

Plant Propagation Protocol for *Ericameria arborescens*

ESRM 412 – Native Plant Production

URL: <https://courses.washington.edu/esrm412/protocols/2023/ERAR27>



Figure 1. Geographical distribution in United States.¹



Figures 2 and 3. *Ericameria arborescens* flower and plant, respectively.²

TAXONOMY ¹	
Plant Family	
Scientific Name	Asteraceae
Common Name	Aster family, Sunflower family, Daisy family
Species Scientific Name	
Scientific Name	<i>Ericameria arborescens</i> (A. Gray) Greene
Varieties	None listed.
Sub-species	None listed.
Cultivar	None listed.
Common Synonym(s)	<i>Haplopappus arborescens</i> (A. Gray) H.M. Hall <i>Linosyris arborescens</i> A. Gray
Common Name(s)	Golden Fleece, Goldenfleece
Species Code (as per USDA Plants database)	ERAR27
GENERAL INFORMATION	
Geographical range	California and southwest Oregon. ¹ See Figure 1 for a specific distribution.
Ecological distribution	Chaparral, open woodlands. ³ Adapted to ecosystems prone to wildfire. ⁴

Climate and elevation range	Grows at an elevation of 0-6400 feet. Annual precipitation ranges from 22''-93'' in a wet season of 4-9 months. Temperatures range from 29 to 60 degrees Fahrenheit. ⁵
Local habitat and abundance	Grows in full sun to part shade. ⁴ Tolerant to shade and low water availability. Prefers soil pH of 5.1-7.9. Soil material includes decomposed plant material, clay loam, loam, sandy loam, bedrock. ⁵ Closely related to <i>Ericameria parishii</i> . ³
Plant strategy type / successional stage	Prevalent after fire. ³ May be early successional.
Plant characteristics	Fast growing perennial shrub that blooms August-September. ⁵ Other sources state flowering occurs into November. ³ Disc florets are yellow/white in color. ⁶ Typically 6'-10' tall. ⁴ Can grow up to 15' tall with glabrous or slightly hairy plant material. ³ Fruit is classified as a cypsela or referred to as an achene (technically incorrect). ⁶
PROPAGATION DETAILS⁷	
Ecotype	Developed as part of a vegetation restoration plan for Mount Umunhum in Santa Clara County, California.
Propagation Goal	Plants
Propagation Method	Seed
Product Type	Recognizable patches of seeded areas.
Stock Type	Field
Time to Grow	N/A
Target Specifications	N/A
Propagule Collection Instructions	Seeds should be collected at the restoration site using proper seed collection protocol. Impacts to existing vegetation and future seed should be minimized. For restoration, seeds from other shrub, annual, subshrub, and grass species should also be collected at the site.
Propagule Processing/Propagule Characteristics	Seeds should be fresh (1-2 years old optimal), pathogen-free, and fungus-free.
Pre-Planting Propagule Treatments	Seeds should not need to be stratified.
Growing Area Preparation / Annual Practices for Perennial Crops	When soil is moist, create 3' wide swaths using a heavy-tine rake or McLeod. Swaths should be perpendicular to the slope to ensure seeds don't go down the slope during rain. Swaths should be placed 10' apart and lines should be wavy/irregular to avoid looking "row-cropped".
Establishment Phase Details	1-2 handfuls of seed mix (mix of plant types) should be spread over every 10' (15-20 lbs/acre). Soil should be lightly raked over seeds to ensure seeds are at a depth of about ¼''. Soil should then be lightly tamped to increase soil contact with seeds.

Length of Establishment Phase	N/A
Active Growth Phase	Maintenance should be performed. This includes removal of invasive, non-native vegetation, replacement of dead plants, and irrigation.
Length of Active Growth Phase	N/A
Hardening Phase	Continued maintenance.
Length of Hardening Phase	N/A
Harvesting, Storage and Shipping	Seed from established plants should be collected again and the propagation process should restart for restoration purposes.
Length of Storage	N/A
Guidelines for Outplanting / Performance on Typical Sites	Plant establishment may be difficult due to climate and soil conditions. Herbivory is uncommon; however, organic deterrents should be used if necessary. Additional maintenance should occur for the first 1-2 years. The need for maintenance will lessen after this period.
Other Comments	N/A
INFORMATION SOURCES	
References	
Other Sources Consulted	
Protocol Author	Hunter Wade
Date Protocol Created or Updated	05/23/23

References

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