

Plant Propagation Protocol for *Sisyrinchium septentrionale*

ESRM 412 – Native Plant Production

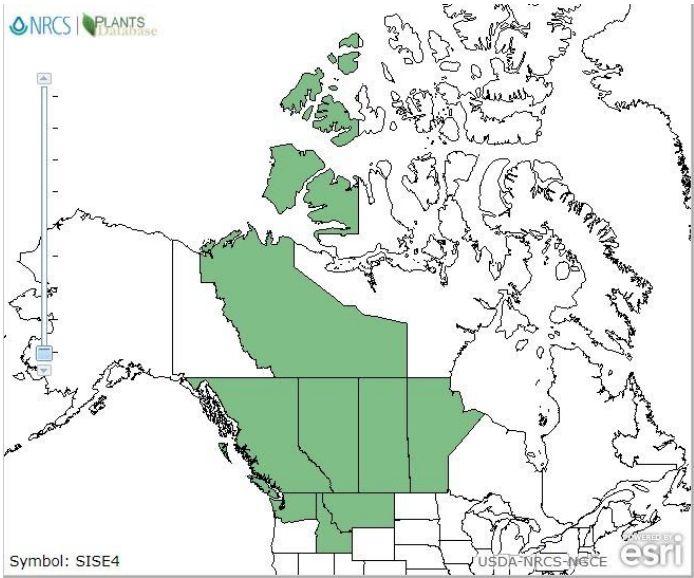

Protocol URL: [https://courses.washington.edu/esrm412/protocols/\[SISE4.pdf\]](https://courses.washington.edu/esrm412/protocols/[SISE4.pdf])



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TAXONOMY	
Plant Family	Iridaceae
Scientific Name	<i>Sisyrinchium septentrionale</i>

Common Name	Northern Blue-eyed Grass
Species Scientific Name	
Scientific Name	Sisyrinchium septentrionale E.P. Bicknell
Varieties	N/A
Sub-species	N/A
Cultivar	N/A
Common Synonym(s)	N/A
Common Name(s)	Northern Blue-eyed Grass
Species Code (as per USDA Plants database)	SISE4
GENERAL INFORMATION	

<p>Geographical range</p>	 <p>Symbol: SISE4</p> <p>North American Distribution</p>  <p>Symbol: SISE4</p> <p>WA State Distribution</p>
<p>Ecological distribution</p>	<p>Open wet-dry meadows, forested edges, streams and wetlands. Facultative wetland species.¹⁻³</p>
<p>Climate and elevation range</p>	<p>Elevation 655-1370 m, USDA zones 3a-9b</p>

Local habitat and abundance	Commonly in community with Ponderosa Pine (<i>Pinus ponderosa</i>), sedges (<i>Carex sp.</i>), Bluegrass (<i>Poa pratensis</i>), Resin Birch (<i>Betula glandulosa</i>), and Snowberry (<i>Symphoricarpos albus</i>), among others. Rare and threatened by grazing, trampling and exotic plant competition. ⁴
Plant strategy type / successional stage	Can tolerate moderately disturbed soils. Only found in non-glaciated areas, suggesting that it may be a relict species. ⁵
Plant characteristics	Rhizomatous perennial forb with stems 10–43 cm tall. Leaves are 1–2 mm wide, sharply pointed and sheathed at the bases. Inflorescences hold 2 to 5 pale blue to light bluish violet flowers with yellow bases, 8-9mm long each; inner spathe 1–4 cm long; outer spathe 2–6 cm long. Fruits are beige to light brown ovoid-globose capsules 3–5 mm long. Seeds are <1/16 inch in diameter, black, angled, finely pitted, 12-30 per capsule. Bloom time is Mid-late summer, usually June-July. ⁴⁻⁶
PROPAGATION DETAILS	
Ecotype)	N/A
Propagation Goal	Plants
Propagation Method	Seed
Product Type	Container-field grown hybrids

Stock Type	Flats, vented containers
Time to Grow	
Target Specifications	N/A
Propagule Collection Instructions	Once fruits are mature and dried on plants (usually in the fall), break open and collect seeds. Plant also self-sows readily
Propagule Processing/Propagule Characteristics	
Pre-Planting Propagule Treatments	Cold stratify for indoor sowing
Growing Area Preparation / Annual Practices for Perennial Crops	Direct sow in full sun to part shade in the fall, or in flats or vented containers in a cold frame in winter. <i>Sisyrinchium sp.</i> prefer moist, well draining to gravelly soils with a pH between 5-7 ⁶⁻⁹
Establishment Phase Details	Cold stratification,
Length of Establishment Phase	Around 6 months
Active Growth Phase	Keep moist but not overwatered, allow full sun to part shade once established.
Length of Active Growth Phase	Around 6 months

Hardening Phase	Cut leaves back in fall to early winter, or allow leaves to die back for winter dormancy.
Length of Hardening Phase	N/A
Harvesting, Storage and Shipping	Dormant rhizomes can be shipped or stored in cold storage
Length of Storage	N/A
Guidelines for Outplanting / Performance on Typical Sites	Many species of <i>Sisyrinchium</i> can spread vigorously, so plants may need to be periodically dug up and thinned or divided.
Other Comments	<i>S. septentrionale</i> cannot produce viable seeds when cross pollinated with other <i>Sisyrinchium</i> species. ¹⁰

PROPAGATION DETAILS

Ecotype	N/A
Propagation Goal	Plants
Propagation Method	Vegetative, rhizome or root ball division
Product Type	Container
Stock Type	N/A

Time to Grow	
Target Specifications	
Propagule Collection Instructions	Dig up rhizomes and divide at the beginning of dormancy season.
Propagule Processing/Propagule Characteristics	N/A
Pre-Planting Propagule Treatments	N/A
Growing Area Preparation / Annual Practices for Perennial Crops	Moist, well-draining to gravelly soils with a pH between 5-7
Establishment Phase Details	Don't overwater
Length of Establishment Phase	N/A
Active Growth Phase	N/A
Length of Active Growth Phase	N/A
Hardening Phase	N/A
Length of Hardening Phase	N/A
Harvesting, Storage and Shipping	Dormant rhizomes can be shipped or stored in cold storage ⁹
Length of Storage	N/A

Guidelines for Outplanting / Performance on Typical Sites	Many species of <i>Sisyrinchium</i> can spread vigorously, so plants may need to be periodically dug up and thinned or divided.
Other Comments	None

INFORMATION SOURCES

References	<p>https://plants.sc.egov.usda.gov/core/profile?symbol=SISE4</p> <p>http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=242101922</p> <p>http://fieldguide.mt.gov/speciesDetail.aspx?elcode=P_MIRI0D180</p> <p><i>Prepared by Washington State Department of Natural Resources</i> https://www.dnr.wa.gov/publications/amp_nh_sise4.pdf.</p> <p><i>Prepared by Washington Department of Natural Resources, Washington Natural Heritage Program, and the U.S.D.I. Bureau of Land Management</i> http://citeseerx.ist.psu.edu/viewdoc/download?rep=rep1&type=pdf&doi=10.1.1.214.3777</p> <p>https://www.wildflower.org/plants/result.php?id_plant=SISE4</p> <p>https://wimastergardener.org/article/blue-eyed-grass-sisyrinchium/</p> <p>https://davesgarden.com/guides/pf/go/72207/</p> <p>Draft Plant Propagation Protocol</p> <p>1. Plants Profile for <i>Sisyrinchium septentrionale</i> (northern blue-eyed grass).</p>
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	<p>https://plants.sc.egov.usda.gov/core/profile?symbol=SISE4.</p> <p>2. Sisyrinchium septentrionale in Flora of North America @ efloras.org. http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=242101922.</p> <p>3. Webmaster, D. R. Northern Blue-eyed-grass - Montana Field Guide. http://fieldguide.mt.gov/speciesDetail.aspx?elcode=PMIRI0D180.</p> <p>4. Sisyrinchium septentrionale Fact Sheet.</p> <p>5. Sisyrinchium septentrionale Report. (2000).</p> <p>6. Sisyrinchium septentrionale (Northern blue-eyed grass) Native Plants of North America. https://www.wildflower.org/plants/result.php?id_plant=SISE4.</p> <p>7. Blue-eyed grass, <i>Sisyrinchium</i>. <i>Master Gardener Program</i> https://wimastergardener.org/article/blue-eyed-grass-sisyrinchium/.</p> <p>8. PlantFiles: American Blue-eyed Grass, Common Blue-eyed Grass. <i>Dave's Garden</i> https://davesgarden.com/guides/pf/go/72207/.</p> <p>9. Liu, Y. Plant Propagation Protocol for</p>
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	<p><i>Sisyrinchium montanum</i>.</p> <p>http://courses.washington.edu/esrm412/protocols/SIMO2.pdf.</p> <p>10. Henderson, D. M. A Biosystematic Study of Pacific Northwestern Blue-Eyed Grasses (<i>Sisyrinchium</i>, Iridaceae). <i>Brittonia</i> 28, 149–176 (1976).</p>
Other Sources Consulted	<p>Blue Eyed Grass Care: Growing Blue Eyed Grass Wildflower In The Garden. Gardening Know How https://www.gardeningknowhow.com/ornamental/foilage/blue-eyed-grass/blue-eyed-grass-care.htm.</p> <p>Blue Eyed Grass, <i>Sisyrinchium bellum</i>. https://calscape.org/Sisyrinchium-bellum-(Blue-Eyed-Grass).</p>
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