



Seed Propagation Information

SEED TREATMENT OPTIONS

- DRY STRATIFICATION** is a seed pre-treatment in which the seed is subjected to cold temperatures of 32° F or lower, for a period of a month or longer. This breaks dormancy in many native seeds, especially the prairie grasses and many prairie flowers. Some grasses will show increased germination with Moist Stratification, but most will germinate well with only Dry Stratification. *The seed that you receive from Prairie Nursery has already been Dry Stratified, except for seed that is shipped in summer and fall immediately following harvest.*
- MOIST STRATIFICATION** is a seed pre-treatment wherein seed is mixed with slightly damp sawdust, vermiculite, or clean sand, and placed in a refrigerator at 32 – 36° F for the recommended number of days. This will break seed dormancy and increase germination of many native wildflowers. While Moist Stratification can increase germination, it is not required for good germination of all wildflowers. Most prairie grasses do not require Moist Stratification for good germination. *It is not necessary to use this pre-treatment for seed that is to be planted in the fall, as dormancy will be broken naturally in the soil over winter.*
- SCARIFICATION** of seed is the process of scratching the seed coat to allow moisture to enter the seed itself. Gently scratch the seed with a sandpaper block prior to planting or Moist Stratification. Many members of the pea family (legumes) benefit from Scarification.
- DOUBLE DORMANT** species have seeds that must spend two consecutive winters in the ground to break dormancy. These seeds are best planted in the fall, although they typically will germinate two years after being seeded in the spring.
- HOT WATER** is used for species that require heat to stimulate germination. Scarify the seed, then place it in a bowl. Pour boiling water over the seed and allow to cool. This mimics the effects of a prairie fire. Pour off the water, collect the seed, and Moist Stratify for 30 days as per directions above in (2).
- RHIZOBIUM INOCULUM** is included with all legume seeds (members of the pea family). *Your seed will have been pre-inoculated* with a fine black powder that contains spores of a micro-organism that forms beneficial relationships with the roots of leguminous plants. The Rhizobium bacterium forms nodules on the roots of legume plants, so that they can obtain Nitrogen, an important plant nutrient, from the air.

WILDFLOWERS		GREENHOUSE PROPAGATION METHODS			Seed Scarification	DIRECT SEED IN FIELDS
		Dry	Moist	# of Days to Moist		Optimal
Lavender Hyssop	Agastache foeniculum	x				Fall, Spring
Nodding Pink Onion	Allium cernuum		x	30		Fall
Leadplant ⁶	Amorpha canescens	x			x	Spring, Early Summer
Jack in the Pulpit	Arisaema triphyllum	x				Fall, Early Spring
Red Milkweed	Asclepias incarnata		x	10		Fall, Spring, Early Summer
Common Milkweed	Asclepias syriaca		x	10		Fall, Spring, Early Summer
Butterflyweed	Asclepias tuberosa	x				Fall, Spring, Early Summer
Sky Blue Aster	Aster azureus	x				Fall, Early Spring
Smooth Aster	Aster laevis	x				Fall, Early Spring
New England Aster	Aster novae-angliae	x				Fall, Early Spring
White Aster	Aster ptarmicoides	x				Fall, Early Spring
Canada Milk Vetch ⁶	Astragalus canadensis	x			x	Fall, Spring, Early Summer
Blue False Indigo ⁶	Baptisia australis	x			x	Fall
Cream False Indigo ⁶	Baptisia bracteata		x	30	x	Fall
White False Indigo ⁶	Baptisia lactea		x	30	x	Fall
Pale Indian Plantain	Cacalia atriplicifolia	x				Fall, Early Spring
Partridge Pea ⁶	Cassia fasciculata		x	10	x	Fall, Spring, Early Summer
New Jersey Tea ⁵	Ceanothus americanus		x	Hot Water ⁵ , 30 days	x	Fall
Lanceleaf Coreopsis	Coreopsis lanceolata	x				Fall, Spring, Early Summer
White Prairie Clover ⁶	Dalea candida	x				Fall, Spring, Early Summer
Purple Prairie Clover ⁶	Dalea purpurea	x				Fall, Spring, Early Summer
Canada Tick-Trefoil ⁶	Desmodium canadense	x				Fall, Spring, Early Summer
Shooting Star	Dodecatheon meadia		x	30		Fall
Pale Purple Coneflower	Echinacea pallida		x	30		Fall
Purple Coneflower	Echinacea purpurea	x				Fall, Spring, Early Summer
Rattlesnake Master	Eryngium yuccifolium		x	30		Fall
Joe Pye Weed	Eupatorium maculatum		x	30		Fall
Boneset	Eupatorium perfoliatum		x	30		Fall
Sweet Joe Pye Weed	Eupatorium purpureum		x	30		Fall
Dogtooth Daisy	Helenium autumnale	x				Fall, Early Spring
Showy Sunflower	Helianthus laetiflorus		x	30		Fall
Downy Sunflower	Helianthus mollis		x	30		Fall

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		Dry	Moist	# of Days to		Optimal
WILDFLOWERS						
Ox-Eye Sunflower	<i>Heliopsis helianthoides</i>		x	30		Fall, Spring, Early Summer
Wild Iris	<i>Iris shrevei</i>		x	90	x	Fall
Blue Flag Iris	<i>Iris versicolor</i>		x	90	x	Fall
Roundheaded Bushclover ⁶	<i>Lespedeza capitata</i>		x	30		Fall, Spring, Early Summer
Rough Blazingstar	<i>Liatris aspera</i>		x	30		Fall
Prairie Blazingstar	<i>Liatris pycnostachya</i>		x	30		Fall, Spring
Dense Blazingstar	<i>Liatris spicata</i>		x	30		Fall
Cardinal Flower	<i>Lobelia cardinalis</i>		x	30		Fall, Early Spring
Great Blue Lobelia	<i>Lobelia siphilitica</i>		x	30		Fall, Early Spring
Lupine ⁶	<i>Lupinus perennis</i>		x	10		Fall
Solomon's Plume	<i>Maianthemum racemosum</i>		x	Double Dormant ⁴		Fall
Monkeyflower	<i>Mimulus ringens</i>		x	30		Fall, Early Spring
Bergamot	<i>Monarda fistulosa</i>	x				Fall, Spring, Early Summer
Dotted Mint	<i>Monarda punctata</i>	x				Fall, Spring, Early Summer
Wild Quinine	<i>Parthenium integrifolium</i>		x	30		Fall
Smooth Penstemon	<i>Penstemon digitalis</i>		x	30		Fall
Beardtongue	<i>Penstemon grandiflorus</i>		x	60		Fall
Yellow Coneflower	<i>Ratibida pinnata</i>	x				Fall, Spring, Early Summer
Orange Coneflower	<i>Rudbeckia fulgida</i>		x	30		Fall, Spring, Early Summer
Black-Eyed Susan	<i>Rudbeckia hirta</i>	x				Fall, Spring, Early Summer
Green-headed Coneflower	<i>Rudbeckia laciniata</i>	x				Fall, Early Spring
Sweet Black-Eyed Susan	<i>Rudbeckia subtomentosa</i>	x				Fall, Spring, Early Summer
Brown Eyed Susan	<i>Rudbeckia triloba</i>	x				Fall, Spring, Early Summer
Wild Petunia	<i>Ruellia humilis</i>		x	30		Fall
Wild Senna ⁶	<i>Senna hebecarpa</i>		x	10	x	Fall, Spring, Early Summer
Rosinweed	<i>Silphium integrifolium</i>		x	30		Fall
Compassplant	<i>Silphium laciniatum</i>		x	30		Fall
Cupplant	<i>Silphium perfoliatum</i>		x	30		Fall
Prairie Dock	<i>Silphium terebinthinaceum</i>		x	30		Fall
Ohio Goldenrod	<i>Solidago ohioensis</i>	x				Fall, Spring, Early Summer
Stiff Goldenrod	<i>Solidago rigida</i>	x				Fall, Spring, Early Summer
Showy Goldenrod	<i>Solidago speciosa</i>	x				Fall
Tall Meadowrue	<i>Thalictrum dasycarpum</i>		x	30		Fall
Ohio Spiderwort	<i>Tradescantia ohiensis</i>		x	90		Fall
Blue Vervain	<i>Verbena hastata</i>		x	30		Fall
Hoary Vervain	<i>Verbena stricta</i>		x	30		Fall
Ironweed	<i>Vernonia fasciculata</i>		x	30		Fall
Culver's Root	<i>Veronicastrum virginicum</i>		x	30		Fall
Golden Alexanders	<i>Zizia aurea</i>		x	30		Fall
SEDGES & BULRUSHES						
Bottlebrush Sedge	<i>Carex comosa</i>	x	x	30		Fall, Early Spring
Porcupine Sedge	<i>Carex hystericina</i>	x	x	30		Fall, Early Spring
Awl Fruited Sedge	<i>Carex stipata</i>	x	x	30		Fall, Early Spring
Fox Sedge	<i>Carex vulpinoidea</i>	x	x	30		Fall, Early Spring
Dark Green Bulrush	<i>Scirpus atrovirens</i>		x	30		Fall, Early Spring
Woolgrass	<i>Scirpus cyperinus</i>		x	30		Fall, Early Spring
GRASSES						
Big Bluestem	<i>Andropogon gerardi</i>	x				Spring, Early Summer
Sideoats Grama	<i>Bouteloua curtipendula</i>	x				Spring, Early Summer
Canada Wild Rye	<i>Elymus canadensis</i>	x				Spring, Early Summer
Virginia Wild Rye	<i>Elymus virginicus</i>	x				Spring, Early Summer
Bottlebrush Grass	<i>Hystrix patula</i>	x				Fall, Early Spring
Junegrass	<i>Koeleria macrantha</i>	x				Fall, Early Spring
Switchgrass	<i>Panicum virgatum</i>	x				Spring, Early Summer
Little Bluestem	<i>Schizachyrium scoparium</i>	x				Spring, Early Summer
Indiangrass	<i>Sorghastrum nutans</i>	x				Spring, Early Summer
Prairie Cordgrass	<i>Spartina pectinata</i>		x	30		Fall
Prairie Dropseed	<i>Sporobolus heterolepis</i>	x				Fall, Early Spring