



MISSOURI  
BOTANICAL  
GARDEN

**INDEX SEMINUM 2014**

Missouri Botanical Garden  
4344 Shaw Boulevard  
Saint Louis, MO 63110  
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314-577-9465

## GENERAL INFORMATION

Missouri Botanical Garden is pleased to offer its third annual *Index Seminum*. All seed is collected from naturally occurring populations. Species that are known weeds in disturbed areas in North America, known to be invasive to North America or other continents, and related species known to be invasive to North America or other continents have been excluded from the list. While we have made every effort to ensure that we are not distributing invasive or potentially invasive plants, selections should be made carefully with consideration of the environment in which the species will be grown.

We support the Convention on Biological Diversity. The seeds offered here are for the use of the common good in the areas of research and development of public gardens and plant collections. They should not be used for commercial profit. If publications result from the use of this material, we expect acknowledgement as the source of the material and an unsolicited reprint of any publication.

Missouri Botanical Garden is a member of the International Plant Exchange Network (IPEN). IPEN membership allows for exchange of plant material with other IPEN members without bilateral agreements. Non-IPEN members must sign the AGREEMENT ON THE SUPPLY OF LIVING PLANT MATERIAL FOR NON-COMMERCIAL PURPOSES, found on the last page of this catalog.

IPEN numbers are assigned to all plants that may be distributed. The IPEN number remains connected to the plant material and its derivatives through all generations to come. The IPEN number consists of the following:

1. Country of origin (two positions, abbreviation according to ISO 3166-1-alpha-2 (<http://www.iso.org>), "XX" is used for seeds of plants of non-wild origin).
2. Restrictions of transfer (one position, "I" if there exist a restriction, "0" if none).
3. Garden code, which can be found on the [website of BGCI](#) under "Garden Search".
4. Identification number (accession number of the specific garden. Example: 2004-149 or 03214, whatever the specific recording system of the gardens generates).

## GEOGRAPHICAL DATA

Seeds listed below were collected from within two eco-regions of Missouri: the southeastern-most portion of the Mississippi River Hills, located approximately 120 miles north of St. Louis (all accessions from Lincoln County, MO); and the Ozark Highlands, located in south-central Missouri and northern Arkansas (all other accessions). In general, these two eco-regions are separated by the Missouri River, which divides the rolling prairie lands of northern Missouri which were formed by glaciers, from the Ozark Plateau that was formed by uplift and erosion.

### Climate conditions in St. Louis (1981-2010)

Average annual precipitation	40.96 inches
Average annual snow	17.7 inches
Average temperature	57.1°F
Mean July temperature	80.0°F
Mean maximum July temperature	89.1°F
Mean minimum July temperature	71.0°F
Mean January temperature	31.8°F
Mean maximum January temperature	39.9°F
Mean minimum January temperature	23.7°F

## AGAVACEAE

01. *Camassia scilloides* (Raf.) Cory (IPEN US-0-MO-2013-1172)

Collected 06/11/2013, Lincoln County, MO.

02. *Manfreda virginica* (L.) Salisb. ex Rose (IPEN US-0-MO-2013-1067)

Collected 10/13/2011, Madison County, AR.

## APIACEAE

03. *Angelica venenosa* Fernald (IPEN US-0-MO-2013-1684)

Collected 09/17/2013, Shannon County, MO.

04. *Perideridia americana* (Nutt.) Rchb. ex Steud. (IPEN US-0-MO-2013-1554)

Collected 06/11/2013, Lincoln County, MO.

## CELASTRACEAE

05. *Euonymus atropurpureus* Jacq. (IPEN US-0-MO-2013-1846)

Collected 10/24/2013, Shannon County, MO.

06. *Parnassia grandifolia* DC. (IPEN US-0-MO-2013-2336)

Collected 11/12/2013, Shannon County, MO.

## CYPERACEAE

07. *Carex crawei* Dewey (IPEN US-0-MO-2013-1053)

Collected 06/10/2011, Franklin County, MO.

08. *Carex frankii* Kunth (IPEN US-0-MO-2013-1051)

Collected 10/10/2010, Crawford County, MO.

09. *Carex lurida* Wahlenb. (IPEN US-0-MO-2013-1872)

Collected 10/04/2011, Benton County, AR.

10. *Carex retroflexa* Muhl. ex Willd. (IPEN US-0-MO-2013-1312)

Collected 06/13/2013, Franklin County, MO.

11. *Eleocharis ovata* R. Br. (IPEN US-0-MO-2013-1075)

Collected 10/27/2010, Washington County, MO.

## **HYPERICACEAE**

12. *Hypericum sphaerocarpum* Michaux (IPEN US-0-MO-2013-1062)

Collected 10/21/2011, Franklin County, MO.

## **LYTHRACEAE**

13. *Ammannia coccinea* Rottb. (IPEN US-0-MO-2013-1074)

Collected 10/31/2012, Washington County, MO.

## **MELANTHIACEAE**

14. *Melanthium woodii* (J.W. Robbins ex Alph. Wood) Bodkin (IPEN US-0-MO-2013-1692)

Collected 09/21/2013, Lincoln County, MO.

## **ONAGRACEAE**

15. *Epilobium coloratum* Muhl. ex Willd. (IPEN US-0-MO-2013-1073)

Collected 10/31/2012, Washington County, MO.

## **OROBANCHACEAE**

16. *Pedicularis lanceolata* Michx. (IPEN US-0-MO-2013-2337)

Collected 11/12/2013, Shannon County, MO.

## **PHRYMACEAE**

17. *Mimulus ringens* L. (IPEN US-0-MO-2013-1072)

Collected 10/25/2011, Crawford County, MO.

## **PLANTAGINACEAE**

18. *Penstemon digitalis* Nutt. (IPEN US-0-MO-2013-1581)

Collected 08/17/2013, Howell County, MO.

19. *Penstemon pallidus* Small. (IPEN US-0-MO-2013-1559)

Collected 08/07/2013, Lincoln County, MO.

## **RANUNCULACEAE**

20. *Actaea racemosa* L. (IPEN US-0-MO-2013-1683)

Collected 09/16/2013, Carter County, MO.

21. *Delphinium carolinianum* Walter. (IPEN US-0-MO-2013-1388)

Collected 07/02/2013, Lincoln County, MO.

## **RHAMNACEAE**

22. *Ceanothus americanus* L. (IPEN US-0-MO-2013-1576)

Collected 08/01/2013, Lincoln County, MO.

## **TYPHACEAE**

23. *Sparganium angrocladum* (Engelm.) Morong (IPEN US-0-MO-2013-2339)

Collected 11/12/2013, Shannon County, MO.

## **VIOLACEAE**

24. *Hybanthus concolor* (T.F. Forst.) Spreng. (IPEN US-0-MO-2013-1551)

Collected 06/05/2013, Franklin County, MO.

## SEED SELECTIONS

Please list seed selections below. Requests are limited to 10 items and must be submitted by April 15<sup>th</sup>, 2014. Please submit requests to the Plant Records department via fax at (314) 577-9465 or e-mail to [rebecca.sucher@mobot.org](mailto:rebecca.sucher@mobot.org).


## AGREEMENT ON THE SUPPLY OF LIVING PLANT MATERIAL FOR NON-COMMERCIAL PURPOSES

Against the background of the provisions and decisions of the Convention on Biological Diversity of 1992 (CBD) and in particular those on access to genetic resources and benefit-sharing, the Missouri Botanical Garden is dedicated to promoting the conservation, sustainable use, and research of biological diversity. The Missouri Botanical Garden therefore expects its partners in acquiring, maintaining, and transferring plant material to always act in accordance with the CBD and the Convention on the International Trade in Endangered Species (CITES).

The responsibility for legal handling of the plant material passes on to the recipient upon receipt of the material. The requested plant material will be supplied to the recipient only on the following conditions:

1. Based on this agreement, seeds are supplied only for the common good, such as scientific research, education, conservation, environment protection and the development of botanic gardens.
2. On receiving the seed, the recipient is obliged to document its origin (country of origin, first receiving garden, donor of the seed, year of collection) as well as the acquisition and transfer conditions in a comprehensible manner.
3. The recipient may use the seed and any progeny for non-commercial purposes only.
4. Recipient will provide the Missouri Botanic Garden with a fair and equitable share of any benefits obtained by recipient arising out of any utilisation of the seed or its progeny or derivatives, including benefits such as research results and copies of publications. In addition, recipient shall acknowledge the Missouri Botanic Garden and, where determinable, the country of origin, in all research publications resulting from the use of the seed.
5. If at any point in the future the recipient wishes to use the genetic resources or its derivatives for purposes other than those allowed by the terms and conditions under which the seed was originally acquired (such as commercial use), the recipient must obtain the written permission of Missouri Botanic Garden and specify in writing the terms and conditions of use, including fair and equitable benefit sharing as set out in Missouri Botanic Gardens policy.
6. Recipient may not transfer the seed or derivatives thereof to any party without the prior informed consent in writing of Missouri Botanic Garden.

I accept the above conditions.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

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Printed name and address