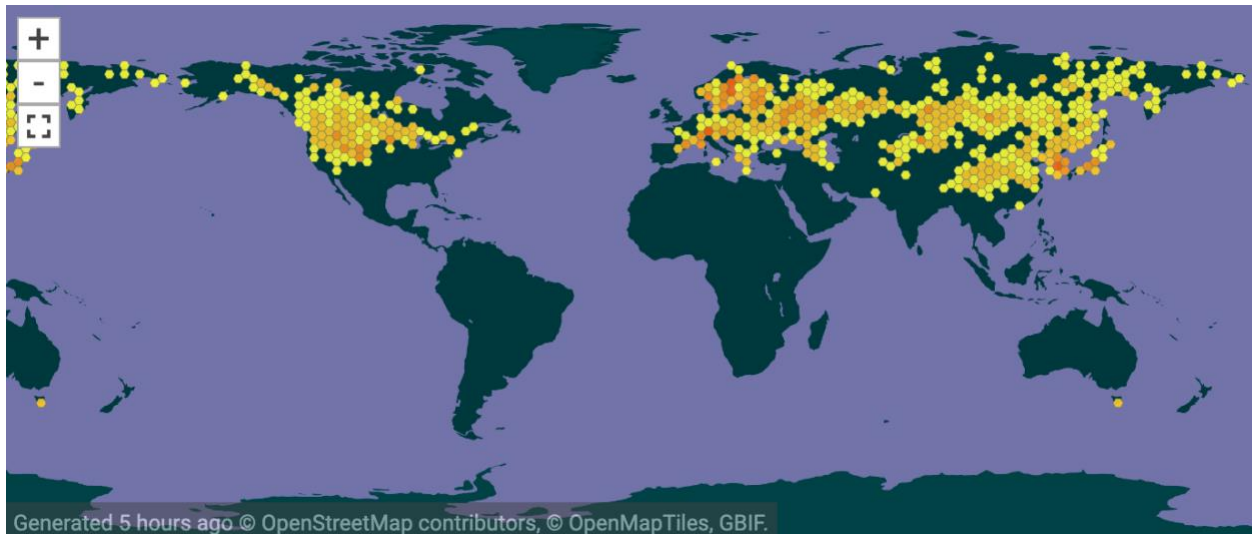


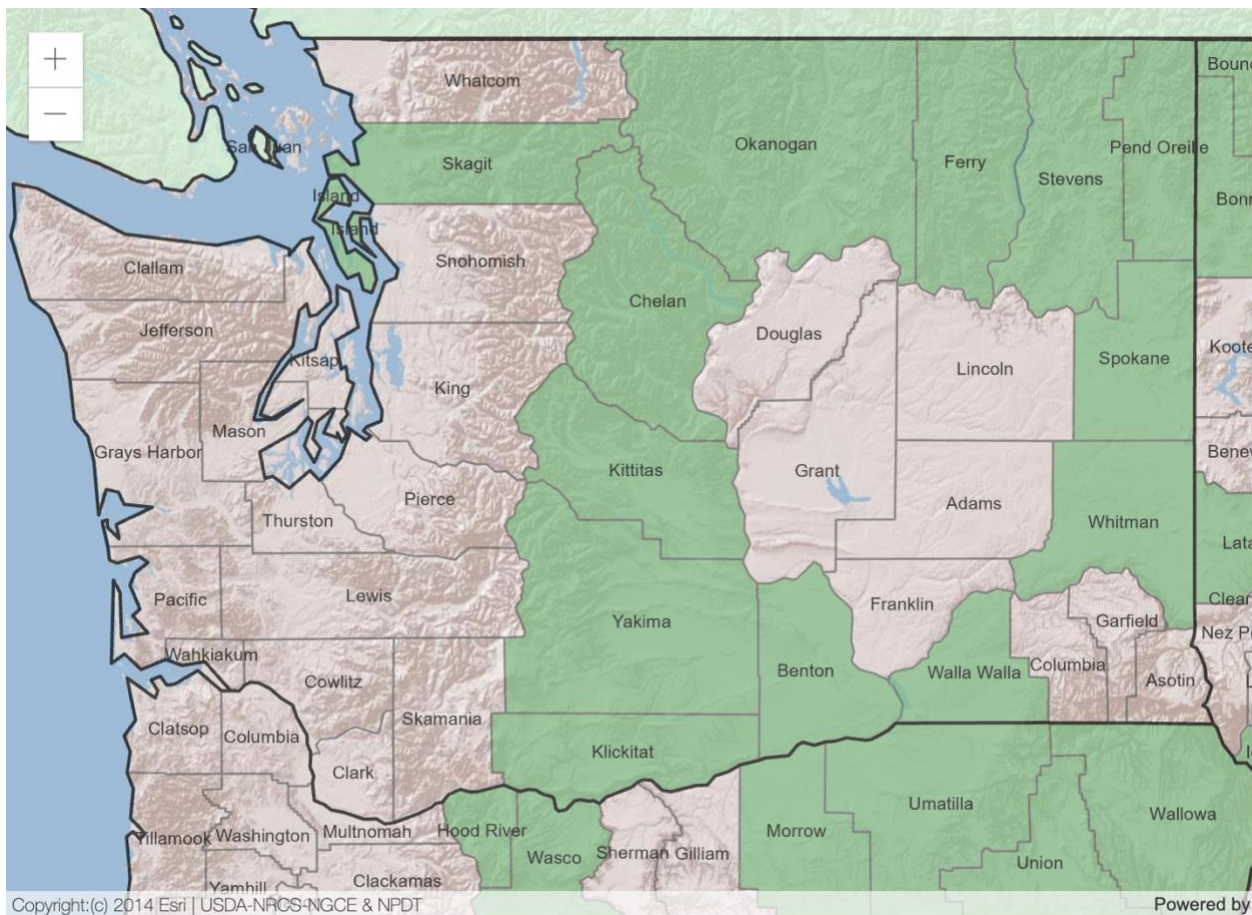
Plant Propagation Protocol for *Draba nemorosa*

ESRM 412 – Native Plant Production

URL: <https://courses.washington.edu/esrm412/protocols/2023/DRNE.pdf>



Source: GBIF



Source: USDA Plants Database

| TAXONOMY | |
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| Plant Family | |
| Scientific Name | <i>Brassicaceae</i> Burnett |
| Common Name | Mustard family |
| Species Scientific Name | |
| Scientific Name | <i>Draba nemorosa</i> L. |
| Varieties | <i>Draba nemorosa</i> L. var. <i>leiocarpa</i> Lindbl. (DRNEL) |
| Sub-species | - |
| Cultivar | - |
| Common Synonym(s) | <p>From USDA:¹ <i>Draba lutea</i> Gilib. (DRLU2) <i>Draba nemorosa</i> L. var. <i>leiocarpa</i> Lindbl. (DRNEL)</p> <p>From the Burke:³ <i>Draba dictyota</i> Greene <i>Draba nemoralis</i> Ehrh. <i>Draba nemorosa</i> L. var. <i>leiocarpa</i> Lindblom <i>Tomostima nemorosa</i> (L.) Lunell</p> <p>From Powo:² Homotypic Synonyms: <i>Drabella nemoralis</i> (L.) Bubani <i>Tomostima nemorosum</i> (L.) Lunell</p> <p>Heterotypic Synonyms: <i>Crucifera nemorosa</i> E.H.L. Krause <i>Draba x ambigua</i> Schur <i>Draba dictyota</i> Greene <i>Draba gracilis</i> Graham <i>Draba intermedia</i> Andrz. ex DC. <i>Draba lutea</i> Gilib. ex DC. <i>Draba lutea</i> var. <i>brevipens</i> DC. <i>Draba lutea</i> var. <i>longipes</i> DC. <i>Draba macroloba</i> Turcz. <i>Draba muralis</i> Thunb. <i>Draba nemoralis</i> Ehrh. <i>Draba nemoralis</i> var. <i>hebecarpa</i> (Lindblom) E.Lehm. <i>Draba nemoralis</i> var. <i>leiocarpa</i> <i>Draba nemoralis</i> var. <i>leiocarpa</i> Boiss. <i>Draba nemorosa</i> f. <i>acaulis</i> Sommier <i>Draba nemorosa</i> var. <i>alpina</i> Porter <i>Draba nemorosa</i> var. <i>brevipes</i> DC. <i>Draba nemorosa</i> var. <i>brevisilcula</i> Zapal. <i>Draba nemorosa</i> f. <i>foliosa</i> Pohle <i>Draba nemorosa</i> f. <i>gracilis</i> Pohle <i>Draba nemorosa</i> var. <i>hebecarpa</i> Lindblom <i>Draba nemorosa</i> var. <i>latifolia</i> M.Bieb. ex Kuntze</p> |

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| | <i>Draba nemorosa</i> var. <i>leiocarpa</i> Lindblom <i>Draba nemorosa</i> var. <i>leiocarpa</i> (Lindblom) Kitag. <i>Draba nemorosa</i> var. <i>longipes</i> DC. <i>Draba nemorosa</i> f. <i>macroloba</i> (Turcz.) Pohle <i>Draba nemorosa</i> var. <i>nemoralis</i> (Ehrh.) Rouy & Foucaud <i>Draba polygonifolia</i> Mill. <i>Draba pontica</i> Desf. <i>Tomostima luteum</i> (Gilib. ex DC.) Lunell |
| Common Name(s) | Woodland draba, woodland whitlow-grass ³ , woods draba ³ , wood whitlow-grass ⁴ , yellow whitlow-wort ⁵ |
| Species Code (as per USDA Plants database) | DRNE |
| GENERAL INFORMATION | |
| Geographical range | AK N CAN N L48 N N. America – AK, Canada, and the lower 48 states. Most of the Arctic and temperate Europe and Asia. ⁴ See map above. |
| Ecological distribution | Disturbed open areas, forest edges. ³ Part shade, sun; sandy or rocky soil. ⁵ |
| Climate and elevation range | Subarctic and temperate ecosystems in the Northern Hemisphere. ² Grassy areas, wet valleys, roadsides, riverbanks, stream sides, mountain slopes, near sea level up to 4800 m. ⁴ |
| Local habitat and abundance | Weevils have been associated with <i>D. nemorosa</i> . ⁹ Honeybees will pollinate <i>Draba</i> . ¹⁶ Often associated with ground squirrel or pocket gopher digging. ¹⁷ <i>D. nemorosa</i> does best when planted in a rocky area and are best grown under the protection of a rock overhang, specifically for precipitation. ¹³ |
| Plant strategy type / successional stage | <i>D. nemorosa</i> is a weedy/colonizer type that tends to be early seral and grows well on disturbed land. ¹² |
| Plant characteristics | Annual forb/herb, stems are 6-45cm tall, not branched or branched at the ends, with simple trichomes 0.5-1.3mm and stalked trichomes with 2-4 rays that are 0.1-0.5mm. ⁶ Basal leaves that are rosulate or not, and oblong-obovate or oblanceolate leaf blades. Cauline leaves are |

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| | <p>sessile with broadly ovate to oblong blades and have simple and 2 or 3 rayed trichomes.⁶</p> <p>Racemes are 18-60 flowered and considerably elongated in fruit, straight, and glabrous. Flowers have yellow petals that are spatulate to oblanceolate and are 1.7-2.2 x 0.6-1mm. Fruits are oblong to elliptic, slightly flattened, and are 5-8 x 1.5-2.5mm. Seeds are ovoid and 0.5-0.7 x 0.3-0.4mm.⁶</p> <p>Flowers from March through June in Washington state.³ Flowering occurs in mid spring; month ranges vary depending on location.</p> <p><i>Draba</i> is mat forming.¹⁵</p> |
| PROPAGATION DETAILS | |
| Ecotype | - |
| Propagation Goal | Plants |
| Propagation Method | Seed |
| Product Type | Container |
| Stock Type | Plug |
| Time to Grow | From fall to spring when planted outdoors. 10 weeks when grown indoors. ¹³ |
| Target Specifications | 6-30cm |
| Propagule Collection Instructions | Handpick seeds by snipping or breaking off the stems into bags. ¹⁰ Cut off single rosettes in late summer. ¹⁴ |
| Propagule Processing/Propagule Characteristics | <p>Seed longevity is possibly long term if seed is ultra-dry. Seeds are orthodox and can be dried to 3% to 7% humidity before being stored at freezing.¹²</p> <p>Seeds weigh 0.03g/1000 seeds.¹²</p> |
| Pre-Planting Propagule Treatments | <p>Allow the pods to dry while still on the plant then break them open to collect the seeds.¹⁰</p> <p>Air dry seeds in paper bags then crush plant material to remove large chaff before using a sieve to remove seeds from chaff.¹²</p> <p>May require stratification in the fridge for a month. Stratify seeds 9 to 10 weeks before planting.¹³</p> <p>Could be scarified with scalpel.¹²</p> |
| Growing Area Preparation / Annual Practices for Perennial Crops | <p>Keep temperature around 60 to 70°F (16 to 21°C).¹³</p> <p>Growing media should be well drained. Sandy or gritty soil that is not too acidic should be used. Lime can be added to the soil if needed.¹³</p> |

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| Establishment Phase Details | Prepare growing room temperature to be set to 59 to 68°F (15 to 20°C) which is what the seeds require for germination. ¹³ |
| Length of Establishment Phase | 1 to 3 months. ¹³ |
| Active Growth Phase | Keep room temperature at 60 to 70°F (16 to 21°C). ¹³ |
| Length of Active Growth Phase | - |
| Hardening Phase | Keep plants indoors until last spring frost when it is safe to be planted. |
| Length of Hardening Phase | <i>Draba</i> are relatively cold hardy and can be planted after growth indoors after the last spring frost. They are said to be tolerant of winters with lows of -10 to -15°C and are an H5 based on the UK growing conditions. ¹⁵ |
| Harvesting, Storage and Shipping | Plants are hardy. |
| Length of Storage | Until able to be planted provided they are in large enough containers. <i>Draba</i> have large roots systems and aren't good pot plants. |
| Guidelines for Outplanting / Performance on Typical Sites | Outplant the seedlings following the last frost of the spring. Flowers grow in early spring, when seedlings should be outplanted. Propagation can be further done through division in the spring. ¹³ |
| Other Comments | Spacing should be about 22-30cm. ¹⁰ |
| INFORMATION SOURCES | |
| References | See below |
| Other Sources Consulted | See below |
| Protocol Author | Nora Boe |
| Date Protocol Created or Updated | 05/03/2023 |

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