



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

Melia azedarach -- Arizona

2022 Western IPM Grant Project

PRE Score: 18 -- High Potential Risk

Confidence: 70 / 100

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

Privacy: Public

Status: Completed

Evaluation Date: August 30, 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

Melia azedarach



Image by Forest & Kim Starr



Evaluation Overview

A PRE™ screener conducted a literature review for this plant (*Melia azedarach*) 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

Chinaberry (*Melia azedarach*) is an introduced plant in warm regions around the Globe. It has a long history of use as an ornamental, and it has found application for pharmacological uses. Abundant literature on the plant and the efforts to control it support its recognition as a significant invasive species worldwide. In Arizona it has escaped cultivation less often and has not proved a major invader of wild areas. Chinaberry is rarely offered for sale in nurseries in Arizona. Trees can regularly be seen in older neighborhoods in Phoenix and Tucson suggesting the plant has the ability to persist and/or reseed in the urban environment, as the tree is not likely to be commonly planted. Chinaberry has a high PRE score rating of 18 on the basis of the considerable literature available describing its more significant impact in other parts of the world.

General Information

Status: Completed

Screener: Michael Chamberland

Evaluation Date: August 30, 2022

Plant Information

Plant: *Melia azedarach*

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 *screeners* has a **Very High** confidence in this answer based on the available literature.

Answer / Justification:

Chinaberry is considered native to southeastern Asia, specifically central and western China, northern India, the Himalayan region, Burma, and Malaysia. It is also native to tropical Australia. Because chinaberry has been extensively cultivated around the world, its native distribution is uncertain. Chinaberry readily escapes cultivation and spreads to disturbed sites and wildlands. Chinaberry is a nonnative tree in North America. It occurs throughout the southern United States north to Virginia and west to central California. It also occurs in Utah, Oklahoma, Missouri and New York, Hawaii and Puerto Rico. In southern forests, its estimated cover is greatest in Georgia, Alabama, Mississippi, and eastern Texas. In addition to North America, chinaberry occurs as a nonnative in Mexico, Argentina, and other warm-temperature parts of the world (Waggy, 2009).

Reference(s):

- Waggy, M. A. (2009). *Melia azedarach*. In Fire Effects Information System.

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 *screeners* has a **Very High** confidence in this answer based on the available literature.



Answer / Justification:

Chinaberry is naturalized in areas with a climate match to Arizona, such as Argentina, central Australia, and southern and northern Africa (GBIF, 2022).

Reference(s):

- GBIF (2022). GBIF - *Melia azedarach*.
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3. Is the species (or cultivar or variety) noted as being invasive in the U.S. or world?

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

Answer / Justification:

Melia azedarach has become invasive in a number of locations in the Americas, the Pacific and Africa, and has been classified as an invasive species in some countries including South Africa and Hawaii, USA. It is difficult to control because of its ability to resprout from stems and suckers, and the expense of chemical techniques (CABI, 2022). Chinaberry displays a wide range of occurrence across warm parts of the Globe (GBIF, 2022). The significance of chinaberry invasion is shown in the prioritization it has been given in studies of biological control (Ding et al, 2006), ecological assessments (Rowntree, 1991) and listings of invasive species (Oswalt & Oswalt, 2013). Though a prioritization study gave it a lower ranking than expected for South Africa (Robertson et al, 2003).



Reference(s):

- CABI (2022). CABI - Invasive Species Compendium - *Melia azedarach* (Chinaberry) .
 - GBIF (2022). GBIF - *Melia azedarach*.
 - Ding, J., Reardon R., Wu Y., Zheng H., & Fu W. (2006). Biological control of invasive plants through collaboration between China and the United States of America: a perspective. *Biological Invasions*. 8, 1439–1450.
 - Rowntree, K. (1991). AN ASSESSMENT OF THE POTENTIAL IMPACT OF ALIEN INVASIVE VEGETATION ON THE GEOMORPHOLOGY OF RIVER CHANNELS IN SOUTH AFRICA. *Southern African Journal of Aquatic Sciences*. 17, 28–43.
 - Oswalt, C., & Oswalt S. (2013). Chapter 8: Invasive Plants on Forest Land in the United States. In: Potter, Kevin M.; Conkling, Barbara L., eds. 2015. Forest health monitoring: national status, trends, and analysis 2013. General Technical Report SRS-207. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station.. 207, 123–134.
 - Robertson, M. P., Villet M. H., Fairbanks D. H. K., Henderson L., Higgins S. I., Hoffmann J. H., et al. (2003). A proposed prioritization system for the management of invasive alien plants in South Africa. *South African Journal of Science*. 7.
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4. Is the species (or cultivar or variety) noted as being invasive in the US or world in a similar climate?

- Answer: **Yes**, which contributes **3** point(s) to the total PRE score.
- The *screeners* has a **High** confidence in this answer based on the available literature.

Answer / Justification:

Chinaberry has not been included on any state or federal Noxious Weed list. However, it is listed as an invasive species by the Texas Invasive Species Institute (2014). Its significance as invasive is supported by impacts caused by the plants' toxicity and tendency to form thickets, and ability to travel by seeds consumed by birds (Texas Invasive Species Institute, 2014). While *Melia* can be expected to be a more common problem in east Texas, outside the climate-matching zone, *Melia* is widely occurring in the Southwest, present in New Mexico, Utah, and California, other states adjacent to Arizona with large climate-matching areas. Chinaberry has been noted as common along streambanks and roadsides in semiarid savanna in the norther Cape of Africa, but its abundance declined in arid regions. Also reported from Australia (Waggy, 2009).

Reference(s):

- Texas Invasive Species Institute (2014). Chinaberry Tree: Texas Invasive Species Institute.
- Waggy, M. A. (2009). *Melia azedarach*. In Fire Effects Information System.



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:

Melia is a small genus with no other species with noteworthy invasive tendencies (Wikipedia, 2022). No other species in the genus Melia are listed in the Global Compendium of Weeds (Randall, 2017).

Reference(s):

- Anonymous (2022). Wikipedia - Melia.
 - Randall, R.P. (2017). A Global Compendium of Weeds. Third Edition..
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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 *screeener* has a **High** confidence in this answer based on the available literature.

Answer / Justification:

Chinaberry is a widespread species which is present in areas which are a climate match to Arizona, plus many more areas. These additional areas include Central America and the Northwest portion of South America, Brazil, Central Africa, Southeast Asia and New Zealand (GBIF, 2022).

Reference(s):

- GBIF (2022). GBIF - Melia azedarach.
-



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:

Rated as forming dense thickets, but not having a climbing or smothering habit (PIER, 2004). In Georgia, Chinaberry is ranked as a Category 1 invasive species: nonnative plants that pose serious problems in Georgia natural areas by "extensively invading native plant communities and displacing native species." In parts of Texas "often forms dense stands that reduce light to other understory vegetation" (Waggy, 2009).

Reference(s):

- PIER (2004). *Melia azedarach*: info from PIER (PIER species info).
 - Waggy, M. A. (2009). *Melia azedarach*. In Fire Effects Information System.
-

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:

Chinaberry sprouts from roots and stumps when damaged suggesting it may sprout after fire. Vegetative regeneration is more likely than sexual reproduction in chinaberry after fire; however, chinaberry seedlings may establish from buried seed or from off-site seed sources soon after fire. A publication from Virginia on firewise landscaping techniques gave chinaberry a low flammability rating however, no details were provided on how this determination was made. (Waggy, 2009).

Reference(s):

- Waggy, M. A. (2009). *Melia azedarach*. In Fire Effects Information System.



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

- 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:

Chinaberry is listed as toxic and unpalatable to animals (PIER, 2004). *Melia azedarach* intoxication has been observed in humans and domestic animals due to the ingestion of leaves or, mainly, fallen fruits, although they have a bitter taste; clinical signs in humans include nausea, vomiting, diarrhea, thirst, sweating, grinding of teeth, sleepiness, and convulsions. Chinaberry poisoning has been reported in horses, cattle, sheep, goats, pigs, dogs, rabbits, rats, guinea pigs, and poultry. Toxicity of the fruits is found within the pulp, whereas the shell and kernel are quite harmless. Most poisoning occurs in autumn and winter, when the berries ripen (Ferreiro et al. 2010).

Reference(s):

- PIER (2004). *Melia azedarach*: info from PIER (PIER species info).
 - Ferreiro, D., Orozco J. P., Mirón C., Real T., Hernández-Moreno D., Soler F., et al. (2010). Chinaberry tree (*Melia azedarach*) poisoning in dog: a case report. *Topics in Companion Animal Medicine*. 25, 64–67.
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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 *screeners* has a **Very High** confidence in this answer based on the available literature.

Answer / Justification:

Rated as forming dense thickets, but not having a climbing or smothering habit (PIER, 2004). Forming dense thickets (Tourn, 2000). In one instance, chinaberry formed impenetrable patches of vegetation in combination with pokeweed (*Phytolacca* sp.) and boneset (*Eupatorium* sp.) on an island off the coast of Texas. Can form dense stands, as has been observed in Florida and Texas (Waggy, 2009). Because this is a tree species, by inference these thickets will have capacity to block livestock and humans.



Reference(s):

- PIER (2004). *Melia azedarach*: info from PIER (PIER species info).
 - Tourn, G. M., Menvielle M. F., Scopel A. L., & Pidal B. (2000). Clonal strategies of a woody weed: *Melia azedarach*. (Stokes, A., Ed.). *The Supporting Roots of Trees and Woody Plants: Form, Function and Physiology*. 137–143.
 - Waggy, M. A. (2009). *Melia azedarach*. In *Fire Effects Information System*.
-

Reproductive Strategies (Questions 11 - 17)

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

- 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:

Chinaberry typically reproduces by seeds, but may exhibit clonal growth following disturbance (e.g. fire, herbivory, animal injury). Root buds were produced in all (fire treated and control) plagiotropic root cuts when incubated under controlled conditions. Root suckers developed from the differentiation of parenchymatous cells produced by meristematic activity in the cambial zone. Results from ongoing experiments indicate that the chances of a root sprout to survive into a new individual are much higher than those of a seedling (Tourn et al, 2000)

Reference(s):

- Tourn, G. M., Menvielle M. F., Scopel A. L., & Pidal B. (2000). Clonal strategies of a woody weed: *Melia azedarach*. (Stokes, A., Ed.). *The Supporting Roots of Trees and Woody Plants: Form, Function and Physiology*. 137–143.
-

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 **Low** confidence in this answer based on the available literature.



Answer / Justification:

Chinaberry can reproduce vegetatively from root suckers. However a study of chinaberry clonal growth (Tourn, 2000) did not describe a capacity for the plant to disperse detached fragments.

Reference(s):

- Tourn, G. M., Menvielle M. F., Scopel A. L., & Pidal B. (2000). Clonal strategies of a woody weed: *Melia azedarach*. (Stokes, A., Ed.). *The Supporting Roots of Trees and Woody Plants: Form, Function and Physiology*. 137–143.
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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:

Typically reproduces by seeds (Tourn, 2000).

Reference(s):

- Tourn, G. M., Menvielle M. F., Scopel A. L., & Pidal B. (2000). Clonal strategies of a woody weed: *Melia azedarach*. (Stokes, A., Ed.). *The Supporting Roots of Trees and Woody Plants: Form, Function and Physiology*. 137–143.
-

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

- 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:

Rated as "no" for prolific seed production ($>1000/m^2$) (PIER, 2004). However, described as prolific producer of seeds by CABI (2022). Each fruit contains one to six seeds (Waggy, 2009). Forms a tree suggesting high seed potential, but under dry conditions these are smaller trees where the maximum height is 10-15 m (CABI, 2022).

Reference(s):

- PIER (2004). *Melia azedarach*: info from PIER (PIER species info).
 - CABI (2022). CABI - Invasive Species Compendium - *Melia azedarach* (Chinaberry) .
 - Waggy, M. A. (2009). *Melia azedarach*. In Fire Effects Information System.
-

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 *screeners* has a **Medium** confidence in this answer based on the available literature.

Answer / Justification:

Seed germination of the species is very poor due to seed dormancy (Azad et al, 2010). However in a study of seed germination, the control group consisting of cleaned and dry seeds showed a 39% germination rate, while treatments such as scarification and submersion in hot water or acid yielded higher germination rates. (Azad et al, 2010).

Reference(s):

- Azad, M. Salim, Zedan-Al-Musa M., & Matin M. Abdul (2010). Effects of pre-sowing treatments on seed germination of *Melia azedarach*. *Journal of Forestry Research*. 21, 193–196.
-



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:

This woody species is rated as having a minimum generative time of four years (PIER, 2004). May begin flowering in the seedling stage (Waggy, 2009).

Reference(s):

- PIER (2004). *Melia azedarach*: info from PIER (PIER species info).
 - Waggy, M. A. (2009). *Melia azedarach*. In Fire Effects Information System.
-

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 **Medium** confidence in this answer based on the available literature.

Answer / Justification:

Chinaberry flowers from March through April or May. Fruits and seeds are produced by July and ripen from September to October (Waggy). In Florida chinaberry flowers from March through April or May. Fruits and seeds are produced by July and ripen from September to October. In Japan, chinaberry fruits ripen autumn through winter. Fruit often remains on the tree until the leaves fall, or longer (Waggy, 2009). Noted as flowering March - July in California (Preston & McClintock, 2012).

Reference(s):

- Waggy, M. A. (2009). *Melia azedarach*. In Fire Effects Information System.
 - Preston, R. E., & McClintock E. (2012). *Jepson eFlora - Meliaceae*.
-



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 *screeners* has a **High** confidence in this answer based on the available literature.

Answer / Justification:

In North America, chinaberry seed is dispersed by animals, gravity, and possibly water. Birds and mammals eat chinaberry fruit and disperse its seed. Cattle egrets in Texas use fruitbearing twigs of chinaberry for nesting material, thus dispersing its seed. Seedlings emerge in abundance near the parent plant, suggesting that much of the seed is gravity dispersed. In Hawaii, chinaberry does not appear to have a natural dispersal agent and is thought to be dispersed by humans. In Africa, chinaberry is dispersed by water and birds (Waggy, 2009).

Reference(s):

- Waggy, M. A. (2009). *Melia azedarach*. In Fire Effects Information System.
-

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 *screeners* has a **Medium** confidence in this answer based on the available literature.

Answer / Justification:

In North America, Chinaberrytree seed is dispersed by animals, gravity, and possibly water. In Africa, chinaberry is dispersed by water and birds (Waggy, 2009).

Reference(s):

- Waggy, M. A. (2009). *Melia azedarach*. In Fire Effects Information System.
-



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 **Very Low** confidence in this answer based on the available literature.

Answer / Justification:

Propagules not likely to disperse as a produce contaminant (PIER, 2004).

Reference(s):

- PIER (2004). *Melia azedarach*: info from PIER (PIER species info).

Total PRE Score

PRE Score: 18 -- High Potential Risk

Confidence: 70 / 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 7, 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 # 8946

Date Created: March 13, 2023 - 7:00am

Date Updated: March 13, 2023 - 10:50am

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

Specifically list examples of the species being invasive in a similar climate to AZ if the answer is 'yes' to this question. - Jutta Burger

Issue Resolution (Screener's Response to Issue)

I have added more info on Melia's impact in Texas. - Michael Chamberland

Issue ID # 8481

Date Created: December 5, 2022 - 10:55am

Date Updated: December 10, 2022 - 7:22pm

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.

Issue Resolution (Screener's Response to Issue)

Done. - Michael Chamberland

Issue ID # 8480

Date Created: December 5, 2022 - 10:55am

Date Updated: December 10, 2022 - 7:23pm

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.

Issue Resolution (Screener's Response to Issue)

Done. - Michael Chamberland



Issue ID # 8271

Date Created: October 10, 2022 - 4:20pm

Date Updated: November 20, 2022 - 8:24pm

Submitted by: Jutta Burger

Status: Fixed

Type: Suggestion

Severity: Minor

Scope: Regional Information

Issue Description

Replace pdf attachment with climate match map that includes the *Melia azedarach* overlay. Rename as, e.g., ClimateMatch_Arizona_Melia azedarach. - Jutta

Issue Resolution (Screener's Response to Issue)

I have replaced with a newer generated map, not sure about overlay part. - Michael Chamberland

Issue ID # 8268

Date Created: October 10, 2022 - 4:12pm

Date Updated: November 20, 2022 - 8:22pm

Submitted by: Jutta Burger

Status: Fixed

Type: Suggestion

Severity: Minor

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

Issue Description

If there is documentation of seed (fruit) dispersal by water, then this should be at least a "medium" confidence. If you are implying that this mode of transport is not available in AZ (due to lack of water), then that should be stated explicitly. - Jutta



Issue Resolution (Screener's Response to Issue)

Confidence level increased to Medium. - Michael Chamberland

Issue ID # 8269

Date Created: October 10, 2022 - 4:12pm

Date Updated: November 20, 2022 - 8:23pm

Submitted by: Jutta Burger

Status: Fixed

Type: Suggestion

Severity: Minor

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

Issue Description

If there is documentation of seed (fruit) dispersal by water, then this should be at least a "medium" confidence. If you are implying that this mode of transport is not available in AZ (due to lack of water), then that should be stated explicitly. - Jutta

Issue Resolution (Screener's Response to Issue)

Confidence level increased to Medium. - Michael Chamberland

Issue ID # 8267

Date Created: October 10, 2022 - 4:09pm

Date Updated: November 20, 2022 - 8:19pm

Submitted by: Jutta Burger

Status: Fixed



Type: Suggestion

Severity: Minor

Scope: Q18. Are the plant's propagules dispersed long distance (>100 m) by mammals or birds or via domestic animals?

Issue Description

Based on the information provided, I think your confidence could be increased at least to medium (you provide direct evidence of the movement of fruits by animals). - Jutta

Issue Resolution (Screener's Response to Issue)

I have increased the confidence rating. - Michael Chamberland

Issue ID # 8266

Date Created: October 10, 2022 - 4:07pm

Date Updated: November 20, 2022 - 8:18pm

Submitted by: Jutta Burger

Status: Fixed

Type: Comment

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

You could add that the Jepson Flora of California lists it as blooming from March - July. https://ucjeps.berkeley.edu/eflora/eflora_display.php?tid=33069. - Jutta

Issue Resolution (Screener's Response to Issue)

Added Jepson eFlora information. - Michael Chamberland



Issue ID # 8264

Date Created: October 10, 2022 - 3:55pm

Date Updated: November 20, 2022 - 7:39pm

Submitted by: Jutta Burger

Status: Fixed

Type: Suggestion

Severity: Major

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

Issue Description

I'm not sure what references PIER has used, but there are other references (e.g., [CABI](#)), which list list this species as being a prolific seeder. Since you mention that each fruit can contain up to 6 seeds, it seems that it would be easy for a tree to produce more than 1000 seeds. Your call of whether you want to change this answer, but at a minimum there seems to be disagreement on seed production in the lit. - Jutta

Issue Resolution (Screener's Response to Issue)

I have added the extra details, but it does not resolve the contradiction. - Michael Chamberland

Issue ID # 8262

Date Created: October 10, 2022 - 3:32pm

Date Updated: November 20, 2022 - 8:00pm

Submitted by: Jutta Burger

Status: Fixed

Type: Suggestion

Severity: Minor

Scope: Q05. Are other species of the same genus invasive in a similar climate?

Issue Description

In this case, Wikipedia does not provide any specific information about the invasiveness (or lack thereof)



of *Melia* relatives. A more robust reference would be Randall (2017) Global Compendium of Weeds. - Jutta

Issue Resolution (Screener's Response to Issue)

Added the Randall reference. - Michael Chamberland

Issue ID # 8261

Date Created: October 10, 2022 - 3:28pm

Date Updated: November 20, 2022 - 7:55pm

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

Since GBIF really only shows occurrence and not invasiveness, you will need an additional reference. Waggy (2009) [species account in "Fire Effects Information System"] seems to be one appropriate resource that could be used if it refers to invasiveness in similar climates. - Jutta

Issue Resolution (Screener's Response to Issue)

I have substituted with evidence from the Fire Effects publication. - Michael Chamberland

Issue ID # 8260

Date Created: October 10, 2022 - 3:21pm

Date Updated: November 20, 2022 - 7:40pm



Submitted by: Jutta Burger

Status: Fixed

Type: Comment

Severity: Minor

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

Issue Description

Correct author spelling in text (Rowntree). - Jutta

Issue Resolution (Screener's Response to Issue)

Done. - Michael Chamberland

Issue ID # 8259

Date Created: October 10, 2022 - 3:18pm

Date Updated: November 20, 2022 - 8:24pm

Submitted by: Jutta Burger

Status: Fixed

Type: Suggestion

Severity: Minor

Scope: Regional Information

Issue Description

Add direct link to species / region ClimateMatch search in "Link to Climate Match Map" box. - Jutta

Issue Resolution (Screener's Response to Issue)

Done. - Michael Chamberland



Issue ID # 8241

Date Created: October 7, 2022 - 5:37pm

Date Updated: November 20, 2022 - 8:25pm

Submitted by: Nicole Valentine

Status: Fixed

Type: Suggestion

Severity: Minor

Scope: Evaluation as a whole

Issue Description

For Qs 18/19 the Waggy/FEIS reference could qualify the confidence rating as high or medium depending on the evidence. I think Q10 could be changed to "very high."

Confidence definitions:

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

Issue Resolution (Screener's Response to Issue)

Done. - Michael Chamberland

Issue ID # 8240

Date Created: October 7, 2022 - 5:27pm

Date Updated: November 20, 2022 - 8:04pm

Submitted by: Nicole Valentine

Status: Fixed

Type: Comment

Severity: Minor

Scope: Q07. Does this plant displace native plants and dominate the plant community in areas where it



has been established?

Issue Description

I think there is enough evidence available to qualify this answer a "High" confidence rating. "In Georgia, Chinaberrytree is ranked as a Category 1 invasive species: nonnative plants that pose serious problems in Georgia natural areas by "extensively invading native plant communities and displacing native species"" (Waggy). -NV

Issue Resolution (Screener's Response to Issue)

Added some notes from Waggy. - Michael Chamberland

Issue ID # 8239

Date Created: October 7, 2022 - 5:18pm

Date Updated: November 20, 2022 - 8:06pm

Submitted by: Nicole Valentine

Status: Fixed

Type: Suggestion

Severity: Minor

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

Issue Description

The FEIS (Waggy) and CABI both state that this plant is a "prolific" seeder. The #seeds/fruit coupled with photos of the tree with numerous fruit/flowers make it seem like it could produce over 1000 seeds. More reasoning in your answer could resolve some of these concerns. -NV

Issue Resolution (Screener's Response to Issue)

This was previously listed as an issue. There is contradictory information in the literature, and complicated by the smaller stature of trees in drier climates. - 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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