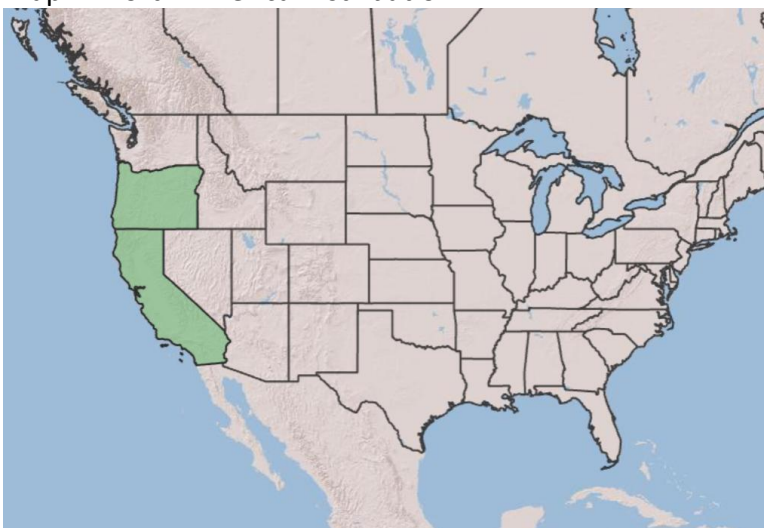
Plant Propagation Protocol for *Rosa californica*
ESRM 412 – Native Plant Production
URL: https://courses.washington.edu/esrm412/protocols/2026/ROCA2.pdf

Map 1: North America Distribution



Map 2: PNW Distribution

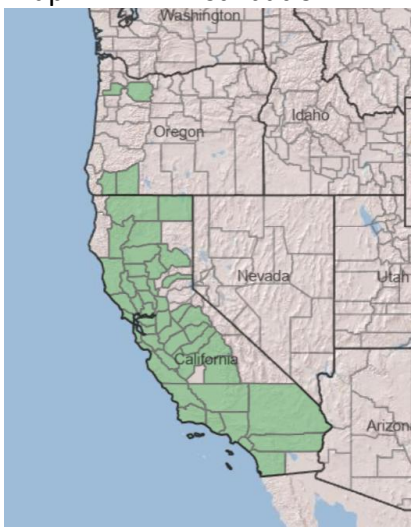


Image 1: California wildrose photographed by Gerald and Buff Corsi

TAXONOMY	
Plant Family	
Scientific Name	Rosaceae[1]

Common Name	Rose family[1]
Species Scientific Name	
Scientific Name	*Rosa californica* Cham. & Schlecht.[1]
Varieties	
Sub-species	
Cultivar	
Common Synonym(s)	*Rosa aldersonii* Greene[1]
Common Name(s)	California wildrose[1]
Species Code	ROCA2[1]
GENERAL INFORMATION	
Geographical range	Native to southern Oregon and California. Map 1: North America Distribution and Map 2: PNW Distribution were taken from the NRCS database. Both California and Oregon are shaded green to represent the native geographical location for *Rosa californica*.[1]
Ecological distribution	Thrives in moist ecosystems including chaparral, foothill woodland, valley grassland, yellow pine forest, and wetland-riparian communities.[2]
Climate and elevation range	Moist sites below 6,000 feet elevation. Prefers shade inland and full sun near the coast or at higher elevations.[1] The minimum temperature for plant growth is 7°F.
Local habitat and abundance	Thicket-forming rose along sunny streambanks, slough banks, mesic draws, seeps, and seasonal drainages. Can survive in fine, medium, and coarse textured soils. Commonly found in disturbed riparian habitats.[3]
Plant strategy type / successional stage	Rhizomatous shrub that experiences rapid growth rates. Competitive under moist conditions because the plant spreads laterally through rhizomes and has upright thorny stems capable of outcompeting nearby vegetation. Found in early to mid-seral communities.[4]
Plant characteristics	Semi-deciduous shrub with prickly branches, bright green pinnate leaves, fragrant pink flowers and red hips.[1]
PROPAGATION DETAILS: FROM SEED **Vegetative propagation for *Rosa californica* is possible but there is not enough detailed information for inclusion in this protocol. The seed propagation methods closely follow Betty Young's RNGR (2001) protocol and are supplemented with information from the USDA Plant Guide for California Wildrose written by Smither-Kopperl (2021).**	
Ecotype	Marin County, California[5]
Propagation Goal	Plants[5]
Propagation Method	Seed[5]

Product Type	Container (plug)[5]
Stock Type	Deepot 40[5]
Time to Grow	Betty Young's protocol for *Rosa californica* is listed as 0, but this protocol suggests one year.[5] The adjusted timeframe aligns with USDA Plant Guide recommendations for *Rosa californica*.[4]
Target Specifications	Firm rooted plug with a developed root system. [5]
Propagule Collection Instructions	Seeds are collected between July 1st and September 1st when the mature hips are bright red and the internal seeds are hard and dry.[5]
Propagule Processing/Propagule Characteristics	The seeds can be removed from the dried fruits by hand or by macerating (softening) the hips in water to remove the flesh from the hips.[5] After the seeds are dried, they can be stored in a refrigerator.[4] There are approximately 102,000 seeds per pound.[6]
Pre-Planting Propagule Treatments	The seeds should be stratified prior to planting. This is done by soaking the seeds overnight in fresh water and then stratifying them in a refrigerator set to 40°F for up to three months.[5]
Growing Area Preparation / Annual Practices for Perennial Crops	The flats should be filled with Sunshine Mix #4 Aggregate Plus, a growing medium that is composed of peat moss, perlite, major and minor nutrients, gypsum, and dolomitic lime.[5]
Establishment Phase Details	On April 1st, four grams of seeds were measured and mixed with media prior to being sown on the surface. The flats were kept under fully controlled greenhouse conditions with an automatic irrigation system. The seeds germinate 14 days after sowing. Seedlings were transplanted 14 days after germination into individual 2"x10" Deepot 40 containers. These containers were filled with standard potting mix consisting of peat moss, fir bark, perlite, and sand.[5]
Length of Establishment Phase	1 month[5]
Active Growth Phase	The seedlings were moved to the shade house and then fertilized with Nutricote NPK (13-13-13) 3 months after transplanting. The plants were monitored and pruned back to four nodes when the shoot height exceeded the container height.[5]
Length of Active Growth Phase	The active growth phase depends on the outplanting schedule but is approximately four months if the plants are maintained in the shade house until the fall.[7]

Hardening Phase	There is no explicitly specified hardening phase on Betty Young's protocol for *Rosa californica*.[5] According to the plant protocol for *Rosa nutkana* completed in 2018, seedlings are moved to an outdoor growing area in mid-September. No dry-down is done to induce dormancy for *Rosa nutkana.*[8] It is reasonable to assume that the seedlings should be moved from the shade house to an outdoor growing area around the same time frame.
Length of Hardening Phase	There is no explicitly specified hardening phase timeframe on Betty Young's protocol for *Rosa californica*.[5] According to the plant protocol for *Rosa nutkana* completed in 2018, the hardening phase should be three weeks.[7]
Harvesting, Storage and Shipping	There is no explicitly specified harvesting, storage, and shipping information on Betty Young's protocol for *Rosa californica*.[5] Following the plant protocol for *Rosa nutkana,* the seedlings should be harvested in mid to late October. Since seedlings are usually outplanted in the fall, there is no storage time required prior to being shipped in containers.[7] These steps are logical to assume for *Rosa californica* since the USDA plant guide for *Rosa californica* states "Seedlings can be transplanted to the field in containers or as bareroot stock in the fall".[4] The seedlings should be irrigated prior to shipping to avoid desiccation and shipped in containers that protect the developed root systems.
Length of Storage	There is no explicitly specified storage information on Betty Young's *Rosa californica* protocol or Lee Riley's *Rosa nutkana* protocol.[5,7]
Guidelines for Outplanting / Performance on Typical Sites	There is no explicitly specified outplanting information on Betty Young's *Rosa californica* protocol or Lee Riley's *Rosa nutkana* protocol.[5,7]
Other Comments	The Protocol for *Rosa nutkana* by Lee Riley is an appropriate comparison because the plants share the same genus, are both a Pacific Northwest native shrub, are ecologically similar, and both protocols include seeds that are container-grown.

INFORMATION SOURCES	
References	[1] USDA Natural Resources Conservation Service (NRCS). 2021. *PLANTS Profile for Rosa californica* (ROCA2). National Plant Data Team, Greensboro, North Carolina. USDA PLANTS Database [2] Lady Bird Johnson Wildflower Center. 2026. *Rosa californica*. University of Texas at Austin, Austin, Texas. Lady Bird Johnson Wildflower Center [3] CalScape. 2026. *Rosa californica (California Wildrose).* California Native Plant Society, Sacramento, California. CalScape [4] Smither-Kopperl, M.L. 2021. *Plant Guide for California Wildrose (Rosa californica).* USDA Natural Resources Conservation Service, Lockeford Plant Materials Center, Lockeford, California. USDA Plant Guide PDF [5] Young, B. 2001. Propagation protocol for production of Container (plug) *Rosa californica* plants Deepot 40; Golden Gate National Parks Association, San Francisco, California. In: Native Plant Network. Native Plant Network Protocol [6] USDA Natural Resources Conservation Service (NRCS). 2026. *Rosa californica* Characteristics. National Plant Data Team, Greensboro, North Carolina. USDA Characteristics Database [7] Riley, L.E. 2018. Propagation protocol for production of Container *Rosa nutkana* plants. In: Native Plant Network. *Rosa nutkana* Protocol
Other Sources Consulted	
Protocol Author	Laura Moravec
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