

California Pest Rating Proposal Xerotricha conspurcata (Draparnaud) Mollusca: Hygromiidae Current Rating: B Proposed Rating: C

Comment Period: 04/20/2023 - 06/04/2023

Initiating Event:

Xerotricha conspurcata has been found in Alameda and Fresno counties and citizen scientist reports suggest it is widespread in California. This snail is currently rated B, which is not appropriate for a pest of widespread distribution in the state. A pest rating proposal is needed.

History & Status:

Background: *Xerotricha conspurcata* is a found in rocky grasslands, under stones, along stone and concrete walls, and in shrubby areas in Europe (Keulen et al., 2018; Reitano et al., 2012; Štamol and Kletečki, 2009). There is little information available on feeding habits; Keulen et al. (2018) suggest this snail may feed on algae, lichens, or decaying plants. It is reported to be able to tolerate dry conditions (e.g., two months in the "absence of moisture" in a laboratory) (Vendetti et al., 2018).

Xerotricha conspurcata is generally considered a pest, and it does occur in agricultural settings (e.g., olive orchards), but no indication as found that this snail feeds on living plants; its impacts agriculture may be limited to interference resulting from their presence in large numbers (Georgopoulou et al., 2022). No reports of damage from *X. conspurcata* in California have been found.



Worldwide Distribution: *Xerotricha conspurcata* is reported from: Europe: Croatia, France, Greece, Italy, Netherlands; North America: United States (California) (Georgopoulou et al., 2022; Keulen et al., 2018; Kiss and Magnin, 2003; Reitano et al., 2012; Štamol and Kletečki, 2009)..

<u>Official Control</u>: *Xerotricha conspurcata* is considered reportable by the United States Department of Agriculture (U.S. regulated plant pest table).

<u>California Distribution</u>: *Xerotricha conspurcata* has been found in Alameda and Fresno counties (California Department of Food and Agriculture). In addition, Roth and Sadeghian (2003) list this snail from Contra Costa and Santa Clara counties in California, and there are numerous citizen scientist reports of it from multiple counties each in the San Francisco Bay area and coastal southern California (iNaturalist; Vendetti et al., 2018).

<u>California Interceptions</u>: *Xerotricha conspurcata* has not been intercepted in California by the state, but it is intercepted at international ports of entry (California Department of Food and Agriculture).

The risk *Xerotricha conspurcata* poses to California is evaluated below.

Consequences of Introduction:

- Climate/Host Interaction: *Xerotricha conspurcata* is apparently already widely distributed in California. Therefore, *X. conspurcata* 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: The feeding habits of *X. conspurcata* are not known. It may feed on a variety of plant material dead or living. 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:** *Xerotricha conspurcata* can be moved with objects including stone, pots, etc. 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. This snail is considered reportable by the United States Department of Agriculture. Therefore, it is possible its presence in California may result in loss of markets. Its presence in agricultural settings may require changes in cultural practices, although such impacts do not appear to have been reported in the state. Therefore, it receives a Medium (2) in this category.

Economic Impact: C, D

- 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: Medium



- 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 *X. conspurcata* could affect gardens and could trigger treatments. Therefore, *X. conspurcata* 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 Xerotricha conspurcata: High (13)

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:** *Xerotricha conspurcata* is established in Alameda and Fresno counties, based on official records, however, it is apparently much more widespread based on citizen scientist reports. It receives a **Medium (-2)** 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 is some uncertainty regarding the citizen scientist reports of this snail across California, but this is considered low, based on the number of reports. Considering its apparently widespread distribution in the state and the lack of reports of impact, there is low uncertainty regarding it potential impacts here.

Conclusion and Rating Justification:

Xerotricha conspurcata is established in California, including in the San Francisco Bay area and the Central Valley. It is not known to be having an impact 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 March 14, 2023:



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

Georgopoulou, E., Gkisakis, V. D., and Kabourakis, E. M. 2022. Land snail assemblages of olive orchards in Crete, Greece. Diversity 14:1-9.

Keulen, S. M. A., Majoor, G. D., and Maassen, W. J. M. 2018. *Xerotricha conspurcata* (Draparnaud, 1802), a new species for The Netherlands (Gastropoda, Pulmonata, Hygromiidae). Basteria 82:43-49.

Kiss, L. and Magnin, F. 2003. The impact of fire on some Mediterranean land snail communities and patterns of post-fire recolonization. Journal of Molluscan Studies 69:43-53.

Reitano, A., Liberto, F., Giglio, S., Grasso, R., and Spena, M. T. 2012. Terrestrial molluscs from the R.N.I. "Grotta Conza" (Palermo, Sicily) (Gastropoda Architaemioglossa Pulmonata). Biodiversity Journal 3:555-570.

Roth, B., and Sadeghian, P. S. 2003. Checklist of the land snails and slug of California. Santa Barbara Museum of Natural History, Santa Barbara, California.

Štamol, V. and Kletečki, E. 2009. New finding sites of some interesting species of Croatian terrestrial malacofauna (Mollusca: Gastropoda Terrestria). Natura Croatica 18:91-112.

U.S. regulated plant pest table. Accessed March 30, 2023: <u>https://www.aphis.usda.gov/aphis/ourfocus/planthealth/import-information/rppl/rppl-table</u>

Vendetti, J. E., Lee, C., LaFollette, P., and citizen science participants in SLIME and BioSCAN. 2018. Five new records of introduced terrestrial gastropods in southern California discovered by citizen science. American Malacological Bulletin 36:232-247.

Responsible Party:

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*Comment Period: 04/20/2023 - 06/04/2023

***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: C