



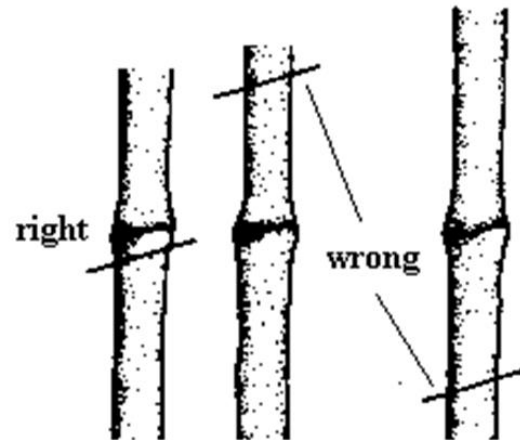
Eco Logic

Native Plant Propagation



Types of Propagation

- Stem cuttings (asexual)
- Division (asexual)
- Root cuttings (asexual)
- By seed (sexual)



Propagation by Seed (Sexual)

Place of Origin

- *Asclepias syriaca* from New York vs. *Asclepias syriaca* from Georgia

Collection

- Only collect 10% of a healthy population with permission from the landowner.
- Never collect seed from rare or threatened plants. Do not dig wild plants.

Storage

- Store seeds in a cool dry place and record the date collected.



Materials

Collecting

- Paper bags, various sizes
- Hand pruners
- Permanent Marker

Cleaning

- Various screens
- Newspaper
- Holding trays
- Jars or plastic zip lock

Storage Areas

- Dry basement
- Refrigerator
- Temperature should be steady

Seed Treatments

- Many native plants have built-in dormancy mechanisms
- Seeds will lie dormant until there are proper conditions
- Become familiar with pre-sowing seed treatment methods

- Coca-Cola Soak

- Hot Water Treatment

- Cold-Moist Stratification

- Warm Moist Stratification & Cold Moist Stratification

- Double Cold-Moist Stratification

- Scarification of Seed Coats

- Seeds Requiring Light to Germinate

- Nicking Seed Coats and Soaking Overnight

Example: Cold-Moist Stratification



Prairie Moon Nursery

- **Germination Codes**

A – No pre-treatment needed

B – Hot Water Treatment

C – Stratification Needed

D – Surface Sow

E – Seeds need a warm, moist period followed by a cold, moist period

F – Seeds need a cold, moist period followed by a warm, moist period followed by a 2nd cold, moist period

G – Germinate Most Successfully in Cool Soil

H – Need Scarification

I – Needs Inoculum

J – Hulls Removed

K – Hemiparasitic Species (needs a host plant)

L – Plant Fresh Seed or Keep Moist

M – Best Planted Outdoors in the Fall

New England Wildflower Society

– Bill Cullina

- **Germination Codes**

A – No pre-treatment needed

B – 90 days of moist, cold stratification

C – Multiple cycle of warm and cold

D – Needs a period of warm, moist stratification followed by cold stratification

G – Germinate Most Successfully in Cool Soil

H – Surface Sow

I – Requires Scarification

*** - Hydrophilic, intolerant of dry storage**

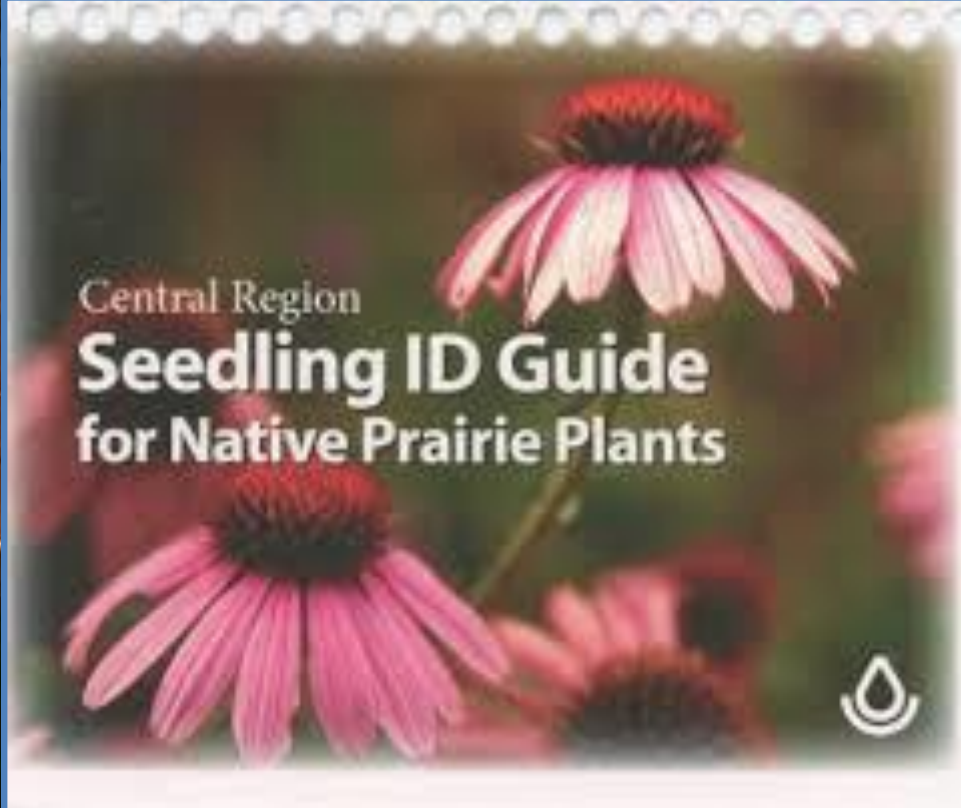
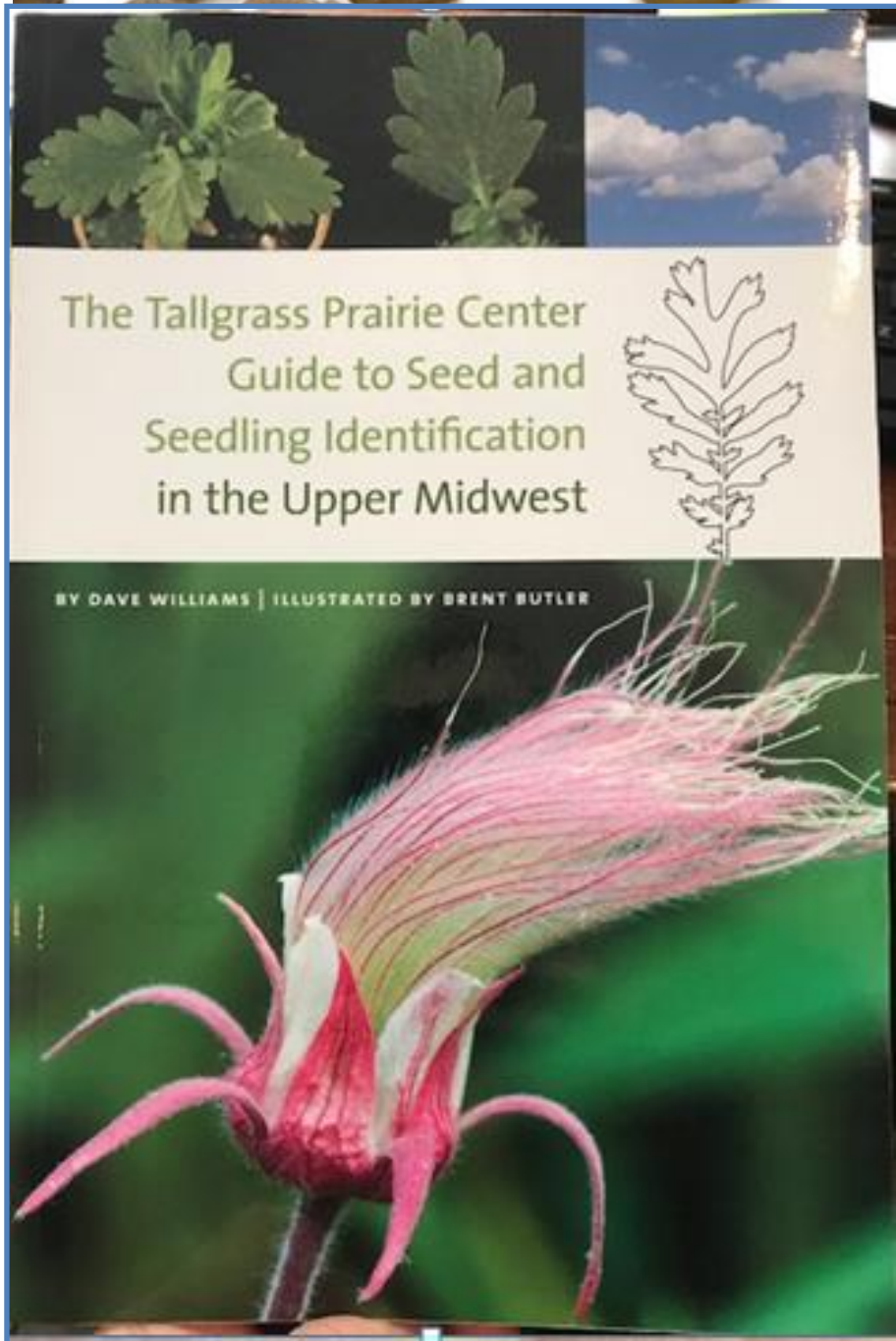
Seed treatments – Stratification Media

- 1 part sand to 1 part perlite
- Add water until mix holds together when squeezed



- Record keeping!
- Correct I.D. and source
- Date when put into treatment





Easy to Grow from Seed

Aster, Eupatorium, Monarda, Echinacea, Rudbeckia, Lobelia, Asclepias



Sowing Seeds

Seed Sowing

- After treatment, sow seeds in sterile seed starting medium and keep at 70 degrees.
- Cover at a depth of 2-3 times the width of the seed.
- If seeds are large enough to handle, orient with point (where radicle will emerge) downward.



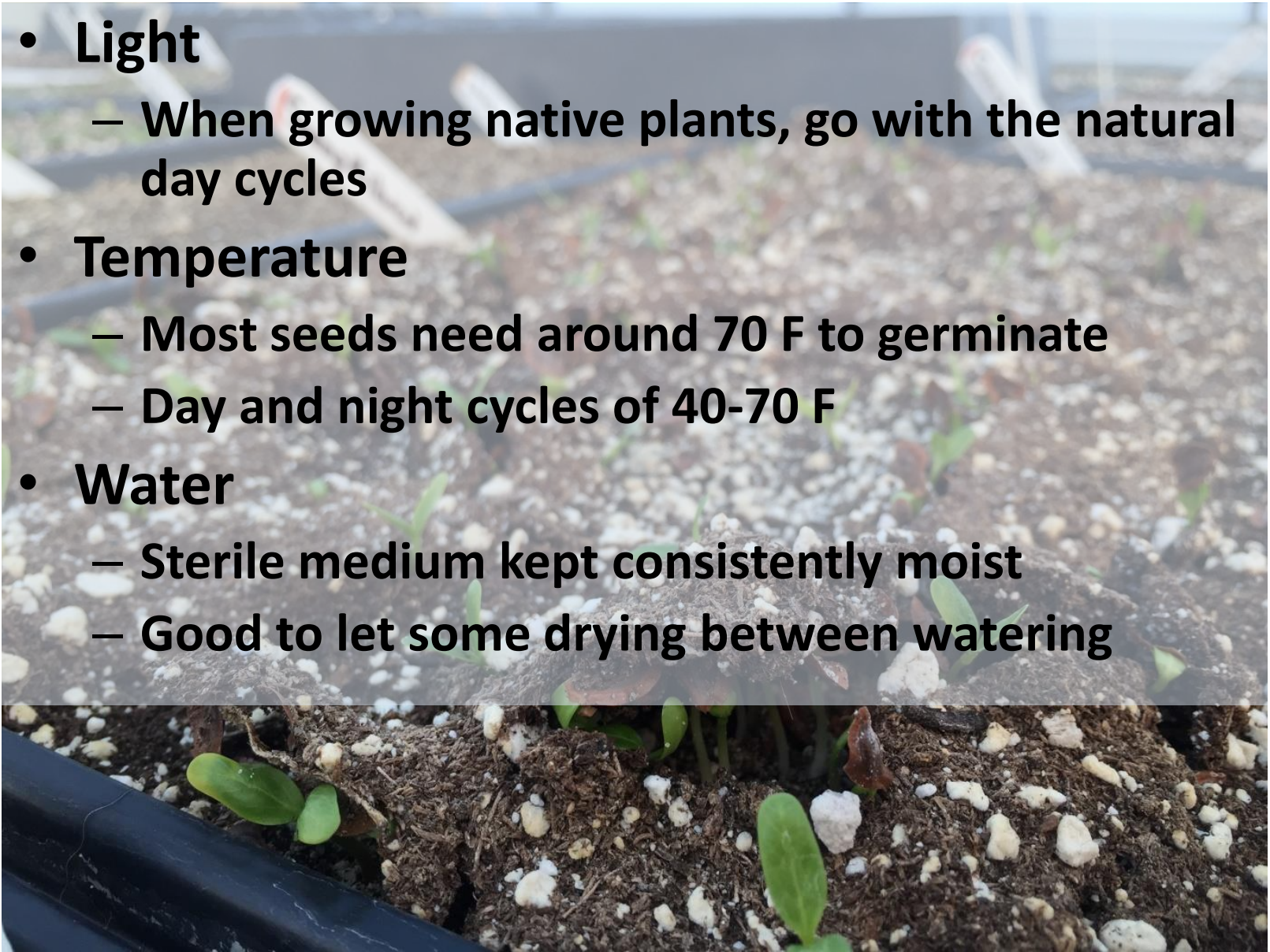
Germination

- Emergence of the epicotyl
- First shoot with cotyledons develops
- Emergence of true leaves



Elements that Affect Germination

- **Light**
 - When growing native plants, go with the natural day cycles
- **Temperature**
 - Most seeds need around 70 F to germinate
 - Day and night cycles of 40-70 F
- **Water**
 - Sterile medium kept consistently moist
 - Good to let some drying between watering



Propagation by Seed (Sexual)



Soil Medium and Fertilizer:

Use a well drained commercial growing medium. Add fertilizer and *mycorrhizal* fungi.



Add more compost to wetland species to increase moisture retention.

Add perlite or sand for well drained species.



Transplanting

When to Transplant

Transplant to containers after first true leaves form (not the cotyledons).

Handling Seedlings

Handle seedlings by the leaves and try not to damage the stems.

Vegetative Growth

Keep plants at a consistent temperature. Keep them watered and lighted.



Valuable Resources for Information

Prairie Moon Nursery:
www.prairiemoon.com

- germination codes
- native range
- seeds per ounce
- great pictures
- sun exposure
- moisture requirements
- bloom time and color

Home / Seeds / **Asclepias incarnata**



Asclepias incarnata ROSE MILKWEED

SEEDS

Packet	\$2.50	-	<input type="text" value="0"/>	+
1/8 oz.	\$5.00	-	<input type="text" value="0"/>	+
1/4 oz.	\$8.00	-	<input type="text" value="0"/>	+
1/2 oz.	\$13.00	-	<input type="text" value="0"/>	+
1 oz.	\$20.00	-	<input type="text" value="0"/>	+

BARE ROOT PLANTS

1-2	\$6.00			
3-11	\$5.00			
12-35	\$3.50			
36-99	\$3.00			
100+	\$2.75	-	<input type="text" value="0"/>	+

POTTED PLANTS

Tray of 38	\$99.00	-	<input type="text" value="0"/>	+
------------	---------	---	--------------------------------	---

ADD TO CART

WISHLIST

[ABOUT](#) [RANGE MAP](#) [Q & A](#) [PLANTING](#) [SHIPPING](#)

Asclepias incarnata, Rose Milkweed, is also commonly called Red Milkweed, Marsh Milkweed, or Swamp Milkweed. That lovely vanilla fragrance you detect coming from large rosy pink flowers possibly hosting several Monarch or Swallowtail butterflies is Rose Milkweed. This deer-resistant plant grows in moist to average soils, and blooms in July and August. Later, large pods form which will break open to reveal seeds that will float away in the wind. If growing Rose Milkweed from seed, try fall planting - or if planting in spring be sure to first moist-cold stratify the seeds for a month. Large numbers of Rose Milkweed can often be seen growing in wetland settings.

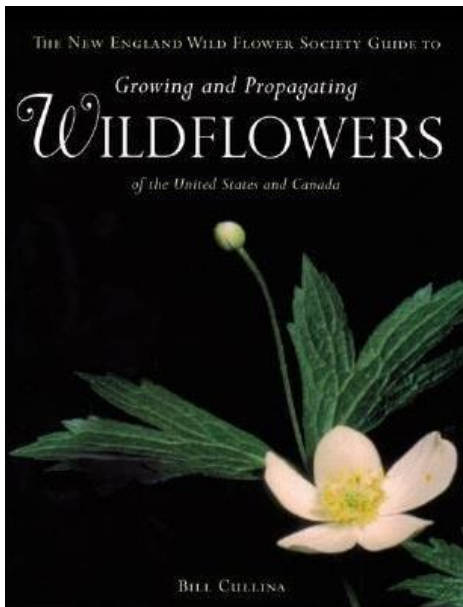
Dormant bare root plants ship each year during optimal transplanting season: Fall (October) or Spring (April/May).

Potted plants come in trays of 38 and ship when all plants in the tray are well-rooted and transit-ready, early May through June. [Click here if you prefer to mix/match up to 6 species in a tray.](#)

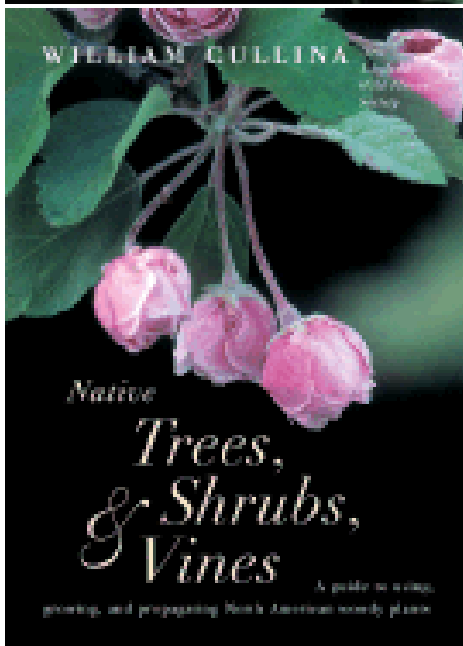
DETAILS

Seeds/Packet	100
Seeds/Ounce	4,800
Germination Code	C(30)
Sun Exposure	Full, Partial
Soil Moisture	Wet, Medium-Wet, Medium
Height	4 feet
Bloom Time	June, July, August
Bloom Color	Pink
USDA Zones	3-9
Plant Spacing	18-36"
Catalog Number	ASC08F

Valuable Resources for Information



The New England Wild Flower Society Guide to Growing and Propagating Wildflowers of the United States and Canada - William Cullina



Native Trees, Shrubs, and Vines: A Guide to Using, Growing, and Propagating North American Woody Plants - William Cullina

The New England Wild Flower Society Guide to Growing and Propagating Wildflowers of the United States and Canada - William Cullina

Each species entry includes:

- **hardiness zones**
- **soil type**
- **where the plant is native to**
- **size**
- **flower color**
- **bloom time**

Additionally:

- **a section on propagation techniques**
- **detailed information by genus**
 - **how to harvest seed**
 - **propagate the plants by seed, division, or cutting.**



ABOUT

NATIVE PLANTS JOURNAL

PROPAGATION

Propagation Techniques

Protocol Database

Add/Edit Protocols

Become a Propagator

Member Login

LINKS

Native Plants JOURNAL



Propagation Protocols

The Native Plant Network is devoted to the sharing of information on how to propagate native plants of North America (US, Canada, Mexico and the Pacific Islands).

To search the database, enter the search criteria to the right and then click the Search button. For best results, start fairly broad (so enter text in only a couple of fields) and narrow your search if that returns too many results. The search results will be show below.

To submit updates or additions to the database of species you successfully grow, use the Add/Edit Protocols link to learn more about becoming a propagator or to login and start adding and editing your protocols.

Search the Protocol Database

Text (Search Term or Author):

Asclepias incarnata

US, Canada or Mexico Pacific Island

Genus (Species):

No Preference

Family: No Preference

State:

No Preference

Product Type:

No Preference

Organization:

No Preference

Company/Nursery:

No Preference

Search

Search Results

2 results matched your search criteria: Text = Asclepias incarnata, US, Canada or Mexico = True

View / Print Protocols Checked Below

View for Printing	Genus (species)	Synonym	Propagation Method	Product Type	Stock Type	State Year
<input type="checkbox"/>	Asclepias (Incarnata L.)		seed	Container (plug)		West Virginia 2014
<input type="checkbox"/>	Asclepias (Incarnata)		seed	Container (plug)		Michigan 2001

Valuable Resources for Information

Native Plant Network:
www.nativeplantnetwork.org/

Dedicated to the sharing of information, to promote native plant restoration and landscaping.

Native Plant Network

Randall Lester
Assistant Manager
USDA NRCS
Materials Center
P.O. Box 39
Alderson, WV
304-445-3000
304-445-7000
randall.lester@aphis.usda.gov
<http://plantnetwork.usda.gov/wvpmc>

Propagule Collection: Seeds were collected from multiple existing populations within the boundaries of the Monongahela National Forest. Mature seed pods were collected from numerous plants to ensure genetic diversity.

Propagule Processing: Seed pods were placed in a breathable cloth bag to allow for air drying. Once

Length of Active Growth Phase: 5 months

Hardening Phase: Plants were moved into the shadehouse to allow for hardening off before shipping.

Length of Hardening Phase: 2 weeks

Harvesting, Storage and Shipping: Plants with sufficient top growth and root development were shipped back to the Monongahela National Forest for transplanting. Trailers were covered with tarps to prevent excessive wind burn damage.

Length of Storage: 1 day

Other Comments: Swamp milkweed seeds often fall prey to weevil larvae while still in the seed pods. This will have a significant effect on the viability of the seeds.

greenhouse. Once the seedlings had developed sufficient root systems, they were transplanted into quart plastic containers filled with Metro-mix 510 growing media.

Questions?

