



NANPS 2021 Seed Exchange Germination Requirements

species	common name	code	species	common name	code
grasses & sedges			herbaceous		
<i>Andropogon gerardii</i>	big bluestem	A	<i>Monarda punctata</i>	dotted horsemint	B
<i>Bouteloua curtipendula</i>	sideoats grama	A	<i>Oenothera biennis</i>	evening primrose	A
<i>Deschampsia caespitosa</i>	tufted hairgrass	A	<i>Oligoneuron rigidum</i>	stiff goldenrod	B
<i>Elymus canadensis</i>	Canada wild rye	B	<i>Opuntia humifusa</i>	prickly pear cactus	B, I
<i>Elymus hystrix</i>	bottlebrush grass	B	<i>Penstemon digitalis</i>	foxglove beardtongue	B, H
<i>Schizachyrium scoparium</i>	little bluestem	A	<i>Penstemon hirsutus</i>	hairy beardtongue	B, H
<i>Sorghastrum nutans</i>	Indian grass	B	<i>Physostegia virginiana</i>	obedient plant	A Or B
herbaceous			<i>Ratibida pinnata</i>	grey-headed coneflower	A Or B
<i>Agastache foeniculum</i>	anise hyssop	A	<i>Silphium perfoliatum</i>	cup plant	B
<i>Agastache nepetoides</i>	yellow giant hyssop	A	<i>Solidago caesia</i>	blue-stemmed goldenrod	B
<i>Agastache scrophulariifolia</i>	purple giant hyssop	A	<i>Solidago canadensis</i>	Canada goldenrod	B
<i>Ageratina altissima</i>	white snakeroot	B	<i>Solidago flexicaulis</i>	zig-zag goldenrod	B
<i>Allium cernuum</i>	nodding wild onion	A	<i>Solidago nemoralis</i>	grey goldenrod	B
<i>Anaphalis margaritacea</i>	pearly everlasting	A	<i>Solidago ptarmicoides</i>	upland white aster	B
<i>Antennaria</i>	pussytoes	B	<i>Symphyotrichum cordifolium</i>	heart-leaved aster	B
<i>Antennaria neglecta</i>	pussytoes	B	<i>Symphyotrichum laeve</i>	smooth aster	B
<i>Apocynum androsaemifolium</i>	spreading dogbane	B	<i>Symphyotrichum novae-angliae</i>	New England aster	B
<i>Aquilegia canadensis</i>	wild columbine	B	<i>Symphyotrichum puniceum</i>	swamp aster	B
<i>Asclepias exaltata</i>	poke milkweed	B, H	<i>Taenidia integerrima</i>	yellow pimpernel	B
<i>Asclepias incarnata</i>	swamp milkweed	B, H	<i>Thalictrum dioicum</i>	early meadow-rue	B
<i>Asclepias syriaca</i>	common milkweed	B, H	<i>Thalictrum pubescens</i>	tall meadow rue	B
<i>Asclepias tuberosa</i>	butterfly milkweed	B, H	<i>Vernonia fasciculata</i>	ironweed	B
<i>Asclepias verticillata</i>	whorled milkweed	B, H	<i>Vernonia missurica</i>	Missouri ironweed	B
<i>Baptisia australis</i>	wild false indigo	B, I	<i>Vernonia noveboracensis</i>	New York ironweed	B
<i>Campanula rotundifolia</i>	harebell	B	<i>Veronicastrum virginicum</i>	Culver's root	B, H*
<i>Cassia hebecarpa</i>	wild senna	B	<i>Zizia aurea</i>	golden alexanders	B
<i>Coreopsis lanceolata</i>	lance-leaved coreopsis	A Or B	sedge		
<i>Desmodium canadense</i>	showy tick-trefoil	A, I, K	<i>Carex rosea</i>	stellate sedge	B, H
<i>Echinacea purpurea</i>	purple coneflower	B	shrub		
<i>Eupatorium fistulosum</i>	hollow Joe Pye weed	B	<i>Ceanothus americanus</i>	New Jersey tea	B, I
<i>Euphorbia corollata</i>	flowering spurge	B	<i>Hypericum kalmianum</i>	Kalm's st. john's-wort	A, H
<i>Eurybia divaricata</i>	white wood aster	B	<i>Physocarpus opulifolius</i>	ninebark	B, H
<i>Eurybia macrophylla</i>	big-leaved aster	B	tree		
<i>Eutrochium maculatum</i>	spotted Joe Pye weed	B	<i>Aesculus glabra</i>	Ohio buckeye	B*
<i>Gentiana andrewsii</i>	bottle gentian	B, H	<i>Gymnocladus dioicus</i>	Kentucky coffeetree	A, I
<i>Geranium maculatum</i>	wild geranium	B*	vine		
<i>Geum triflorum</i>	prairie smoke	B	<i>Clematis virginiana</i>	virgin's bower	B*
<i>Gillenia trifoliata</i>	Bowman's root	D	<i>Dioscorea villosa</i>	wild yam	A Or B
<i>Helenium autumnale</i>	sneezeweed	A			
<i>Helianthus strumosus</i>	pale-leaved sunflower	A			
<i>Heliopsis helianthoides</i>	false sunflower	A			
<i>Hibiscus moscheutos</i>	swamp rose-mallow	B, I			
<i>Hypericum ascyron</i>	great St. John's-wort	B, H			
<i>Impatiens pallida</i>	yellow jewelweed	A, H			
<i>Lespedeza capitata</i>	round-headed bush clover	B, I, K			
<i>Liatris ligulistylis</i>	meadow blazing star	B			
<i>Liatris spicata</i>	dense blazing star	A Or B			
<i>Lilium michiganense</i>	Michigan lily	D			
<i>Lobelia cardinalis</i>	cardinal flower	A, H			
<i>Lobelia siphilitica</i>	great blue lobelia	A, H			
<i>Lupinus perennis</i>	wild lupine	A, I			



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Germination Codes

- * seed is hydrophyllic, intolerant of dry storage.
 - A seed will germinate within 4 weeks if sown at 20°C
 - B seed will germinate upon being shifted to 20°C after a period of moist, cold stratification at 5°C.
 - C seed germinates only after multiple cycles of warm and cold, typically 5°-20°-5°-20°C.
 - D seed needs a period of warm, moist stratification followed by cold stratification and will germinate after being shifted back to warm, for example 20°-5°-20°C.
 - G seed will not germinate in presence of chemical inhibitors.
 - H seed requires light to germinate.
 - I seed requires scarification because of an impermeable seed coat.
 - J seed needs high humidity to germinate
 - K seed germinates better with inoculant
 - M moss germination: seed germinates best in the presence of both light and high atmospheric moisture as would be found on a damp mossy substrate in the wild.
 - W wetland species: soil should be consistently wet
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