

Protocol Information

Upper Colorado Environmental Plant Center

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<http://plant-materials.nrcs.usda.gov/copmc/>

Family Scientific Name: **Liliaceae**

Family Common Name: **Lily**

Scientific Name: *Calochortus nuttallii*

Common Name: **sego lily**

Species Code: **CANU3**

Ecotype: **Juniper Springs Colorado**

General Distribution: **Sego lily ranges from New Mexico and Colorado to the Dakotas, west to Idaho and to California.**

Propagation Goal: **Plants**

Propagation Method: **Seed**

Product Type: **Propagules (seeds, cuttings, poles, etc.)**

Propagule Collection: **Blooms begin in June and early July based on precipitation at the site. Seed was collected throughout July from Juniper Springs. It was collected when the capsules were dry and beginning to open, at this stage seed is completely dried. Capsules were clipped from the plant and hand stripped. Seed was stored in paper bags at room temperature until seed was cleaned in the winter. 190,000 seeds/lb. (Hassell, et al. 1996)**

Propagule Processing: **Seed cleaning technique: Seeds were removed from the heads by crushing the capsules and removing the large seeds with tweezers or by hand.**

Pre-Planting Treatments: **Seeds were placed in a petri dish with blue blotter paper and moistened for 40 to 60 days in 2 degrees C. Other seeds were directly planted into a large flat with a soil mixture of sand, gravel and Sunshine mix #4. The flat was placed in the Upper Colorado Environmental Plant Center (UCEPC) lathhouse over winter to utilize the natural cold stratification process.**

Growing Area Preparation/

Annual Practices for Perennial Crops: **Petri dishes: While in cold stratification seeds began to germinate in the petri dishes. Seeds were then transplanted into cone-tainers to complete grow out. Lathhouse: Seeds that overwintered in the UCEPC lathhouse began to germinate in late May. The flat was then transplanted directly into a field trial.**

Establishment Phase: **Petri dish: Blotter paper was kept moist throughout cold stratification. Seeds began to germinate around day 45 and continued past day 60. Lathhouse: After soil began to thaw in early May soil was kept moist until seeds began to emerge in late May.**

Active Growth Phase: **spring**

References: Hassell, et al. 1996. Seeding Rate Statistics for Native and Introduced Species. USDI National Park Service and USDA Natural Resources Conservation Service. Craighead and Davis. 1963. A Field Guide to Rocky Mountain Wildflowers. Houghton Mifflin Company. Boston, MA. USDA, NRCS. 2011. The PLANTS Database (<http://plants.usda.gov>, 29 December 2010). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

Citation:

Blanke, Terri; Woodruff, Heather. 2011. Propagation protocol for production of *Calochortus nuttallii* plants; Upper Colorado Environmental Plant Center, Meeker, Colorado. In: Native Plant Network. URL: <http://www.nativeplantnetwork.org> (accessed 23 September 2011). Moscow (ID): University of Idaho, College of Natural Resources, Forest Research Nursery