

## MULTILOBED GROUNDSEL

*Packera multilobata* (Torr. & A.  
Gray ex A. Gray) W.A. Weber &  
A. Löve

Plant Symbol = PAMU11

Contributed by: USDA NRCS PMC or State PM  
Program



Multilobed groundsel. Photo by Derek Tilley, USDA-NRCS

### Alternate Names

Lobeleaf groundsel  
*Senecio multilobata*

### Uses

Multilobed groundsel has been used in restoration and wildlife enhancement plantings. The flowers attract a variety of native bees. Multilobed groundsel was used medicinally by Native Americans as an aid for a variety of internal problems (Moerman 1998).

Multilobed groundsel contains pyrrolizidine alkaloids (Tilley and St. John 2011), and presents a risk to livestock (Talcott, 2003).

### Status

Consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g., threatened or endangered species, state noxious status, and wetland indicator values).

### Description

**General:** Multilobed groundsel is a short-lived perennial forb in the sunflower family (Asteraceae) arising from a taproot. The plants grow to approximately 10 to 60 cm (4 to 24 in) tall from a cluster of basal leaves. The leaves are 2 to 12 cm (1 to 5 in) long, obovate in outline with pinnatifid (multilobed) margins. The stem leaves are much smaller than the basal leaves. The flower head has 7 to 13 yellow ray flowers, 4 to 10 mm (0.16 to 0.4 in) long and yellow-orange disk flowers. The achenes bear a white pappus of capillary bristles (Welsh and others 2003). There are approximately 900,000 seeds/lb.

**Distribution:** Multilobed groundsel occurs in arid environments from California east of the Sierras to Colorado, Wyoming and New Mexico. For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site.

**Habitat:** Multilobed groundsel grows naturally in a variety of plant communities and elevations. It is often associated with sagebrush and pinyon-juniper plant communities, but can also be found in desert shrub, mountain brush, ponderosa pine, aspen, lodgepole pine and spruce-fir communities (Welsh and others 2003).

### Adaptation

Multilobed groundsel is adapted to growing on medium to coarse textured soils. It can be found in arid environments to temperate mountain communities in areas receiving 9 to more than 20 inches of annual precipitation. It is most commonly found in open areas but can also be an understory species in mountain plant communities.

### Establishment

The full stand seeding rate, based on 50 pure live seeds (PLS) per foot at 12 inch spacing, is 2 lbs/acre. When planted in a mixture, the seeding rate should be adjusted according to the proportion of the mix.

### Management

Multilobed groundsel is typically used as a minor component of seed mixtures. Management strategies should be based on the key species in the established plant

community. Grazing should be deferred on seeded lands for at least two growing seasons to allow for full stand establishment.

### **Pests and Potential Problems**

There are no known pests associated with this species. Multilobed groundsel contains compounds toxic to cattle and other livestock, but will be avoided when other preferable forage is available.

### **Environmental Concerns**

Multilobed groundsel is native to western North America. There are no known environmental concerns associated with this species

### **Seeds and Plant Production**

Wildland collections can be made by hand stripping or shaking ripe seed into collection bags. Seed can be collected slightly early by harvesting the entire inflorescence and allowing the seed to continue ripening while drying.

The most effective means of processing seed is to use a laboratory brush machine with a number 7 mantle at a speed of 2. The gate is left approximately 1 cm open to allow the brushed seed to fall through to the catch pan below. The brushes dislodge the seed from the heads and remove the pappus. The brushed material is then cleaned using a multi-deck air screen cleaner with a 1.55 mm top screen, blank middle, and solid bottom screen. The air is set at approximately 1.5 to pick up the removed pappus, unfilled achenes and light inert matter. These methods yield high purities (90-100%). Seed is stored in cool-dry conditions with temperatures of approximately 10° C (50° F) and relative humidity of 20 to 30%.

Seed may be sown into weed barrier fabric at 23 to 30 cm (9 to 12 in) spacing. Seed should be planted in late fall into slightly roughened soil and then lightly covered and packed. First emergence occurs in early spring; late April and early May at Aberdeen, Idaho.

Seed can be harvested the first full growing season. Two to three years of additional harvests may be possible depending on ecotype. Plants go dormant in late summer and can be mowed for the winter. Seed can be harvested from production fields by hand, combine, flailvac, or vacuum-type harvester. The Aberdeen Plant Materials Center uses a "jet harvester" (Bair and Tilley 2010) with the fan running at 3,000 to 5,000 rpm. This ensures that only ripe seed is harvested and allows for multiple harvests during the season. Seed readily disarticulates from flower heads when ripe.

### **Cultivars, Improved, and Selected Materials (and area of origin)**

There are currently no commercial releases of multilobed groundsel.

### **References**

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- Tilley D, St. John L. 2011. Initial toxicity screening of groundsel (*Senecio* spp.); 2011 Progress Report. Aberdeen (ID): USDA Natural Resources Conservation Service, Aberdeen Plant Materials Center. 3 p.
- USDA-NRCS. 2011. The PLANTS Database [Online]. Available at <http://plants.usda.gov> (accessed 10 December 2011). USDA-NPDC, Baton Rouge, LA.
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