



***Plant Risk Evaluator -- PRETM
Evaluation Report***

Vitex agnus-castus -- Arizona

2022 Western IPM Grant Project

PRE Score: 12 -- Low Potential Risk

Confidence: 69 / 100

Questions answered: 20 of 20 -- Valid (80% or more questions answered)

Privacy: Public

Status: Completed

Evaluation Date: August 29, 2022

This PDF was created on May 23, 2025

This project was funded in part by the USDA National Institute of Food and Agriculture through the Western Integrated Pest Management Center, grant number 2018-70006-28881.



Plant Evaluated

Vitex agnus-castus



Image by Cillas



Evaluation Overview

A PRE™ screener conducted a literature review for this plant (*Vitex agnus-castus*) in an effort to understand the invasive history, reproductive strategies, and the impact, if any, on the region's native plants and animals. This research reflects the data available at the time this evaluation was conducted.

Summary

Chastetree (*Vitex agnus-castus*) is a very popular ornamental shrub or tree valued for its flowers. It has been entertained for various pharmacological uses. Chastetree is certainly a weedy introduced exotic species in several regions, but there is not strong supporting evidence that it has an economic or ecological effect significant enough to be rated as invasive per the definition used by the PRE. The best documented invasion is in central Texas, where it is recommended to be placed on EDDR watch lists. The plant may be in the process of becoming a more significant invader. In Arizona it has been an occasional escapee, not reaching the situation seen in Texas. It has received a correspondingly low PRE rating of 12 for Arizona.

General Information

Status: Completed

Screener: Michael Chamberland

Evaluation Date: August 29, 2022

Plant Information

Plant: *Vitex agnus-castus*

Regional Information

Region Name: Arizona



Climate Matching Map

To answer four of the PRE questions for a regional evaluation, a climate map with three climate data layers (Precipitation, UN EcoZones, and Plant Hardiness) is needed. These maps were built using a toolkit created in collaboration with GreenInfo Network, USDA, PlantRight, California Invasive Plant Council, and The Information Center for the Environment at UC Davis.

Click [here](#) to see the generated climate matching map for this region. This climate match database is hosted by GreenInfo Network and publicly accessible.



Evaluation Questions

These questions are based on an article published by PLOS One, which can be found here:

<https://doi.org/10.1371/journal.pone.0121053>.

Invasive History and Climate Matching (Questions 1 - 6)

1. Has the species (or cultivar or variety, if applicable; applies to subsequent "species" questions) become naturalized where it is not native?

- Answer: **Yes**, which contributes **1** point(s) to the total PRE score.
- The *screener* has a **Very High** confidence in this answer based on the available literature.

Answer / Justification:

A live EDDmaps tracker hosted through Bugwood (2018) maps county occurrence of *Vitex agnus-castus*. The plant is shown occurring across the southern tier of states. *Vitex agnus-castus* generally occurs as a weed in wildland areas of the Southwestern Region rather than as an invasive plant (White, 2013). *Vitex agnus-castus* is showing invasive tendencies in areas where it has been planted extensively in landscaping, as in Texas (Bugwood, 2018). It is found in limestone outcrops and dry creek beds throughout Central Texas (Lady Bird Johnson Wildflower Center, 2006). The plant is listed by CABI Invasive Species Compendium (2007) under their "invasive" category for for Anguilla and Cuba and as "naturalized" for Brazil, Columbia, French Guiana, Guyana and Suriname.

Reference(s):

- Bugwood (2018). Invasive Plant Atlas of the United States.
- White, M. (2013). Invasive Plants and Weeds of the National Forests and Grasslands in the Southwestern Region.
- Center, L. Bird Johns (2006). Texas Invasives.
- CABI (2007). CABI Invasive Species Compendium.

2. Is the species (or cultivar or variety) noted as being naturalized in the US or world in a similar climate?

- Answer: **Yes**, which contributes **2** point(s) to the total PRE score.
- The *screener* has a **Very High** confidence in this answer based on the available literature.



Answer / Justification:

Vitex agnus-castus has been noted as naturalized, or escaped from cultivation, in Arizona. The plant is mapped as naturalized in Maricopa, Gila, and Navajo County in Arizona (Bugwoodwiki, 2014). These occurrences are corroborated by SEINet, with additional occurrences in Cochise, Pima, and Yavapai County (SEINET, 2016). In Texas it has been found in limestone outcrops and dry creek beds throughout Central Texas (Lady Bird Johnson Wildflower Center, 2006) and this is a climate match with Arizona. However other sites consider the plant to be exhibiting no more than local weediness and state the plant can be safely used as an ornamental in all parts of Texas. They note the plant is not listed on the Texas Noxious Weed List (Texas A&M, 2022). Reports from Texas have prompted a suggestion that the plant be listed as an EDRR (Early Detection & Rapid Response) species across the southern United States where it is warm enough to survive the winters (Bugwoodwiki, 2014).

Reference(s):

- Bugwoodwiki (2014). *Vitex agnus-castus* - Bugwoodwiki.
 - SEINet (2016). SEINet - Arizona Chapter Home.
 - Center, L. Bird Johns (2006). Texas Invasives.
 - A&M, T. (2022). Texas Vitex.
-

3. Is the species (or cultivar or variety) noted as being invasive in the U.S. or world?

- Answer: **No**, which contributes **0** point(s) to the total PRE score.
- The *screeener* has a **Low** confidence in this answer based on the available literature.

Answer / Justification:

Appraisal of this species from the Southwestern USA suggest the species generally occurs as a weed in wildland areas of the Southwestern Region rather than as an invasive plant (White, 2013). Chastetree is a non-native species but is not considered invasive by the UF/IFAS assessment of non-native plants. Still, seeds may colonize nearby landscape beds and become weedy (Anonymous, 2022). Chastetree is certainly a weedy introduced exotic species in several regions, but there is not strong supporting evidence that its ecological effect is significant enough to be rated as invasive per the definition used by the PRE.

Reference(s):

- White, M. (2013). Invasive Plants and Weeds of the National Forests and Grasslands in the Southwestern Region.
- Anonymous (2022). Chastetree - University of Florida, Institute of Food and Agricultural Sciences.



4. Is the species (or cultivar or variety) noted as being invasive in the US or world in a similar climate?

- Answer: **No**, which contributes **0** point(s) to the total PRE score.
- The *screeener* has a **Medium** confidence in this answer based on the available literature.

Answer / Justification:

Vitex agnus-castus is documented as occurring in climate-matching regions of California, New Mexico, Nevada and Texas. Appraisal of this species from the Southwestern USA suggest the species generally occurs as a weed in wildland areas of the Southwestern Region rather than as an invasive plant (White, 2013).

Reference(s):

- White, M. (2013). Invasive Plants and Weeds of the National Forests and Grasslands in the Southwestern Region.
-

5. Are other species of the same genus (or closely related genera) invasive in a similar climate?

- Answer: **No**, which contributes **0** point(s) to the total PRE score.
- The *screeener* has a **Medium** confidence in this answer based on the available literature.

Answer / Justification:

Vitex trifolia is a naturalized alien new to the non-native flora of Tunisia and North Africa (Khalifa & El Mokni, 2020). This region is a similar climate, but the naturalization is not impactful enough meet the definition of invasive. *Vitex rotundifolia* is a more significant introduced species in the Southeast USA, but this is not in a similar climate (GISD, 2017).

Reference(s):

- Khalifa, & Mokni E. (2020). *Vitex trifolia* (Lamiaceae) a naturalized alien new to the non-native flora of Tunisia and North Africa. *Flora Mediterranea*. 6.
- Invasive Species Specialist Group (2017). GISD.



6. Is the species (or cultivar or variety) found predominately in a climate matching the region of concern?

- Answer: **No**, which contributes **0** point(s) to the total PRE score.
- The *screeners* has a **High** confidence in this answer based on the available literature.

Answer / Justification:

Large areas of the native or near-native range of *Vitex agnus-castus* in Central Europe do not correspond with the climate match map for Arizona. Areas of establishment for the plant in Brazil and the Southeast United States also do not have a climate match. Southern Hemisphere regions with a climate match for Arizona have been little or not colonized by the plant (GBIF, 2022).

Reference(s):

- GBIF (0). Global Biodiversity Information Facility (GBIF).
-

Impact on Native Plants and Animals (Questions 7 - 10)

7. Does this plant displace native plants and dominate (overtop or smother) the plant community in areas where it has established?

- Answer: **Yes**, which contributes **1** point(s) to the total PRE score.
- The *screeners* has a **High** confidence in this answer based on the available literature.

Answer / Justification:

In Central Texas, it is reported to be outcompeting native vegetation (Lady Bird Johnson Wildflower Center, 2006). The PIER (2011) assessment lists the plant as forming dense thickets, but not having a climbing or smothering habit. Since the plant is a shrub or tree, this suggests it can overtop and shade smaller plants, but not in the manner of a vine.



Reference(s):

- Center, L. Bird Johns (2006). Texas Invasives.
 - PIER (2011). *Vitex agnus-castus*: info from PIER (PIER species info).
-

8. Is the plant noted as promoting fire and/or changing fire regimes?

- Answer: **No**, which contributes **0** point(s) to the total PRE score.
- The *screeners* has a **Medium** confidence in this answer based on the available literature.

Answer / Justification:

Rated as not creating a fire hazard in natural ecosystems (PIER, 2011). However fire and the heat produced may induce higher seed germination (Travlos, 2007).

Reference(s):

- PIER (2011). *Vitex agnus-castus*: info from PIER (PIER species info).
 - Travlos, I. S., & Karamanos A. J. (2007). Influence of Heat on Seed Germination and Seedling Emergence of Chaste Tree (*Vitex agnus castus* L.). *Journal of Agronomy*. 6, 4.
-

9. Is the plant a health risk to humans or animals/fish? Has the species been noted as impacting grazing systems?

- Answer: **No**, which contributes **0** point(s) to the total PRE score.
- The *screeners* has a **Medium** confidence in this answer based on the available literature.



Answer / Justification:

Vitex agnus-castus has effects on human physiology when consumed or applied in various ways. It has been used as a herbal medicine, and can have some adverse effects (Coon et al. 2005). However it does not appear toxic or poisonous in the conventional sense. The plant is rated as non-toxic but unpalatable to grazing animals (PIER, 2011). While unpalatable, the plant is not likely to be significantly displacing palatable forage, as it has been described as showing only local weediness. While it has been rated as forming dense thickets by PIER (2011), reports from individual states do not reflect this density on a landscape level of occurrence. The escaped occurrence of the plant has been most noted in Texas, but the plant is not listed on the Texas Noxious Weed List (Texas A&M, 2022).

Reference(s):

- Daniele, C., Coon J. Thompson, Pittler M. H., & Ernst E. (2005). *Vitex agnus castus*: A Systematic Review of Adverse Events. *Drug Safety*. 28, 319–332.
 - PIER (2011). *Vitex agnus-castus*: info from PIER (PIER species info).
 - A&M, T. (2022). *Texas Vitex*.
-

10. Does the plant produce impenetrable thickets, blocking or slowing movement of animals, livestock, or humans?

- Answer: **Yes**, which contributes **1** point(s) to the total PRE score.
- The *screeener* has a **Medium** confidence in this answer based on the available literature.

Answer / Justification:

The plant is a large multistem rounded shrub or small tree (White, 2013). Rated as forming dense thickets by PIER (2011).

Reference(s):

- White, M. (2013). *Invasive Plants and Weeds of the National Forests and Grasslands in the Southwestern Region*.
 - PIER (2011). *Vitex agnus-castus*: info from PIER (PIER species info).
-



Reproductive Strategies (Questions 11 - 17)

11. Does this species (or cultivar or variety) reproduce and spread vegetatively?

- Answer: **No**, which contributes **0** point(s) to the total PRE score.
- The *screeners* has a **Medium** confidence in this answer based on the available literature.

Answer / Justification:

Does not reproduce by vegetative fragmentation (PIER, 2011)

Reference(s):

- PIER (2011). *Vitex agnus-castus*: info from PIER (PIER species info).
-

12. If naturally detached fragments from this plant are capable of producing new plants, is this a common method of reproduction for the plant?

- Answer: **No**, which contributes **0** point(s) to the total PRE score.
- The *screeners* has a **High** confidence in this answer based on the available literature.

Answer / Justification:

Does not reproduce by vegetative fragmentation (PIER, 2011)

Reference(s):

- PIER (2011). *Vitex agnus-castus*: info from PIER (PIER species info).
-

13. Does the species (or cultivar or variety) commonly produce viable seed?

- Answer: **Yes**, which contributes **1** point(s) to the total PRE score.
- The *screeners* has a **High** confidence in this answer based on the available literature.



Answer / Justification:

Produces fertile seeds and readily seeds out into surrounding areas (Bugwoodwiki, 2014). Good seed crops occur almost every year, particularly in deep, moist soils along watercourses (PIER, 2011).

Reference(s):

- Bugwoodwiki (2014). *Vitex agnus-castus* - Bugwoodwiki.
 - PIER (2011). *Vitex agnus-castus*: info from PIER (PIER species info).
-

14. Does this plant produce copious viable seeds each year (> 1000)?

- Answer: **Yes**, which contributes **1** point(s) to the total PRE score.
- The *screeener* has a **Medium** confidence in this answer based on the available literature.

Answer / Justification:

Yes, by inference, considering this can be a large woody plant producing many fruit. Numerous small flowers are produced on flower stalks up to 12 inches long. Each fruit contains four seeds. Seeds are small and can average 40,000 seeds per pound (White, 2013).

Reference(s):

- White, M. (2013). Invasive Plants and Weeds of the National Forests and Grasslands in the Southwestern Region.
-

15. Is there significant germination (>25%) of seeds the next growing season, with no requirement of an infrequent environmental condition for seeds to germinate (i.e. fire) or long dormancy period?

- Answer: **Yes**, which contributes **1** point(s) to the total PRE score.
- The *screeener* has a **Very High** confidence in this answer based on the available literature.



Answer / Justification:

In a test of *Vitex agnus-castus* seed germination under varying heat treatments, the control group exhibited a 68% rate of germination, with higher germination rates for heat-treated seeds (Travlos, 2009).

Reference(s):

- Travlos, I. S., & Karamanos A. J. (2007). Influence of Heat on Seed Germination and Seedling Emergence of Chaste Tree (*Vitex agnus castus* L.). *Journal of Agronomy*. 6, 4.
-

16. Does this plant produce viable seed within the first three years (for an herbaceous species) to five years (for a woody species) after germination?

- Answer: **Yes**, which contributes **1** point(s) to the total PRE score.
- The *screeners* has a **Medium** confidence in this answer based on the available literature.

Answer / Justification:

Vitex agnus-castus is a woody shrub or tree. It is rated as having a 3-year minimum generative time (PIER, 2011).

Reference(s):

- PIER (2011). *Vitex agnus-castus*: info from PIER (PIER species info).
-

17. Does this plant continuously produce seed for >3 months each year or does seed production occur more than once a year?

- Answer: **Yes**, which contributes **1** point(s) to the total PRE score.
- The *screeners* has a **High** confidence in this answer based on the available literature.

Answer / Justification:

Flowers May to September (White, 2013). The fruits ripen in late summer and fall (PIER, 2011).



Reference(s):

- White, M. (2013). Invasive Plants and Weeds of the National Forests and Grasslands in the Southwestern Region.
 - PIER (2011). *Vitex agnus-castus*: info from PIER (PIER species info).
-

Dispersal (Questions 18 - 20)

18. Are the plant's propagules frequently dispersed long distance (>100 m) by mammals or birds or via domestic animals?

- Answer: **Yes**, which contributes **1** point(s) to the total PRE score.
- The *screener* has a **Medium** confidence in this answer based on the available literature.

Answer / Justification:

Fruit is a green and fleshy drupe, drying and turning brown, 1/8th inch in diameter. Persistent through the winter; containing four seeds (United States Department of Agriculture, 2013). Drupes presumably dispersed by birds & seeds therefore presumably survive passage through the guts of birds and/or other vertebrate dispersers (PIER, 2011).

Reference(s):

- United States Department of Agriculture, Forest Service (2013). Invasive Plants and Weeds of the National Forests and Grasslands in the Southwestern Region 2nd edition.
 - PIER (2011). *Vitex agnus-castus*: info from PIER (PIER species info).
-

19. Are the plant's propagules frequently dispersed long distance (>100 m) by wind or water?

- Answer: **Yes**, which contributes **1** point(s) to the total PRE score.
- The *screener* has a **Medium** confidence in this answer based on the available literature.



Answer / Justification:

Seeds or dry fruits containing seeds are noted to disperse by water, such as along riparian zones (PIER, 2011). By inference, this could be >100m.

Reference(s):

- PIER (2011). *Vitex agnus-castus*: info from PIER (PIER species info).
-

20. Are the plant's propagules frequently dispersed via contaminated seed (agriculture or wildflower packets), equipment, vehicles, boats or clothing/shoes?

- Answer: **No**, which contributes **0** point(s) to the total PRE score.
- The *screeners* has a **Low** confidence in this answer based on the available literature.

Answer / Justification:

Not considered a seed contaminant (PIER, 2011).

Reference(s):

- PIER (2011). *Vitex agnus-castus*: info from PIER (PIER species info).
-

Total PRE Score

PRE Score: 12 -- Low Potential Risk

Confidence: 69 / 100

Questions answered: 20 of 20 -- Valid (80% or more questions answered)

PRE Score Legend

The PRE Score is calculated by adding the point totals for each (answered) question.

< 13 : Low Potential Risk

13 - 15 : Moderate Potential Risk

> 15 : High Potential Risk



Questions Answered Legend

It is important to answer at least 16 questions to consider a PRE Score as "valid".

≥ 16 : valid (80% or more questions answered)

≤ 15 : invalid (not enough questions answered)

Organization Ownership and Content Privacy

Organization: 2022 Western IPM Grant Project

Content Privacy: Public



Evaluation Reviewers

The PRE approach is to base decisions on science and make decisions by consensus of diverse horticultural stakeholders. The literature review and process of answering PRE's questions are based on science; the decisions of which plants to prioritize are based on consensus. To ensure this process is in place and that PRE is collaborative, volunteer stakeholders are recruited from each region to review evaluations. The following experts in their profession (plant science, conservation, or horticultural trade) have participated as volunteer PRE reviewers for this evaluation:

- | | |
|--------------------|------------------|
| • Rebecca Senior | December 5, 2022 |
| • Jutta Burger | October 10, 2022 |
| • Nicole Valentine | October 10, 2022 |

This evaluation has a total of 3 reviewer(s).



Evaluation Issues

The following section lists all public issues for this evaluation. Issues provide a way for stakeholder reviewers to communicate any concerns or suggestions they might have with the plant or evaluation. Please email info@plantright.org if additional action is required to resolve open issues.

Issue ID # 8485

Date Created: December 5, 2022 - 12:30pm

Date Updated: December 10, 2022 - 7:40pm

Submitted by: Rebecca Senior

Status: Fixed

Type: Comment

Severity: Minor

Scope: General Information

Issue Description

The new GBIF overlay of this species can be easily updated. Remove the Pre combined map from the evaluation and re-create it with the species name in the lower left GBIF box. Don't forget to copy the map location and paste into your evaluation.

Also the climate match external link did not work.

Issue Resolution (Screener's Response to Issue)

Done. - Michael Chamberland

Issue ID # 8484

Date Created: December 5, 2022 - 12:27pm

Date Updated: December 10, 2022 - 7:40pm



Submitted by: Rebecca Senior

Status: Fixed

Type: Comment

Severity: Minor

Scope: General Information

Issue Description

The new GBIF overlay of this species can be easily updated. Remove the Pre combined map from the evaluation and re-create it with the species name in the lower left GBIF box. Don't forget to copy the map location and paste into your evaluation.

Also the climate match external link did not work.

Issue Resolution (Screener's Response to Issue)

Done. - Michael Chamberland

Issue ID # 8483

Date Created: December 5, 2022 - 12:27pm

Date Updated: December 10, 2022 - 7:41pm

Submitted by: Rebecca Senior

Status: Fixed

Type: Comment

Severity: Minor

Scope: General Information

Issue Description

The new GBIF overlay of this species can be easily updated. Remove the Pre combined map from the evaluation and re-create it with the species name in the lower left GBIF box. Don't forget to copy the map location and paste into your evaluation.

Also the climate match external link did not work.



Issue Resolution (Screener's Response to Issue)

Done. - Michael Chamberland

Issue ID # 8257

Date Created: October 10, 2022 - 2:48pm

Date Updated: November 20, 2022 - 7:09pm

Submitted by: Jutta Burger

Status: Fixed

Type: Comment

Severity: Minor

Scope: Q19. Are the plant's propagules frequently dispersed long distance (>100 m) by wind or water?

Issue Description

Agree with the low confidence score for both this question and Q18. Here it would be helpful to state if there is any evidence that fruits float. - Jutta

Issue Resolution (Screener's Response to Issue)

PIER mentions water dispersal, which suggests floating, but I have not found a specific documentation of floatation. - Michael Chamberland

Issue ID # 8256

Date Created: October 10, 2022 - 2:39pm

Date Updated: November 20, 2022 - 7:05pm

Submitted by: Jutta Burger



Status: Fixed

Type: Suggestion

Severity: Minor

Scope: Q17. Does this plant continuously produce seed for >3 months each year or does seed production occur more than once a year?

Issue Description

The PRE done for California also lists the Sunset Guide and Texas Invasives as supporting sporadic flowering over spring and summer. - Jutta

Issue Resolution (Screener's Response to Issue)

I found a solid citation about flowering period. - Michael Chamberland

Issue ID # 8255

Date Created: October 10, 2022 - 2:31pm

Date Updated: November 20, 2022 - 6:59pm

Submitted by: Jutta Burger

Status: Fixed

Type: Suggestion

Severity: Minor

Scope: Q14. Does this plant produce copious viable seeds each year (>1000)?

Issue Description

If you are answering "yes" based on inference, then confidence would typically be "medium". If you stick with this answer, provide more plant character information to substantiate it, such as how many flowers typically occur on an inflorescence, and how many inflorescences per plant. Invasives.org states "each fruit has four cells that usually contain one seed per cell". Also that it provides "fertile seeds and regularly seeds out into surrounding areas". - Jutta

Issue Resolution (Screener's Response to Issue)

Added some details about seeds per fruit and adjusted confidence level. - Michael Chamberland



Issue ID # 8254

Date Created: October 10, 2022 - 2:15pm

Date Updated: November 20, 2022 - 6:41pm

Submitted by: Jutta Burger

Status: Fixed

Type: Suggestion

Severity: Minor

Scope: Q04. Is the species (or cultivar or variety) noted as being invasive in the US or world in a similar climate?

Issue Description

Vitex agnus-castus is not listed as invasive in California. Make sure to clarify whether the designations given are formal and state/country-wide or more informal to help justify your "no" answer. - Jutta

Issue Resolution (Screener's Response to Issue)

I have departed from citing the CABI state categorization, in favor of source literature. - Michael Chamberland

Issue ID # 8253

Date Created: October 10, 2022 - 2:13pm

Date Updated: November 20, 2022 - 6:34pm

Submitted by: Jutta Burger

Status: Fixed

Type: Suggestion

Severity: Minor

Scope: Q03. Is the species (or cultivar or variety) noted as being invasive in the U.S. or world?

Issue Description



The answer seems justified but the justification actually implies that the species is invasive. Provide a clearer explanation for why the listings provided do not warrant categorization as "invasive". For instance, though CABI makes reference to several regions that list *Vitex* as "invasive", these designations seem to be based on local assessments. [Invasives.org](https://invasives.org) does not list any states that include this species on their lists. - Jutta

Issue Resolution (Screener's Response to Issue)

I have re-worded the justification. - Michael Chamberland

Issue ID # 8252

Date Created: October 10, 2022 - 12:04pm

Date Updated: November 20, 2022 - 6:24pm

Submitted by: Jutta Burger

Status: Fixed

Type: Comment

Severity: Minor

Scope: Q01. Has the species (or cultivar or variety, if applicable) become naturalized where it is not native?

Issue Description

I'm not sure which reference you are using that lists this species as invasive in California. It is not listed by either Cal-IPC or CDFA. - Jutta

Issue Resolution (Screener's Response to Issue)

The states listed were all listed under the "Invasive" column in CABI. I have switched to listing other citations for the US occurrences. - Michael Chamberland

Issue ID # 8251



Date Created: October 10, 2022 - 12:01pm

Date Updated: November 20, 2022 - 7:12pm

Submitted by: Jutta Burger

Status: Fixed

Type: Suggestion

Severity: Minor

Scope: Regional Information

Issue Description

You can add a direct link to your species and region Climate match search in the "Link to Climate Match Map" box. - Jutta

Issue Resolution (Screener's Response to Issue)

Link added. - Michael Chamberland

Issue ID # 8249

Date Created: October 10, 2022 - 10:09am

Date Updated: November 20, 2022 - 7:22pm

Submitted by: Nicole Valentine

Status: Fixed

Type: Suggestion

Severity: Minor

Scope: Evaluation as a whole

Issue Description

Several of your answers based on inference have low confidence (14, 17, 18, 19). These could be rated medium confidence if you have a solid inference supported by enough evidence. Q7 and Q8 could also be rated high based on your evidence. I think there is more evidence available you could use to support these too. For example, Q18, there are several accounts of birds eating the Vitex fruit.

<https://columbiametro.com/article/an-avian-sanctuary/>



<https://garden.org/plants/view/79536/Chaste-Tree-Vitex-agnus-castus/>

VERY HIGH = Highly credible evidence; reviewed scientific publications

HIGH = Other published material (reports or other non-peer-reviewed documents)

MEDIUM = Observational (unpublished information confirmed by a professional in the field); inferences

LOW = Question defaults to a “No” answer; unconfirmed information VERY LOW = Question left blank; no information

-NV

-- I would add a caveat to that to only do so if inference is strong. It is not for a few of these questions. - Jutta

Issue Resolution (Screener's Response to Issue)

I'm going to source my inferences from an actual invasive species site like PIER rather than birdwatching websites which are not focused on the biology of plants. I have tweaked some confidence levels. - Michael Chamberland

Issue ID # 8248

Date Created: October 10, 2022 - 9:57am

Date Updated: November 20, 2022 - 6:55pm

Submitted by: Nicole Valentine

Status: Fixed

Type: Comment

Severity: Minor

Scope: Q10. Does the plant produce impenetrable thickets, blocking or slowing movement of animals, livestock, or humans?

Issue Description

It would be helpful to describe the growth habit here. -NV

Issue Resolution (Screener's Response to Issue)



Added. - Michael Chamberland

Issue ID # 8247

Date Created: October 10, 2022 - 9:44am

Date Updated: November 20, 2022 - 6:49pm

Submitted by: Nicole Valentine

Status: Fixed

Type: Suggestion

Severity: Minor

Scope: Q09. Is the plant a health risk to humans or animals/fish? Has the species been noted as impacting grazing systems?

Issue Description

I agree with your 'no' answer to this question but would address PRE's guidelines more here since being unpalatable can qualify as a yes answer if the species is replacing more nourishing species per PRE's guidelines. I would address whether Vitex is replacing more nourishing species in rangelands. -NV

Issue Resolution (Screener's Response to Issue)

I have pointed out the plant has not been noted in densities that would displace palatable forage. - Michael Chamberland

Issue ID # 8246

Date Created: October 10, 2022 - 9:39am

Date Updated: November 20, 2022 - 7:02pm

Submitted by: Nicole Valentine

Status: Fixed



Type: Suggestion

Severity: Minor

Scope: Q14. Does this plant produce copious viable seeds each year (>1000)?

Issue Description

You can add more evidence about the plant characteristics that would support your inference. OSU details dense flower clusters, coupled with photos of multiple inflorescences supports a yes answer.

"Flowers small, corolla about 8 mm, lilac or pale violet, fragrant, in dense, erect clusters 10-18 cm long" (OSU).

<https://landscapeplants.oregonstate.edu/plants/vitex-agnus-castus>

-NV

Issue Resolution (Screener's Response to Issue)

More floral/fruit description added. - Michael Chamberland



About PRE and this Plant Evaluation Report

The Plant Risk Evaluator (PRE) is an online database and platform designed to assess the risk of a plant becoming invasive in a given region. This tool offers many benefits, and we encourage you to visit the PRE website (<https://pretool.org>) for more information.

If you would like to learn more about PRE, please email us at info@plantright.org, requesting a PRE Account.

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