

# Protocol Information

## Upper Colorado Environmental Plant Center

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

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- Family Scientific Name: **Polygonaceae**
- Family Common Name: **Buckwheat family**
- Scientific Name: *Eriogonum umbellatum*
- Common Name: **sulphur buckwheat**
- Species Code: **ERIUMB**
- Ecotype: **Piceance Basin Colorado**
- General Distribution: **One single collection**
- Propagation Goal: **Plants**
- Propagation Method: **Seed**
- Product Type: **Propagules (seeds, cuttings, poles, etc.)**
- Propagation Collection: **Seed was collected in late July from the Piceance Basin area. It was collected when the inflorescence was dry and a reddish-orange color. The seed was in the hard dough stage. Inflorescence was stripped by hand or was clipped from the plant. Seed was stored in paper bags at room temperature until seed was cleaned in the winter. 209,000 seeds/lb. (Hassell, et al. 1996.)**
- Propagule Processing: **Seed is placed into a Forsberg for a brief period, then run through a Clipper air cleaner with a number seven screen on the top and a number 1/24 on the bottom. Air speed is initial set at minimum or low and then gradually increased until desired seed is achieved.**
- Pre-Planting Treatments: **No treatment was performed on the seed prior to planting in the field.**
- Growing Area Preparation/  
Annual Practices for Perennial Crops: **Propagation Environment: Seed beds were firm and weed free. In August, the seed was directly seeded into the ground and cold stratified over the winter.**
- Establishment Phase: **Sowing date: August Sowing/Planting Technique: 30-33 pure live seeds/ft. Seeded with a belt seeder at 0.25 inches depth.**
- Length of Establishment Phase: **Two growing seasons**
- Active Growth Phase: **Rapid growth occurred mostly in the warmer summer months.**
- Other Comments: **Snow fence was placed around the plot to help prevent wildlife browsing on the plants.**
- References: **Hassell, et al. 1996. Seeding Rate Statistics for Native and Introduced Species. USDI National Park Service and USDA Natural Resources Conservation Service. 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 *Eriogonum umbellatum* 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.