

California Pest Rating Proposal

***Araptus schwarzi* (Blackman): A bark beetle**

Coleoptera: Curculionidae: Scolytinae

Current Rating: Q

Proposed Rating: C

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

Initiating Event:

CDFA was notified by Dr. Rugman-Jones (University of California, Riverside) that *Araptus schwarzi* was found in San Luis Obispo, California. This beetle has not been through the pest rating proposal system. Therefore, a pest rating proposal is needed.

History & Status:

Background: *Araptus schwarzi* is a seed-feeding beetle. Adults tunnel into seeds, including through fruit if the seed is not exposed, where eggs are laid. The larvae feed on the seed. On avocado, the life cycle (egg to adult) takes 12-13 weeks (Equihua-Martínez et al., 2016).

Reported hosts include *Annona cherimola*, *Persea americana*, and *Persea liebmannii* (Diaz, 2019; Mayagoitia and Zamudio, 2020). Regarding the report from *Annona*, details and the original source of this are not available (Diaz, 2019).

Araptus schwarzi was the most common scolytine trapped in a selection of avocado orchards in Mexico (Laureano- Ahuelicán et al., 2022).

Avocados in California are generally not propagated via seed. Therefore, the main concern for California avocado farmers is that the beetle might tunnel into fruit still on the tree, causing fruit damage and/or fruit drop. *Araptus schwarzi* did bore into green avocado fruit in the laboratory, something that has not been observed in the field, which suggests that damage to avocados might be a possibility (Equihua-Martínez et al., 2016). However, no reports of economic impacts, e.g., damage to fruit on the tree, by *A. schwarzi* were found. This is significant, as this beetle is common in avocado orchards in Michoacán, a major avocado-producing state in Mexico (Lázaro-Dzul et al., 2023), and it has been present in California for more than 10 years (see below, under California Distribution). The lack of reports of impacts suggests that significant economic impact on avocados in California is highly unlikely.

Worldwide Distribution: *Araptus schwarzi* is reported from: **North America:** Mexico (including Michoacán, a major avocado-producing state); United States (California) (California Department of Food and Agriculture; Laureano- Ahuelicán et al., 2022; Lázaro-Dzul et al., 2023; Takahashi, 2011).

Official Control: *Araptus schwarzi* is not known to be under official control.

California Distribution: *Araptus schwarzi* was detected in a residential area in San Diego County in 2013 (California Department of Food and Agriculture). It was reported from two locations in San Luis Obispo County (P. Rugman-Jones, per. comm.).

California Interceptions: *Araptus schwarzi* has not been intercepted in California.

The risk *Araptus schwarzi* poses to California is evaluated below.

Consequences of Introduction:

- 1) **Climate/Host Interaction:** *Araptus schwarzi* has established in California, at least in San Luis Obispo and San Diego counties. Avocado is grown widely in the state. It seems likely to be able to establish further in California, but it will perhaps be limited to coastal central and Southern California. Therefore, this beetle 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:** *Araptus schwarzi* is mainly reported to feed on seeds of *Persea* species, although there is a report of *Annona cherimola* as a host. 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:** *Araptus schwarzi* can presumably fly and it could be moved with infested avocados. 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.** No reports were found of economic impacts caused by *Araptus schwarzi*. This beetle is a seed-feeder, and it appears to prefer seeds and fruit that have fallen to the ground. Avocado trees in California are generally not propagated from seed. 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.** No reports were found of *A. schwarzi* impacting the environment. However, California bay laurel (*Umbellularia californica*), is in the family Lauraceae, like avocado. California bay laurel does not appear to occur in the part of Mexico where *A. schwarzi* occurs. If this beetle is capable of attacking California bay laurel seeds, environmental impacts in California are possible. Therefore, *A. schwarzi* receives a **Medium (2)** in this category.

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

Environmental Impact: A

- 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 *Araptus schwarzi*: 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: *Araptus schwarzi* is established in two counties in California. 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 (7)

Uncertainty:

There is significant uncertainty regarding the host range of *A. schwarzi*. If the report of *Annona* as a host is correct (details were not available), this would suggest a broader host range and the potential for greater impacts in California. The potential for environmental impacts assessed here depends on if California bay laurel is a host. There is no evidence that this tree is a host for this beetle, and if it is not, potential for environmental impact has been overestimated.

Conclusion and Rating Justification:

Araptus schwarzi is a seed-feeding bark beetle that primarily feeds on avocado seeds. It is not reported to impact the wood of trees and it is not reported to have economic or environmental impacts. The potential for such impacts in California cannot be completely dismissed. For example, it is not known if California bay laurel seeds may be attacked. However, this beetle is established in California, and eradication is not considered feasible. For these reasons, a “C” rating is justified.

References:

California Department of Food and Agriculture. Pest and damage record database. Accessed June 18, 2026:

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

Díaz, A. V. L. 2019. Análisis espacial de las poblaciones de *Oligonychus perseae* (Tuttle, Baker y Abatiello) y *Araptus schwarzi* (Blackman) en el cultivo de aguacate en el Estado de México. Ph. D. thesis, Universidad Autónoma del Estado de México, Toluca, México.

Equihua-Martínez, A., Estrada-Venegas, E. G., Chaires-Grijalva, M. P., and Acuña-Soto, J. A. 2016. Comportamiento de *Araptus schwartzii* Blackman (Coleoptera: Curculionidae: Scolytinae) en semillas de aguacate (Hass) en diferentes estados de madurez. *Folia Entomológica Mexicana* (nueva serie) 2:33–38.

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Takahashi, C. 2011. New beetle detections. p. 14 in California Forest Pest Conditions 2011. California Forest Pest Council. Accessed June 18, 2026:
<file:///C:/Users/Kyle.Beucke/OneDrive%20-%20CDFA/Home%20work/Araptus%20schwarzi/stelprdb5362126%20page%2024.pdf>

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: C