



***Plant Risk Evaluator -- PRE™
Evaluation Report***

Hibiscus syriacus 'Diana' -- Georgia

2017 Farm Bill PRE Project

PRE Score: 1 -- Accept (low risk of invasiveness)

Confidence: 90 / 100

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

Privacy: Public

Status: Submitted

Evaluation Date: November 2, 2017

This PDF was created on July 06, 2018



Plant Evaluated

Hibiscus syriacus 'Diana'



Image by MBOT



Evaluation Overview

A PRE™ screener conducted a literature review for this plant (*Hibiscus syriacus* 'Diana') 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

Hibiscus syriacus 'Diana' is a sterile triploid cultivar that produces few if any seed. It is obviously very different to the parents species as it has reduced fecundity. For this reason the evaluation uses mostly cultivar references. As the hybrid is sterile (or produces very few seed) the threat of escaping cultivation and proliferating in natural areas is low and therefore gained a very low evaluation score.

General Information

Status: Submitted

Screener: Kylie Bucalo

Evaluation Date: November 2, 2017

Plant Information

Plant: *Hibiscus syriacus* 'Diana'

If the plant is a cultivar, how does its behavior differs from its parent's?

Taken from MOBOT resource. "'Diana' is a sterile triploid that produces very few if any seed pods. Triangular, lobed, leathery, dark green leaves (to 3.5" long). Pure white flowers that are 3 to 4 in. across. A Royal Horticultural Society of Great Britain Award of Garden Merit plant."

Regional Information

Region Name: Georgia



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 in an original article published at the University of California, Davis, and can be found on the PLOS One website, 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: **No**, which contributes **0** points to the total PRE score.
- The *screeener* has a **High** confidence in this answer based on the available literature.

Answer / Justification:

cultivar information used. There is no evidence of this as the cultivar is sterile. The adult plant has escaped cultivation.

Reference(s):

- [Anonymous] (0). Diana_US National Aboretum.
- [Anonymous] (0). Hibiscus syriacus 'Diana' - Plant Finder- MOBOT.
- [Anonymous] (2006). Hibiscus syriacus weed of the week. .
- [Anonymous] (0). rose of Sharon: Hibiscus syriacus (Malvales: Malvaceae): Invasive Plant Atlas of the United States.

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

- Answer: **No**, which contributes **0** points to the total PRE score.
- The *screeener* has a **High** confidence in this answer based on the available literature.

Answer / Justification:

cultivar information used. There is no evidence of this as the cultivar is sterile. The adult plant has escaped cultivation and is present across the southeast



Reference(s):

- [Anonymous] (0). Diana_US National Aboretum.
 - [Anonymous] (0). Hibiscus syriacus 'Diana' - Plant Finder- MOBOT.
 - [Anonymous] (2006). Hibiscus syriacus weed of the week. .
 - [Anonymous] (0). rose of Sharon: Hibiscus syriacus (Malvales: Malvaceae): Invasive Plant Atlas of the United States.
-

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

- Answer: **No**, which contributes **0** points to the total PRE score.
- The *screeener* has a **High** confidence in this answer based on the available literature.

Answer / Justification:

cultivar information used. There is no evidence of this as the cultivar is sterile. The adult plant has escaped cultivation and is listed as invasive in KY, PA, TN, and VA. In areas where the parent species has escaped it can invade, crowd out and displace more desirable native plants.

Reference(s):

- [Anonymous] (0). Diana_US National Aboretum.
 - [Anonymous] (0). Hibiscus syriacus 'Diana' - Plant Finder- MOBOT.
 - [Anonymous] (2006). Hibiscus syriacus weed of the week. .
 - [Anonymous] (0). rose of Sharon: Hibiscus syriacus (Malvales: Malvaceae): Invasive Plant Atlas of the United States.
-

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** points to the total PRE score.
- The *screeener* has a **High** confidence in this answer based on the available literature.



Answer / Justification:

cultivar information used. There is no evidence of this as the cultivar is sterile. The adult plant has escaped cultivation and is listed as invasive in KY, PA, TN, and VA. In areas where the parent species has escaped it can invade, crowd out and displace more desirable native plants. Small portions of TN, VA and KY are climate matches to GA.

Reference(s):

- [Anonymous] (0). Diana_US National Arboretum.
 - [Anonymous] (0). Hibiscus syriacus 'Diana' - Plant Finder- MOBOT.
-

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

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

Answer / Justification:

"Hibiscus tiliaceus is a tree often associated with mangrove vegetation, native to coastal areas from East Africa to the central Pacific. It has been reported as an invasive species in Florida and some Caribbean islands"

Reference(s):

- [Anonymous] (0). Hibiscus tiliaceus (coast cottonwood)_CABI.
-

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

- Answer: **No**, which contributes **0** points to the total PRE score.
- The *screeener* has a **High** confidence in this answer based on the available literature.



Answer / Justification:

cultivar information used. There is no evidence of this as the cultivar is sterile, and no record of escape is listed in the cultivar resources.

Reference(s):

- [Anonymous] (0). Diana_US National Aboretum.
 - [Anonymous] (0). Hibiscus syriacus 'Diana' - Plant Finder- MOBOT.
-

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

Answer / Justification:

The cultivar 'Diana' can grow quite large at around 8 feet tall and 8 feet wide. but can be trained into a pruned hedge or container plant. Because of its dominant growth and habit it may shade out other plants if ever purposefully planted outside of a horticultural environment. But as it is sterile there has been no record of this in the cultivar resources. The parent plant is known to escape cultivation and will invade and outgrow natives.

Reference(s):

- [Anonymous] (2006). Hibiscus syriacus weed of the week. .
 - [Anonymous] (0). Hibiscus syriacus 'Diana' - Plant Finder- MOBOT.
 - [Anonymous] (0). Diana_US National Aboretum.
-

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

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



Answer / Justification:

There is no evidence of this.

Reference(s):

- [Anonymous] .
-

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** points to the total PRE score.
- The *screeener* has a **High** confidence in this answer based on the available literature.

Answer / Justification:

There is no evidence of this.

Reference(s):

- [Anonymous] (0). Diana_US National Aboretum.
 - [Anonymous] (0). Hibiscus syriacus 'Diana' - Plant Finder- MOBOT.
-

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

- Answer: **No**, which contributes **0** points to the total PRE score.
- The *screeener* has a **High** confidence in this answer based on the available literature.

Answer / Justification:

There is no evidence of this.

Reference(s):

- [Anonymous] .



Reproductive Strategies (Questions 11 - 17)

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

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

Reference(s):

- [Anonymous] (0). Diana_US National Arboretum.
 - [Anonymous] (0). Hibiscus syriacus 'Diana' - Plant Finder- MOBOT.
-

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** points to the total PRE score.
- The *screeners* has a **Very High** confidence in this answer based on the available literature.

Reference(s):

- [Anonymous] .
-

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

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

Answer / Justification:

Cultivar. 'Diana' is a sterile triploid that produces very few if any seed pods.



Reference(s):

- [Anonymous] (0). Hibiscus syriacus 'Diana' - Plant Finder- MOBOT.
-

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

- Answer: **No**, which contributes **0** points to the total PRE score.
- The *screeener* has a **Very High** confidence in this answer based on the available literature.

Answer / Justification:

Cultivar. 'Diana' is a sterile triploid that produces very few if any seed pods.

Reference(s):

- [Anonymous] (0). Hibiscus syriacus 'Diana' - Plant Finder- MOBOT.
-

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: **No**, which contributes **0** points to the total PRE score.
- The *screeener* has a **Very High** confidence in this answer based on the available literature.

Answer / Justification:

Cultivar. 'Diana' is a sterile triploid that produces very few if any seed pods.

Reference(s):

- [Anonymous] (0). Hibiscus syriacus 'Diana' - Plant Finder- MOBOT.
-



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: **No**, which contributes **0** points to the total PRE score.
- The *screeners* has a **Very High** confidence in this answer based on the available literature.

Answer / Justification:

Cultivar. 'Diana' is a sterile triploid that produces very few if any seed pods.

Reference(s):

- [Anonymous] (0). *Hibiscus syriacus* 'Diana' - Plant Finder- MOBOT.
-

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

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

Answer / Justification:

Cultivar. 'Diana' is a sterile triploid that produces very few if any seed pods.

Reference(s):

- [Anonymous] (0). *Hibiscus syriacus* 'Diana' - Plant Finder- MOBOT.
-



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: **No**, which contributes **0** points to the total PRE score.
- The *screeners* has a **Very High** confidence in this answer based on the available literature.

Answer / Justification:

Cultivar. 'Diana' is a sterile triploid that produces very few if any seed pods.

Reference(s):

- [Anonymous] (0). Diana_US National Arboretum.
 - [Anonymous] (0). Hibiscus syriacus 'Diana' - Plant Finder- MOBOT.
-

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

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

Answer / Justification:

Cultivar. 'Diana' is a sterile triploid that produces very few if any seed pods, and does not reproduce vegetatively.

Reference(s):

- [Anonymous] .
-



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** points to the total PRE score.
- The *screeners* has a **Very High** confidence in this answer based on the available literature.

Answer / Justification:

there is no evidence of this.

Reference(s):

- [Anonymous] .
-

Total PRE Score

PRE Score: 1 -- Accept (low risk of invasiveness)

Confidence: 90 / 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 : accept (low risk of invasiveness)

13 - 15 : evaluate further

> 15 : reject (high risk of invasiveness)

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: 2017 Farm Bill PRE 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:

This evaluation does not have any reviewers.



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 PlantRight@suscon.org if additional action is required to resolve open issues.

There are currently no issues associated with this evaluation.



About PRE and this Plant Evaluation Report

The PlantRight Plant Risk Evaluator -- PRE is an online database and platform enabling those involved in non-native, terrestrial plant production to know before they grow if a plant poses a regional invasive risk. This tool offers many benefits, and we encourage you to visit the PRE website (<https://pre.ice.ucdavis.edu>) for more information.

If you are a nursery trade association, or involved in the research, development or distribution of horticultural plants we invite you to join the PRE community. If you are a plant scientist, affiliated with a horticultural college or botanic garden, and would like to learn more about becoming a PRE Screener, please drop us an email, PlantRight@suscon.org, requesting a PRE Account.

PRE beta funding is provided by Sustainable Conservation (<http://www.suscon.org/>) and a USDA Farm Bill grant.