

California Pest Rating Profile

***Ceroplastes rusci* (Linnaeus): Fig wax**

scale Hemiptera: Coccidae

Pest Rating: B

Comment Period: 12/04/2025 – 01/18/2026

Initiating Event:

Ceroplastes rusci, currently rated A, has been found in the environment in three counties in California, including in a natural area in Orange County. Eradication is unlikely. Therefore, a new pest rating proposal is needed.

History & Status:

Background: *Ceroplastes rusci* is polyphagous and reported to feed on plants in 53 families. It is reported to be a pest of guava, fig, citrus, mango, grapes, and oleander (García Morales et al., 2016; Hamon and Mason, 2014; Morsi and Mousa, 2004). Other hosts include lychee, sapote, and peach (Chand, 2023).

Morsi and Mousa (2004) report that the main damage caused by this scale is through honeydew and consequent sooty mold.

First-instar *C. rusci* nymphs were found to vector fig leaf mottle-associated virus 1 (FLMaV-1) from infected to healthy fig plants (Yorgancı and Açıkgöz, 2019). This virus is not known to be in California, but there is uncertainty regarding this (T. Tian, pers. comm.). In the laboratory, *C. rusci* can vector

grapevine leafroll viruses GLRaV-3, which is present in California, but other efficient vectors are already present in the state, and GLRaV-5 (Mahfoudhi et al., 2009; T. Tian, pers. comm.).

Worldwide Distribution: *Ceroplastes rusci* is suspected to be native to tropical Africa but it is now widespread in distribution and reported from 64 countries. This distribution includes the Mediterranean region. Its distribution includes: Africa, Asia, Europe, and North America (United States: California and Florida) (Chand, 2023; García Morales et al., 2016; Hamon and Mason, 2014; Morsi and Mousa, 2004; Önder and Soydanbay, 1984; von Ellenrieder, 2025: a, b).

Official Control: *Ceroplastes rusci* is on the A1 list for Azerbaijan, Brazil, Chile, Kazakhstan, and Uzbekistan, a quarantine pest in China, and a regulated non-quarantine pest in Switzerland (EPPO Global Database).

California Distribution: *Ceroplastes rusci* has been found in the environment in three counties in southern California. These finds have been on fig trees in residential areas except for the find in Orange County in October 2025, which was in a natural area. The infested trees in residential areas were planted a year or more prior to the finding of the scales, which supports long-term presence of the scale at these sites and/or movement of the scale in the environment. The finds in the residential areas have been treated with chemicals, pruning, and tree removal. However, scales were observed on fig trees at one of these sites in San Diego County after it had been treated, suggesting that treatment was not fully effective or that the site was reinfested after treatment.

California Interceptions: *Ceroplastes rusci* is intercepted frequently on plant material, including nursery stock and cut flowers, from various localities, including Florida (California Department of Food and Agriculture).

The risk *Ceroplastes rusci* poses to California is evaluated below.

Consequences of Introduction:

- 1) **Climate/Host Interaction:** *Ceroplastes rusci* is already established in southern California. That, in addition to its currently reported distribution, indicates that a Mediterranean climate is suitable. This scale is polyphagous. Therefore, this scale 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.**
- 2) **Known Pest Host Range:** *Ceroplastes rusci* 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:** *Ceroplastes rusci* could be moved with infested plants. 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.** *Ceroplastes rusci* is a pest of figs, citrus, and other crops. It is considered a quarantine pest by some countries and (at least in the laboratory) it vectors plant viruses, including grapevine leafroll viruses. Therefore, it receives a **High (3)** in this category.

Economic Impact: 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.** *Ceroplastes rusci* is a pest of fruit trees grown in home gardens and it could trigger treatments. Therefore, *C. rusci* receives a **High (3)** in this category.

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

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 *Ceroplastes rusci*: 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: *Ceroplastes rusci* was found in the environment in three southern California 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: High (13)

Uncertainty:

There is high uncertainty regarding the distribution of this scale in California. Figs are naturalized in California. This scale is likely present at additional sites.

Conclusion and Rating Justification:

Ceroplastes rusci is a pest of important California crops (citrus and figs). However, it has been present in California for more than one year and has been found in the environment in three counties. Eradication is likely not feasible. For these reasons, a “B” rating is justified.

References:

California Department of Food and Agriculture. Pest and damage record database. Accessed October 1, 2025:
<https://pdr.cdfa.ca.gov/PDR/pdrmainmenu.aspx>

Chand, S. 2023. A report on occurrence, morphology, population ecology and infestation of *Ceroplastes rusci* (Linnaeus: 1758) in Muzaffarnagar, Uttar Pradesh, India. Coccoidea: Coccoidea: Hemiptera: Insecta. Journal of Entomology and Zoology Studies 11:6-11.

EPPO Global Database. Accessed October 27, 2025:
<https://gd.eppo.int/taxon/CERPRU/categorization>

García Morales, M., Denno, B.D., Miller, D.R., Miller, G.L., Ben-Dov, Y., and N.B. Hardy. 2016. ScaleNet: A literature-based model of scale insect biology and systematics. Accessed October 27, 2025:
<http://scalenet.info>

Hamon, A. B., Mason, G. J. 2014. Fig wax scale. Accessed October 27, 2025:
https://entnemdept.ufl.edu/creatures/orn/scales/fig_wax_scale.htm

Mahfoudhi, N., Digiaro, M., and Dhouibi, M. H. 2009. Transmission of grapevine leafroll viruses by *Planococcus ficus* (Hemiptera: Pseudococcidae) and *Ceroplastes rusci* (Hemiptera: Coccidae). Plant Dis. 93:999-1002.

Morsi, G. A., and Mousa, S. F. M. 2004. Seasonal abundance of the fig wax scale insect, *Ceroplastes rusci* Linnaeus (Homoptera: Coccidae) and its parasitoids in Middle Egypt. Egyptian Journal of Biological Pest Control (14):59-64.

Önder, E. P., and Soydanbay, M. 1984. Ege Bölgesi incirlerinde Zarar yapan kanlı balsıra (*Ceroplastes rusci* L.)'nin- kimyasal savaş metodları üzerinde araştırmalar. Bitki Koruma Bülteni 24:200-212.

von Ellenrieder, N. 2025a. New records of scale insects (Hemiptera: Sternorrhyncha: Coccoomorpha) from California with an updated checklist for the state. Pan Pacific Entomologist 101:15-50.

von Ellenrieder, N. 2025b. Fig wax scale. Accessed October 27, 2025:
<https://www.cdfa.ca.gov/plant/ppd/PDF/figwax.pdf>

Yorgancı, S., and Açıkgöz, S. 2019. Transmission of fig leaf mottle-associated virus 1 by *Ceroplastes rusci*. Journal of Plant Pathology 101:1199–1201.

Responsible Party:

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***Comment Period: 12/04/2025 – 01/18/2026**

***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: B