

Plant Propagation Protocol for *Anemone narcissiflora*


ESRM 412 – Native Plant Production

URL: <https://courses.washington.edu/esrm412/protocols/2021/ANNA.pdf>

TAXONOMY

Plant Family	
Scientific Name	Ranunculaceae
Common Name	Buttercup Family
Species Scientific Name	
Scientific Name	<i>Anemone narcissiflora</i> L.
Varieties	<i>Anemone narcissiflora</i> L. var. <i>monantha</i> DC. <i>Anemone narcissiflora</i> L. var. <i>alaskana</i> (Hultén) B. Boivin <i>Anemone narcissiflora</i> L. var. <i>interior</i> (Hultén) B. Boivin <i>Anemone narcissiflora</i> L. var. <i>villosissima</i> DC. <i>Anemone narcissiflora</i> L. var. <i>zephyra</i> (A. Nelson) Dutton & Keener [4]
Sub-species	<i>Anemone narcissiflora</i> L. ssp. <i>alaskana</i> Hultén <i>Anemone narcissiflora</i> L. ssp. <i>interior</i> Hultén <i>Anemone narcissiflora</i> L. ssp. <i>sibirica</i> (L.) Hultén <i>Anemone narcissiflora</i> L. ssp. <i>villosissima</i> (DC.) Hultén <i>Anemone narcissiflora</i> L. ssp. <i>zephyra</i> (A. Nelson) Hultén [4]
Cultivar	<i>Anemone narcissiflora</i> L. var. <i>villosissima</i> DC.
Common Synonym(s)	<i>Anemonastrum narcissiflorum</i> (L.) Holub ssp. <i>villosissimum</i> (DC.) <i>Anemone narcissiflora</i> L. ssp. <i>villosissima</i> (DC.)
Common Name(s)	Narcissus Wind-flower
Species Code (as per USDA Plants database)	ANNA

GENERAL INFORMATION

Geographical range [4]	 <p>Copyright:(c) 2014 Esri USDA-NRCS-NGCE & NPDT</p> <p>Powered by</p> <p>Native Status:</p> <p> <input type="radio"/> L48 <input checked="" type="radio"/> AK <input type="radio"/> HI <input type="radio"/> PR <input type="radio"/> VI <input type="radio"/> NAV <input checked="" type="radio"/> CAN <input type="radio"/> GL <input type="radio"/> SPM <input type="radio"/> N </p>
Ecological distribution	Moist sites in woods and heathlands to arctic tundra Prefers a rich, sandy loam [1]
Climate and elevation range	Northern Europe to northern Asia and northwestern North America Hardy to zone 3
Local habitat and abundance	Can be found growing in alpine grasslands and meadows as well as lower grassy meadows and thickets that have moist soils. Has also been observed on tundra and in open woods Highly polymorphic widespread species
Plant strategy type / successional stage	Hardy to -20 degrees Celsius and immune to being eaten by rabbits Will inhibit the growth of nearby plants especially legumes Has the potential to become weedy if in the wrong place Highly polymorphic plant [1]
Plant characteristics	Herbaceous perennial growing to 2ft by approximately 2ft Flowers in May and seeds ripen from June to July. Hermaphroditic and self-fertile Showy creamy-white flowers borne on stems

The stem leaves are deeply lobed, sessile and smaller than the long-stemmed, ternately cleft basal leaves
 Flowers occur singly or up to three per cluster
 Lowland forms of this plant are larger than plants at a higher elevation
 The plant is more or less soft-hairy

[5]



[6]

PROPAGATION DETAILS

Ecotype	
Propagation Goal	Plants
Propagation Method	Vegetative
Product Type	Propagules
Stock Type	Root cutting
Time to Grow	12 months
Target Specifications	12 inches tall
Propagule Collection Instructions	Take root cuttings in fall or early winter [2]
Propagule Processing/Propagule Characteristics	Harvest roots from bottom third of containerized plants and cut them into 1-to-4-inch pieces which are 1/8 to 1/4 inch thick [2]

Pre-Planting Propagule Treatments	Missing
Growing Area Preparation / Annual Practices for Perennial Crops	Strike these root cuttings into liner trays or scatter over the surface of growing mix and then cover with additional growing medium Use a porous well-draining soil mix Can be grown in 1-to-2-gallon pots [2]
Establishment Phase Details	Keep the root cuttings at cool temperatures for the duration of the winter (at or bellow 40 degrees Fahrenheit) for 6 weeks [2]
Length of Establishme nt Phase	2 months
Active Growth Phase	After 6 weeks of cold gradually increase the temperature to 65 degrees Fahrenheit to promote root and shoot development, allow 6-to-8 weeks until the plants are well rooted and large enough for transplanting [2]
Length of Active Growth Phase	4 months
Hardening Phase	Grow with light to moderate fertility levels Never allow the plants to dry out or wilt Keep moist but not saturated Grow plants in full sun with some shade provided during the heat of the day No pinching or maintenance is required [2]
Length of Hardening Phase	2 months
Harvesting, Storage and Shipping	Plants grown in 1-to-2-gallon pots can be directly transplanted to the ground Ship the adult plants in 65-degree temperatures to avoid heat stress and drying
Length of Storage	1 month
Guidelines for Outplanting / Performance on Typical Sites	If the plants were grown from root stock in the early fall they should be able to flower the following fall, if spring or summer flowering is desired adult plants must be exposed to altered photo periods in order to force flowering
	Propagation Details

Ecotype	
Propagation Goal	Plants
Propagation Method	Seed
Product Type	Container
Stock Type	
Time to Grow	12 months
Target Specifications	8 inches
Propagule Collection Instructions	Collect seeds in early September after the seed’s heads have dried on the plant [5]
Propagule Processing/Propagule Characteristics	The seeds do not store well, plant as soon as possible [3]
Pre-Planting Propagule Treatments	Use a running water bath to soak the seeds for 24 hours and then cold stratify in the soil over winter in damp conditions [3]
Growing Area Preparation / Annual Practices for Perennial Crops	Plant the seeds in the fall in a flat of rich sandy loamed soil that is kept moist Overwinter the seeds in this soil [1]
Establishment Phase Details	Surface sow or only just cover the seeds and keep the soil moist Seeds germinate in 1-6 months at 15 degrees Celsius [3]
Length of Establishment Phase	1-6 months
Active Growth Phase	When large enough to handle prick the seeds out and place into individual 1 gallon pots and grow them in light shade in the greenhouse for at least a year [3]
Length of Active Growth Phase	1 year
Hardening Phase	No hardening phase required

Length of Hardening Phase	Missing
Harvesting, Storage and Shipping	Once a large enough size the seedlings can be shipped in their 1-gallon container at 65 degrees Fahrenheit to reduce the stress on the plants
Length of Storage	Once seedlings are large enough plant them out in the spring 2 months [3]
Guidelines for Out planting/ Performance on Typical Sites	Plant in full sun to light shade in rich loamy soils Plant directly into the ground

INFORMATION SOURCES

References	<p>[1] “Anemone narcissiflora: Narcissus Wind-flower.” <i>Dempstercounty.org</i>. CYSIP References. Web. April 2021. <http://www.flora.dempstercountry.org/0.Site.Folder/Species.Program/Species2.php?species_id=Ane.narci>.</p> <p>[2] “Anemone Narcissiflora L.” <i>alaskawildflower.us</i>. Alaska Wildflowers. Web. June 2021.<http://www.alaskawildflowers.us/Kingdom/Plantae/Magnoliophyta/Magnoliopsida/Ranunculaceae/Anemone_narcissiflora/index.html></p> <p>[3] “Anemone narcissiflora – L.” <i>pfaf.org</i>. Plants for a Future. Web. April 2021. <https://pfaf.org/user/Plant.aspx?LatinName=Anemone+narcissiflora>.</p> <p>[4] “Anemone narcissiflora”. <i>Usda.gov</i>. United Sates Department of Agriculture. Web. April 2021. <https://plants.sc.egov.usda.gov/home/basicSearchResults?resultId=2032c12e-5fb9-4a98-8b86-4f0bb99a70f8>.</p> <p>[5] “Plants Database.” <i>Wildflower.org</i>. Lady Bird Johnson Wildflower center. Web. May 2015. <https://www.wildflower.org/plants/result.php?id_plant=ANNA>.</p>
Other Sources Consulted	<p>“Anemone narcissiflora.” <i>Floranorthamerica.org</i>. Flora of North America. Dutton et al. April 2021. <http://floranorthamerica.org/Anemone_narcissiflora>.</p> <p>“Propigation of Selected Annuals and Herbacious Perennials Used as Ornamentals.” <i>Tamu.edu</i>. Texas A and M University. April 2021. <https://aggie-horticulture.tamu.edu/faculty/davies/pdf%20stuff/ph%20final%20galley/M21_DAVI4493_08_SE_C21.pdf>.</p>

	<p>“Anemone narcissiflora L.” <i>alaskawildflower.us</i>. Alaskan Wildflowers. April 2021. <http://www.alaskawildflowers.us/Kingdom/Plantae/Magnoliophyta/Magnoliopsida/Ranunculaceae/Anemone_narcissiflora/index.html>.</p> <p>“Anemone narcissiflora.” Missouri Botanical Garden. April 2021. <http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?taxonid=286066>.</p> <p>“Narcissus Anemone.” Digital RMBL. April 2021.< https://www.digitalrmbll.org/rmbll-plants-and-animals/narcissus-anemone/ >.</p>
Protocol Author	Ava Kloss-Schmidt
Date Protocol Created or Updated	6/9/21