



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

Nepeta racemosa 'Walker's Low' -- Illinois

2017 Farm Bill PRE Project

PRE Score: 2 -- Accept (low risk of invasiveness)

Confidence: 72 / 100

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

Privacy: Public

Status: Submitted

Evaluation Date: September 13, 2017

This PDF was created on June 15, 2018



Plant Evaluated

Nepeta racemosa 'Walker's Low'



Image by MBOT



Evaluation Overview

A PRE™ screener conducted a literature review for this plant (*Nepeta racemosa* 'Walker's Low') 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

Nepeta racemosa 'Walker's Low' poses a very low risk of invasion due to sterility. No evidence of significant dispersal by vegetative reproduction could be found. Though naturalized, the species *Nepeta racemosa* is not noted as invasive.

General Information

Status: Submitted

Screener: Emily Russell

Evaluation Date: September 13, 2017

Plant Information

Plant: *Nepeta racemosa* 'Walker's Low'

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

'Walker's Low' is sterile.

Regional Information

Region Name: Illinois



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

Answer / Justification:

Nepeta racemosa is naturalized in Europe, Canada, and the United States (Wyoming, Wisconsin and New York). However, the cultivar 'Walker's Low' is sterile and is unlikely to have contributed to naturalized populations.

Reference(s):

- Randall, R. (2012). A Global Compendium of Weeds. 2nd Edition..
 - Kartesz, J. T. (2015). The Biota of North America Program (BONAP).
-

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

Answer / Justification:

Nepeta racemosa is naturalized in northern Europe, Canada, and the United States (Wisconsin and New York) where there is a climate match with Illinois. However, the cultivar 'Walker's Low' is sterile and is unlikely to have contributed to naturalized populations.



Reference(s):

- Randall, R. (2012). A Global Compendium of Weeds. 2nd Edition..
 - Kartesz, J. T. (2015). The Biota of North America Program (BONAP).
-

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:

Nepeta racemosa is not noted as being invasive, nor is the sterile cultivar 'Walker's Low'.

Reference(s):

- [Anonymous] .
-

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:

Nepeta racemosa is not noted as being invasive, nor is the sterile cultivar 'Walker's Low'.

Reference(s):

- [Anonymous] .
-



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

Answer / Justification:

Nepeta cataria is a widely naturalized weed that is listed as invasive in the Mid-Atlantic United States, which is a climate match for Illinois.

Reference(s):

- Mid-Atlantic Exotic Pest Plant Council (2005). Mid-Atlantic Exotic Pest Plant Council Plant List.
 - Randall, R. (2012). A Global Compendium of Weeds. 2nd Edition..
 - Kartesz, J. T. (2015). The Biota of North America Program (BONAP).
-

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

Answer / Justification:

Distribution of *Nepeta racemosa* in Australia, New Zealand, and the Western United States are not a climate match for Illinois.

Reference(s):

- GBIF Secretariat (2016). *Nepeta racemosa* Lam..
-



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

Answer / Justification:

There is no evidence of displacing native plants.

Reference(s):

- [Anonymous] .
-

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

Answer / Justification:

There is no evidence for changing fire regimes.

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



Answer / Justification:

There are not reports of health risks to humans or animals. Cats like to roll in it. Some sources say *Nepeta racemosa* 'Walker's Low' is deer and rabbit proof, but there is no evidence of impacts to grazing systems.

Reference(s):

- [Anonymous] .
-

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

Answer / Justification:

As an herbaceous perennial under 3 feet, *Nepeta racemosa* 'Walker's Low' is unlikely to produce impenetrable thickets.

Reference(s):

- [Anonymous] .
-

Reproductive Strategies (Questions 11 - 17)

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

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

Answer / Justification:

Clumps of *Nepeta racemosa* 'Walker's Low' slowly expand outward. It is also easy to propagate via layering.



Reference(s):

- [Anonymous] .
-

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

Answer / Justification:

Though cuttings root easily, there is no evidence that *Nepeta racemosa* frequently reproduces from fragments in the wild.

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

Answer / Justification:

'Walker's Low' is sterile.

Reference(s):

- Hawke, R. (2007). A Comparative Study of Cultivated Catmints. Chicago Botanic Garden Plant Evaluation Notes.
 - Klingaman, G. (2007). Walker's Low Catmint.
-



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:

'Walker's Low' is sterile.

Reference(s):

- [Anonymous] .
-

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:

'Walker's Low' is sterile.

Reference(s):

- [Anonymous] .
-

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



Answer / Justification:

'Walker's Low' is sterile.

Reference(s):

- [Anonymous] .
-

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

Answer / Justification:

'Walker's Low' is sterile.

Reference(s):

- [Anonymous] .
-

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

Answer / Justification:

There is no evidence of dispersal by animals.



Reference(s):

- [Anonymous] .
-

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

Answer / Justification:

There is no evidence of dispersal by wind or water. *Nepeta racemosa* prefers well-drained soil and therefore may be less likely to grow in riparian areas.

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

Answer / Justification:

There is no evidence of accidental dispersal by people.

Reference(s):

- [Anonymous] .
-



Total PRE Score

PRE Score: 2 -- Accept (low risk of invasiveness)

Confidence: 72 / 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 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.