

Plant Propagation Protocol for *Hieracium albiflorum*

ESRM 412 – Native Plant Production

Protocol URL: <https://courses.washington.edu/esrm412/protocols/HIAL2.pdf>

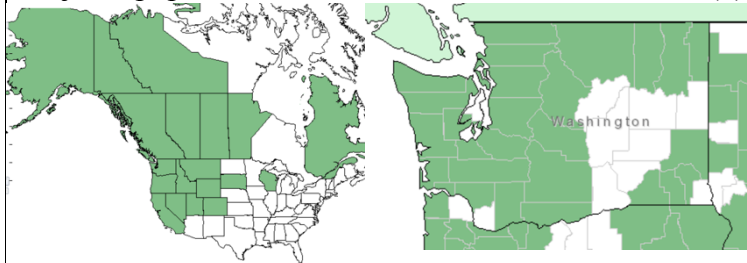


TAXONOMY

Plant Family	
Scientific Name	<i>Asteraceae</i>
Common Name	Aster Family
Species Scientific Name	
Scientific Name	<i>Hieracium albiflorum</i> Hook.
Varieties	Yellow Hawkweed (<i>H. pratense</i>) Orange Hawkweed (<i>H. aurentiacum</i>) Both are state listed as noxious weeds, invasive, and spread rapidly, and have negative impacts on rangeland and other habitats (6)
Sub-species	N/A
Cultivar	N/A
Common Synonym(s)	<i>Chlorocrepis albiflora</i> (Hook.) W.A. Weber <i>Hieracium helleri</i> Gandog. <i>Hieracium siskiyouense</i> M. Peck (1)
Common Name(s)	White Hawkweed
Species Code (as per USDA Plants database)	HIAL2

GENERAL INFORMATION

Geographical range *Hieracium albiflorum* grows in western North America, from Alaska and Northwest Territories south as far as Chihuahua, Sonora) and east to Manitoba and the Black Hills of South Dakota. (1)
Disjunct populations occur in Wisconsin and Quebec (4)



Ecological distribution	Grows in dry to moist, open forests, meadows, wooded slopes, clearings, and roadsides. Able to grow in a wide variety of situations. (3)
Climate and elevation range	Dry, from sea level to 14,000 ft (2) Prefers coarse, well drained soil and partly shady
Local habitat and abundance	Most commonly found under ponderosa pine and lodgepole pine. (3)
Plant strategy type / successional stage	Stress tolerator (3) Early colonizer found in fields, meadows, pastures, forest clearings and disturbed areas such as roadsides and abandoned farmland (6) High drought tolerance, intermediate shade tolerance (9)
Plant characteristics	Perennial form, flowers in spring (2) Grows to 3-4 in height, all hawkweeds are perennials that regrow from underground rhizomes. (9) Stem slightly to moderately hairy, hairs are at max 2-7 inches long, mostly near base, less hairy above. Flowers are composite with individual flowers composed of 'strap shaped petals' (9) Blooms late spring to summer, one seeded fruit, seeds blow away in wind after drying (9). White Hawkweed is native, Orange and Yellow Hawkweed are invasive (9).
PROPAGATION DETAILS	
Ecotype	N/A
Propagation Goal	N/A
Propagation Method	Naturally, they use seed, stolons to propagate (6)
Product Type	N/A
Stock Type	N/A
Time to Grow	N/A
Target Specifications	N/A
Propagule Collection Instructions	Collect seeds in August. Shake flower head into a bag and ripe seeds will fall out easily. Can also collect whole flower heads and remove seeds later for more yield (7).
Propagule Processing/Propagule Characteristics	Short seed shelf life
Pre-Planting Propagule Treatments	Sow in fall or moist stratify for 90 days at 1°C and sow in spring (7).
Growing Area Preparation / Annual Practices for Perennial Crops	N/A
Establishment Phase Details whitei	N/A
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	N/A
Length of Storage	Short
Guidelines for Outplanting / Performance on Typical Sites	N/A
Other Comments	Most all sources found for propagation of this plant warn against propagating. It is considered a noxious weed in many parts of the world. Each plant can produce hundreds of viable seeds. Orange Hawkweed (closely related) is a major concern across interior BC (5).

INFORMATION SOURCES

References	<p>(1) <i>Plants Profile for Hieracium albiflorum (white hawkweed)</i>. (2017). <i>Plants.usda.gov</i>. Retrieved 2 May 2017, from https://plants.usda.gov/core/profile?symbol=HIAL2</p> <p>(2) <i>White Hawkweed, Hieracium albiflorum</i>. (2017). <i>Calscape</i>. Retrieved 10 May 2017, from http://calscape.org/Hieracium-albiflorum-(White-Hawkweed)?srchr=sc568b84829b162</p> <p>(3) Johnson, L. (2003). <i>Plant Data Sheet</i>. <i>Depts.washington.edu</i>. Retrieved 10 May 2017, from http://depts.washington.edu/propplnt/Plants/hieraceum.htm</p> <p>(4) Reeves, Sonja L. 2006. <i>Hieracium albiflorum</i>. In: <i>Fire Effects Information System</i>, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available: http://www.fs.fed.us/database/feis/ [2017, May 10].</p> <p>(5) Armagost, E., Bakker, N., Klym, C., & Wallin, G. (2013). <i>Grow Me Instead</i>. Retrieved 13 May 2017, from http://bcinvasives.ca/documents/GMI-Booklet_2013_WEB.pdf</p> <p>(6) <i>Washington State Noxious Weed Control Board</i>. (2017). <i>Nwcb.wa.gov</i>. Retrieved 13 May 2017, from http://www.nwcb.wa.gov/weeds/nonnative-species-hybrids-of-wall-subgenus</p> <p>(7) Rose, Robin, Caryn E.C. Chachulski, and Diane L. Haase, 1998. <i>Propagation of Pacific Northwest Native Plants</i>. Oregon State University Press</p> <p>(8) Rice, P., & Halpop, J. (2009). <i>Hawkweed Identification</i> (1st ed., pp. 1-12). Montana State University. Retrieved from http://msuextension.org/publications/AgandNaturalResources/EB0187.pdf</p> <p>(9) Aeschliman, W. (2017). <i>White Hawkweed</i>. <i>Nativeplantsociety.org</i>.</p>
------------	--

	Retrieved 13 May 2017, from http://www.nativeplantsociety.org/white-hawkweed (10) Photos: Slitcher, P. (2009). <i>White-flowered Hawkweed: Hieracium albiflorum</i> . <i>Science.halleyhosting.com</i> . Retrieved 14 May 2017, from http://science.halleyhosting.com/nature/plants/sun/dandy/hieracium/albiflorum.htm
Other Sources Consulted	
Protocol Author	Stephen Keimach
Date Protocol Created or Updated	5/22/17

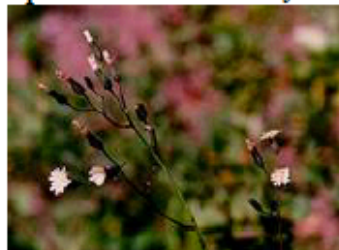
Previous Protocol:

5/13/2017

Plant Data Sheet

Plant Data Sheet

Species *Hieraceum albiflorum*, white hawkweed



Range

Alaska east to Saskatchewan, and south to Colorado and California.

Climate, elevation

Low to mid elevations.

Local occurrence (where, how common)

Most commonly found under ponderosa pine and lodgepole pine.

Habitat preferences

White hawkweed grows in dry to moist, open forests, meadows, wooded slopes, clearings, and roadsides.

Plant strategy type/successional stage (stress-tolerator, competitor, weedy/colonizer, seral, late successional)

Stress-tolerator.

Associated species

Yellow hawkweed (*H. pratense*) and orange hawkweed (*H. aurentiacum*) look very similar to white hawkweed except for flower color, both are state listed noxious weeds and care must be taken to not propagate them.

Other common names include:

None found.

May be collected as:

Seeds.

Collection restrictions or guidelines

Collect seeds in August, depending on elevation and geographic location. Shake flower heads into a paper bag and ripe seeds will fall out easily. You can also simply collect whole flower heads before seeds disperse.

Seed germination (needs dormancy breaking?)

Either sow in the fall or moist stratify for 90 days at 1°C and sow in spring.

Seed life (can be stored, short shelf-life, long shelf-life)

Short self-life.

Recommended seed storage conditions

Not specified.

Propagation recommendations (plant seeds, vegetative parts, cuttings, etc.)
Seed.

Soil or medium requirements (inoculum necessary?)

Installation form (form, potential for successful outcomes, cost)
Seed.

Recommended planting density
None specified.

Care requirements after installed (water weekly, water once etc.)
None specified.

Normal rate of growth or spread; lifespan
Growth rate moderate, vegetative spread rate moderate.

Sources cited

http://plants.usda.gov/cgi_bin/topics.cgi

http://www.fs.fed.us/database/feis/plants/shrub/berner/distribution_and_occurrence.html

Pojar, Jim and Andrew MacKinnon. 1994. Plants of the Pacific Northwest Coast Washington, Oregon British Columbia & Alaska. BC Ministry of Forests and Lone Pine Publishing, Vancouver, British Columbia, Canada 527 p.

Rose, Robin, Caryn E.C. Chachulski, and Diane L. Haase, 1998. Propagation of Pacific Northwest Native Plants. Oregon State University Press

Data compiled by (student name and date)
Lara Johnson