

REQUEST FOR SEED COLLECTIONS

Sulphurflower Buckwheat

Species: *Eriogonum umbellatum*

Common Name: Sulphurflower buckwheat

Plant Symbol: ERUM

Project Description: The Aberdeen Plant Materials Center (PMC) is beginning a common garden study of sulphurflower buckwheat (*Eriogonum umbellatum*) with the goal of a selected class release in the near future. Sulphurflower buckwheat is a perennial forb native to sagebrush and mountain shrub plant communities in the western states. This species is considered to be important to the survival of sage grouse (*Centrocercus urophasianus*) whose chicks feed on insects attracted by the flowers. A sulphurflower buckwheat release would also complement the limited selection of native forbs that restorationists have at their disposal for increasing biodiversity.

The PMC has plans to make wildland seed collections in the summer of 2006 and to plant the initial study in the fall of 2006. We need your cooperation in locating stands, monitoring seed maturity and/or collecting seed.

Description: Sulphurflower buckwheat is a mat-forming perennial forb or sub-shrub of the Polygonaceae. The base is made of woody branches that bear round to oval leaves. The leaves are generally 0.5 to 5 in long and approximately the same width. They can be glabrous (no hairs) or tomentose (covered with wooly hairs). The flowers are born on stalks (4 to 25 in tall) that may have no leaves, or there may be a ring of leaves just below the inflorescence.

Key to species: *Eriogonum* is a large genus with many representatives common to the Intermountain West. For help in distinguishing species consult *Flora of the Pacific Northwest* or *A Utah Flora*, or perhaps a better suggestion is to submit a pressed voucher specimen along with the seed collection if possible.

Known subspecies: According to the



PLANTS database, there are 30 recognized varieties of sulphurflower buckwheat, many of these occurring in the Aberdeen PMC

service area. The most common of these are varieties *umbellatum* and *subaridum*. The inflorescences of *subaridum* are compound umbels while those of *umbellatum* are simple umbels or capitate. The PMC will accept collections from any subspecies from within its service area.

Location: The best places to find sulphurflower buckwheat are in the mountain foothills of the sagebrush steppe and mountain shrub plant communities from 4,000 to 9,000 feet in elevation. Populations can also be found in piñon-juniper, Douglas fir, spruce-fir and alpine meadow communities.

Time to collect: Sulphurflower buckwheat's showy yellow flowers bloom in early summer, and seed is mature and ready to collect in late July through mid August. Plants of lower elevations and southern exposures may be ready for harvest earlier than those of higher or more protected sites. The best strategy is to locate populations early, while plants are in flower and more easily recognized. Monitor the site and harvest seeds when flowers are dry and seeds are just beginning to fall.

How to collect: Seeds can be easily collected by stripping inflorescences and seeds by hand into paper shopping sacks (wear gloves), or by pruning inflorescences using shears. Very ripe seeds can also be shaken off into collecting bags without clipping. For genetic diversity, seed needs to be collected from no fewer than 50 plants. To provide enough seed for testing, out-planting and evaluating, we recommend collecting at least a half to a full shopping sack worth of materials depending on the amount of inert matter. However, more seed is always better.

Selection criteria: Select plants with good overall vigor, good seed production, and leafiness. Special selection criteria could

include plants found on particularly harsh sites, good seedling establishment traits (young plants found near mother plants), and good early season growth.

Things to include: Along with your seed collection, please include a completed NRCS seed collection form NRCS-ECS-580:

<http://plant-materials.nrcs.usda.gov/intranet/Publications/ecs580.pdf>.

If possible, also include a pressed voucher and photos of the site and individual plants.

Thanks: Cooperation from field offices and other agencies is essential for the PMC to produce the best plant material products possible. Your assistance is greatly appreciated. Any questions or comments should be directed to Derek Tilley or Loren St. John at the PMC or to Dan Ogle at the Idaho state office. Seed can be sent to the PMC at:

USDA-NRCS, Aberdeen PMC
P.O. Box 296
1691A S. 2700 W.
Aberdeen, ID 83210
Phone: (208) 397-4133



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