

California Pest Rating Proposal

Aspidiotus excisus Green: Aglaonema scale

Hemiptera: Diaspididae

Current Rating: Q

Proposed Rating: A

Comment Period: 5/26/2021 - 7/10/2021

Initiating Event:

Aspidiotus excisus is occasionally intercepted in California on cut foliage (including Aglaonema and palms) from Hawaii and Central and South America and in nurseries (California Department of Food and Agriculture). It has not been rated. Therefore, a pest rating proposal is needed.

History & Status:

Background: The scale *Aspidiotus excisus* is reported to feed on plants in at least 21 families, including Acanthaceae, Anacardiaceae, Apocynaceae, Araceae, Arecaceae, Asparagaceae, Bromeliaceae, Caricaceae, Commelinaceae, Convolvulaceae, Cycadaceae, Euphorbiaceae, Gardeniaceae, Loniceraceae, Malvaceae, Musaceae, Myrtaceae, Rubiaceae, Rutaceae, Sapindaceae, and Verbenaceae. Reported hosts include citrus, various palms, and ornamentals (including Hoya) (Dekle, 1966; Martin and Lau, 2011; Miller and Davidson, 2005). This scale is reported to occur as dense aggregations on leaves and can be a pest on foliage plants (Dekle, 1966; Miller and Davidson, 2005).

<u>Worldwide Distribution:</u> Aspidiotus excisus is widespread and reported from Asia (Ceylon, China, Hong Kong, India, Japan, Pakistan, Taiwan, Vietnam), the Caribbean (Puerto Rico), North America (Florida), Central America (Panama), South America (Colombia, Galápagos Islands), and Micronesia



(Beardsley, 1966; Causton et al., 2006; Clausen, 1933; Dao et al., 2018; Kondo, 2001; Martin and Lau, 2011; Miller, 2005; Miller and Davidson, 2005; Mito and Uesugi, 2004; Normark et al., 2014; Takagi, 1969; Varshney, 2002).

<u>Official Control:</u> : Aspidiotus excisus is considered a quarantine pest in Morocco (EPPO Global Database).

<u>California Distribution:</u> Aspidiotus excisus is not known to be established in California.

<u>California Interceptions:</u> Aspidiotus excisus is occasionally intercepted in California on cut foliage (including *Aglaonema* and palms) from Hawaii and Central and South America and it was found in some nurseries between 1987 and 1993 in the state (California Department of Food and Agriculture).

The risk Aspidiotus excisus poses to California is evaluated below.

Consequences of Introduction:

- 1) **Climate/Host Interaction:** *Aspidiotus excisus* appears to be limited to warmer areas. This scale is polyphagous and hosts are probably present in much of the state, but climate would likely limit its distribution to southern areas. 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:** *Aspidiotus excisus* is polyphagous and reported to feed on plants in at least 21 families. 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:** *Aspidiotus excisus* could be moved on infested plant material. 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**. Known hosts include citrus, palms, and a variety of ornamental plants.

 Nurseries and plantings in southern California could be impacted. Production costs of ornamental plants may increase if the scale becomes established in California. It does not appear to be a significant citrus pest. Therefore, it receives a **Low (1)** in this category.

Economic Impact: B

- 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**. Infestations of *A. excisus* on ornamental plants could lead to private treatments. Therefore, *A. excisus* receives a **High (3)** in this category.

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 Aspidiotus excisus: 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:** *Aspidiotus excisus* is not known to be established 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 (11)

Uncertainty:

There are two important areas of uncertainty. First, this scale is mostly limited to parts of the world with tropical or subtropical climates. It seems likely that it would be restricted to the southern coastal portions of the state if it is able to establish at all. Secondly, this scale is reported to mainly be a minor pest, although it could be significant in certain situations in California. It is possible that this scale does not have the potential to become a significant pest in California.

Conclusion and Rating Justification:

Aspidiotus excisus is a polyphagous scale that feeds on at least 21 families of plants. It could attack citrus and a variety of ornamental plants in California. It is not known to be in California. Although it does not appear to be considered a serious pests in most of the areas it is present, its ability to feed on many different plants makes it difficult to predict what it might do in this state. For these reasons, an "A" rating is justified.

References:

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Responsible Party:

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*Comment Period: 5/26/2021 - 7/10/2021

*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: A