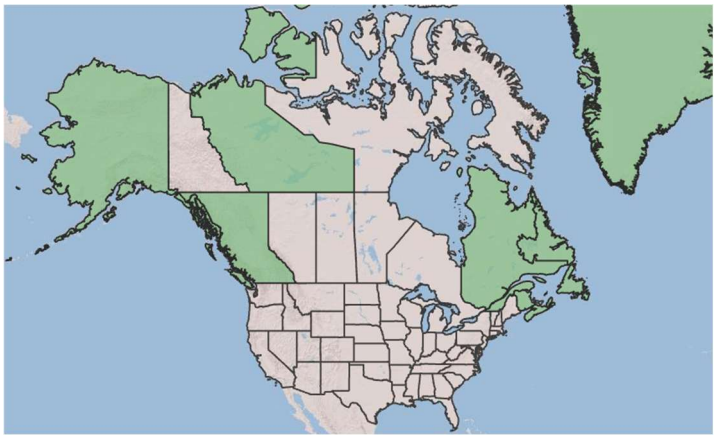
Plant Propagation Protocol for *[Cornus suecica]*

ESRM 412 – Native Plant Production

TAXONOMY	
Plant Family	
Scientific Name	Cornaceae
Common Name	Dogwood family
Species Scientific Name	
Scientific Name	*Cornus suecica L*.
Varieties	N/A
Sub-species	N/A
Cultivar	N/A
Common Synonym(s)	*Chamaepericlymenum suecicum* (L.) Asch. & Graebn.
Common Name(s)	Lapland cornel Dwarf cornel Swedish cornel Bunchberry (often confused with bunchberry flowering vine)[1]
Species Code (as per USDA Plants database)	COSU4
GENERAL INFORMATION	

Geographical range	Found in the Alaska, Greenland, and the Canadian provinces of British Columbia, Northwest Territories, Quebec, Labrador, New Brunswick, Nova Scotia, and Newfoundland.[2] Additionally found in subarctic Europe and western Asia.[3]  *North America distribution*  *Pacific Northwest distribution (British Columbia counties unavailable)*
Ecological distribution	Bogs, tundra, coniferous forests, and subalpine and alpine meadows.
Climate and elevation range	Boreal and subarctic[4] climates with low mean yearly temperature with consistent precipitation and high moisture. Sometimes found in subalpine and alpine areas. Elevation of 244 – 1075 meters in British Columbia.[5]

Local habitat and abundance	Uncommon in its ranges in the Pacific northwest, but common in other ranges. Local habitats are typically cool and moist, with acidic soil high in organic matter and with low decomposition rates. Found mostly in moderately shaded areas in peat banks, bogs, and marshes in British Columbia.[6]
Plant strategy type / successional stage	Stress-tolerant perennial, slow growing and shade tolerant. Reproduces both sexually and with rhizomes.[7] Tolerant to low nutrients and adapted to stable but harsh climates. Associated with late-successional stages and found in climax communities.
Plant characteristics	Green stems 5-22 cm tall with thin hairs, with 4-7 nodes. Leaves are small and scale-like with an opposite pattern and ovate to oval shape with a pale green underside and blue-green upper surface. Flowers grow in clusters of 5-17 and are surrounded by 4 white bracts. Flowers are white with deep purple stamens, and fruits are bright red and grow 3-8 per cluster.[8] Mycorrhizae can sometimes be found in root nodules.[9]
PROPAGATION DETAILS: FROM SEED	
Ecotype	Seeds harvested from naturally occurring populations in mature alpine or subalpine meadows in moderately shaded areas. Harvest in mid-summer to early-fall consistent with flowering patterns.[10]
Propagation Goal	Plants
Propagation Method	Seed
Product Type	Container (plug)
Stock Type	Container-grown seedling plug, greenhouse-grown
Time to Grow	6-12 months in greenhouse, potentially 2-3 years total before reaching flowering height
Target Specifications	~5 cm tall with a well-developed root system filling the container

Propagule Collection Instructions	Pick fruits from plants in mid-summer to early fall
Propagule Processing/Propagule Characteristics	Seed density is unknown and would have to be measured, and seed longevity is not well studied.
Pre-Planting Propagule Treatments	Seeds should be removed from the fruit and cleaned before being stored in a cool, dry, dark environment. The seeds are attached in a way where picking them off manually would likely be the easiest. Before germination, seeds should undergo cold stratification to mimic the seasonality of the climate for 60-90 days at 1-5°C.
Growing Area Preparation / Annual Practices for Perennial Crops	Media of 60% peat or soil rich in organic matter, 20% sand, and 20% perlite to simulate the moist, acidic, and well-draining soil of its native habitat. Containers 15 cm deep and 5 cm in diameter should be prepared, along with an area in a greenhouse with partial shade and 15-22°C during the day and 8-12°C during the night to imitate forest understory conditions.
Establishment Phase Details	Seeds should be sown in early spring after cold stratification into the previously described media mixture. Soil should be kept damp but well drained. Caution should be taken not to overwater.
Length of Establishment Phase	Potentially 2 to 3 weeks after germination
Active Growth Phase	Partial shade and indirect sunlight should be provided, with continued temperatures and watering patterns as previously described. Fertilization should be avoided because of its adaptation to nutrient-poor soils. Maintain good air circulation to avoid fungal issues.
Length of Active Growth Phase	Potentially 3-4 months
Hardening Phase	Decrease watering frequency and allow the soil to dry slightly. Maintain good air circulation and monitor for pests, weeds, and fungus.

Length of Hardening Phase	Potentially 2-4 weeks
Harvesting, Storage and Shipping	Loosen soil around the root plug and remove from the container without disturbing the roots. Store in cool dry environment and keep the roots moist. For shipping make sure the environment for the plants is cool and sufficiently humid.
Length of Storage	Potentially 2-4 weeks
Guidelines for Outplanting / Performance on Typical Sites	Planting should be done in the mid spring if possible to take advantage of moist conditions. Outplanting should be done into acidic soils with low nutrient content and in a moderately shaded area. Performance is not well documented, although sites with low competition and more ideal conditions would result in higher survival rates.
Other Comments	Some aspects of this protocol are based on collective information of other similar species where information on this specific species could not be found.
INFORMATION SOURCES	
References	See below
Other Sources Consulted	*Propagation Protocols — Reforestation, Nurseries and Genetics Resources*. (n.d.). Npn.rngr.net. https://npn.rngr.net/propagation/protocols *Burke Herbarium Image Collection*. (n.d.). Www.burkeherbarium.org. https://www.burkeherbarium.org/imagecollection/ *Cornus suecica L. - Global Pollen Project - Global Pollen Project*. (2025). Globalpollenproject.org. https://globalpollenproject.org/Taxon/Cornaceae/Cornus/suecica *Cornus suecica L.* (2025). Gbif.org. https://www.gbif.org/species/3082246
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[1] Spengler, T. (2018, September 23). *Dwarf Cornel Care: Tips For Growing Dwarf Cornel Plants*. Gardening Know How. https://www.gardeningknowhow.com/ornamental/trees/dogwood/growing-dwarf-cornel-plants.htm

[2] *USDA Plants Database*. (2025). Usda.gov. https://plants.usda.gov/plant-profile/COSU4

[3] *Cornus suecica L. | Plants of the World Online | Kew Science*. (2016). Plants of the World Online. https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:271681-1

[4] Taylor, K. (1999). Cornus suecica L. (Chamaepericlymenum suecicum (L.) Ascherson & Graebner). *Journal of Ecology*, *87*(6), 1068–1077. https://doi.org/10.1046/j.1365-2745.1999.00415.x

[5] *E-Flora BC Atlas Page*. (2020). Geog.ubc.ca. https://linnet.geog.ubc.ca/Atlas/Atlas.aspx?sciname=Cornus+suecica

[6] *Cornus suecica Dwarf Cornel, Lapland cornel PFAF Plant Database*. (2025). Pfaf.org. https://pfaf.org/user/Plant.aspx?LatinName=Cornus+suecica

[7] *Cornus suecica - FNA*. (2020). Floranorthamerica.org. https://floranorthamerica.org/Cornus_suecica

[8] *Cornus suecica in Flora of North America @ efloras.org*. (2025). Efloras.org. http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=250101779

[9] Taylor, K. (1999). Cornus suecica L. (Chamaepericlymenum suecicum (L.) Ascherson & Graebner). *Journal of Ecology*, *87*(6), 1068–1077. https://doi.org/10.1046/j.1365-2745.1999.00415.x

[10] *Dwarf Cornel (Cornus suecica) - All About This Hardy Shrub*. (2025). Wildflowerweb.co.uk. http://www.wildflowerweb.co.uk/plant/2900/dwarf-cornel