



NANPS 2020 Seed Exchange Germination Requirements

species	common name	code	species	common name	code
grasses & sedges			herbaceous		
<i>Bouteloua curtipendula</i>	sideoats grama	A	<i>Oenothera biennis</i>	evening primrose	A
<i>Carex muskingumensis</i>	palm sedge	A	<i>Opuntia humifusa</i>	prickly pear cactus	B, I
<i>Elymus canadensis</i>	Canada wild rye	B	<i>Penstemon digitalis</i>	foxglove beardtongue	B, H
<i>Elymus hystrix</i>	bottlebrush grass	B	<i>Penthorum sedoides</i>	ditch stonecrop	B, H
<i>Sorghastrum nutans</i>	Indian grass	B	<i>Physostegia virginiana</i>	obedient plant	A Or B
herbaceous			<i>Potentilla arguta</i>	tall cinquefoil	B, H
<i>Actaea racemosa</i>	black cohosh	D	<i>Pycnanthemum tenuifolium</i>	slender mountain mint	A
<i>Actaea rubra</i>	red baneberry	B, G*	<i>Pycnanthemum virginianum</i>	Virginia mountain mint	B
<i>Agastache foeniculum</i>	anise hyssop	A	<i>Ratibida pinnata</i>	grey-headed coneflower	A Or B
<i>Agastache nepetoides</i>	yellow giant hyssop	A	<i>Rudbeckia hirta</i>	black-eyed Susan	A Or B
<i>Ageratina altissima</i>	white snakeroot	B	<i>Rudbeckia laciniata</i>	green-headed coneflower	A Or B
<i>Allium cernuum</i>	nodding wild onion	A	<i>Sisyrinchium montanum</i>	blue-eyed grass	A Or C
<i>Amorpha fruticosa</i>	false indigo bush	B, K	<i>Solidago caesia</i>	blue-stemmed goldenrod	B
<i>Anemone canadensis</i>	Canada anemone	B	<i>Solidago canadensis</i>	Canada goldenrod	B
<i>Anemone cylindrica</i>	thimbleweed	B	<i>Solidago flexicaulis</i>	zig-zag goldenrod	B
<i>Anemone virginiana</i>	tall thimbleweed	B	<i>Solidago nemoralis</i>	Grey Goldenrod	B
<i>Apocynum androsaemifolium</i>	spreading dogbane	B	<i>Solidago uliginosa</i>	bog goldenrod	B, H
<i>Aquilegia canadensis</i>	wild columbine	B	<i>Symphyotrichum cordifolium</i>	heart-leaved aster	B
<i>Aralia racemosa</i>	spikenard	B, G, I	<i>Symphyotrichum ericoides</i>	heath aster	B
<i>Aruncus dioicus</i>	goat's beard	B, H	<i>Symphyotrichum laeve</i>	smooth aster	B
<i>Asclepias incarnata</i>	swamp milkweed	B, H	<i>Symphyotrichum lanceolatum</i>	lance leafed aster	A
<i>Asclepias syriaca</i>	common milkweed	B, H	<i>Symphyotrichum novae-angliae</i>	New England aster	B
<i>Asclepias tuberosa</i>	butterfly milkweed	B, H	<i>Symphyotrichum puniceum</i>	swamp aster	B
<i>Astragalus canadensis</i>	Canada milkvetch	A, I	<i>Teucrium canadense</i>	American germander	A Or B
<i>Baptisia australis</i>	wild false indigo	B, I	<i>Thalictrum dioicum</i>	early meadow-rue	B
<i>Chelone glabra</i>	turtlehead	B, H	<i>Verbena hastata</i>	blue vervain	B, H
<i>Conoclinium coelestinum</i>	wild ageratum	B, H	<i>Verbena stricta</i>	hoary vervain	B, H
<i>Coreopsis lanceolata</i>	lance-leaved coreopsis	A Or B	<i>Vernonia gigantea</i>	tall ironweed	B
<i>Coreopsis tripteris</i>	tall coreopsis	A Or B	<i>Vernonia missurica</i>	Missouri ironweed	B
<i>Desmodium canadense</i>	showy tick-trefoil	A, I, K	<i>Vernonia noveboracensis</i>	New York ironweed	B
<i>Echinacea purpurea</i>	purple coneflower	B	<i>Yucca filamentosa</i>	Adam's needle	A
<i>Eurybia divaricata</i>	white wood aster	B	<i>Zizia aurea</i>	golden Alexanders	B
<i>Eurybia macrophylla</i>	big-leaved aster	B	sedge		
<i>Eutrochium maculatum</i>	spotted Joe Pye weed	B	<i>Carex rosea</i>	stellate sedge	B, H
<i>Geum canadense</i>	white avens	B	shrub		
<i>Geum triflorum</i>	prairie smoke	B	<i>Amelanchier arborea</i>	downy serviceberry	B, G, I*
<i>Helenium autumnale</i>	sneezeweed	A	<i>Staphylea trifolia</i>	bladdernut	B Or C
<i>Heliopsis helianthoides</i>	false sunflower	A	tree		
<i>Hibiscus moscheutos</i>	swamp rose-mallow	B, I	<i>Asimina triloba</i>	pawpaw	B, G*
<i>Hypericum ascyron</i>	great St. John's-wort	B, H	<i>Cornus alternifolia</i>	alternate-leaved dogwood	D, G
<i>Iris setosa</i>	beachhead iris	B	<i>Cornus florida</i>	flowering dogwood	B, G
<i>Iris versicolor</i>	blue flag iris	B, H	<i>Crataegus crus-galli</i>	cockspur thorn	D, I
<i>Liatis ligulistylus</i>	meadow blazing star	B	<i>Euonymus atropurpureus</i>	Eastern wahoo	D
<i>Liatis spicata</i>	dense blazing star	A Or B	<i>Fagus grandifolia</i>	American beech	B, I
<i>Lobelia cardinalis</i>	cardinal flower	A, H	<i>Gymnocladus dioicus</i>	Kentucky coffeetree	A, I
<i>Lobelia siphilitica</i>	great blue lobelia	A, H	<i>Ptelea trifoliata</i>	hop tree	B
<i>Lysimachia ciliata</i>	fringed loosestrife	B	vine		
<i>Mimulus ringens</i>	monkeyflower	A, H	<i>Clematis virginiana</i>	virgin's bower	B*
<i>Monarda fistulosa</i>	wild bergamot	B			
<i>Monarda punctata</i>	dotted horsemint	B			
<i>Napaea dioica</i>	glade mallow	B			



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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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