest of milled rice in Cambodia; The list of plant quarantine pests of socialist republic of Vietnam).

California Distribution: *Tagosodes orizicolus* is not known to be present in California.

California Interceptions: *Tagosodes orizicolus* has not been intercepted in California.

The risk *Tagosodes orizicolus* poses to California is evaluated below.

Consequences of Introduction:

1) **Climate/Host Interaction:** *Tagosodes orizicolus* appears to be mostly restricted to areas with a tropical or subtropical climate. Rice is an important crop in California, but it is mostly grown in the northern half of the state. 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:** *Tagosodes orizicolus* is only reported to feed on plants in the family Poaceae. 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:** *Tagosodes orizicolus* 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:** RHBV is reported to cause severe yield losses in rice. *Tagosodes orizicolus* vectors this virus. This insect is quarantined by some countries. 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:** Infestations of *Tagosodes orizicolus* could trigger treatments in rice. Therefore, *T. orizicolus* receives a **Medium (2)** in this category.

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:

– 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 *Tagosodes orizicolus*: Medium (10)

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:** *Tagosodes orizicolus* is not known to be present 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 (10)

Uncertainty:

There is significant uncertainty regarding the potential for *T. orizicolus* to establish in the Mediterranean climate of California.

Conclusion and Rating Justification:

Tagosodes orizicolus is an important pest of rice. It is not known to be present in California. For these reasons, an "A" rating is justified.

References:

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Endemic and quarantine pest of milled rice in Cambodia. Accessed March 6, 2026: https://pflanzengesundheit.julius-kuehn.de/dokumente/upload/kh3-2003qso-mango-orange-rice_en.pdf

González, V. L., and López, G. M. 1977. Algunas observaciones sobre la transmission vertical del agente causal de la hoja blanca del arroz en su vector. Revista Colombiana de Entomologia 3:99-103.

Khanal, S., and Zhou, X. -G. 2025. First report of hoja blanca viral disease in rice in Texas, U.S.A. Plant Disease 2025:2615.

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Meneses, R., Reyes, L., Calvert, L., Triana, M., Cuervo, M., and Duque, M. C. 2005. Identificación de posibles biotipos de *Tagosodes orizicolus* en diferentes zonas arroceras de Colombia. Manejo Integrado de Plagas y Agroecología 74:52-58.

Rodrigues, H. E. 2024. Flutuação populacional da sogata, *Tagosodes orizicolus* (Muir) (Hemiptera: Dephacidae), em agroecossistema de arroz irrigado no estado de Santa Catarina, Brasil. Journal of the Selva Andina Biosphere 12:45-53.

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The list of plant quarantine pests of socialist republic of Vietnam. Accessed March 6, 2026: https://dpss.gov.ua/storage/app/sites/12/uploaded-files/fitosanitarni-vimogi-krayin/vimogi-sotsialistichnoi-respubliki-vetnam.pdf

U.S. regulated plant pest table. Accessed March 6, 2026: https://www.aphis.usda.gov/plant-imports/regulated-pest-list?page=1

Responsible Party:

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***Comment Period: 03/26/2026– 05/10/2026**

***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.

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