

LAMBSTONGUE RAGWORT

Senecio integerrimus Nutt.

Plant Symbol = SEIN2

Including:

- S. integerrimus* Nutt. var. *exaltatus* (Nutt.) Cronquist. (SEINE)
- S. integerrimus* Nutt. var. *integerrimus* (SEINI)
- S. integerrimus* Nutt. var. *major* (A. Gray) Cronquist (SEINM)
- S. integerrimus* Nutt. var. *ochroleucus* (A. Gray) Cronquist (SEINO)
- S. integerrimus* Nutt. var. *scribneri* (Rydb.) T.M. Barkley (SEINS)

Contributed by: USDA NRCS Plant Materials Center, Aberdeen, Idaho



Slichter 2007

Lambstongue ragwort. Photo by Paul Slichter.

Alternate Names

Gauge plant, one-stemmed butterweed, single-stemmed groundsel, western groundsel, wet-the-bed
Columbia ragwort=*S. integerrimus* var. *exaltatus*
Pale yellow ragwort=*S. integerrimus* var. *ochroleucus*
Scribner's ragwort=*S. integerrimus* var. *scribneri*

Uses

Wildlife: Lambstongue ragwort attracts a variety of pollinators including bumblebees, butterflies and flies (Schmitt, 1980).

Livestock: **CAUTION** Lambstongue ragwort and other members of the genus have been found to contain toxic alkaloids (Tilley and St. John 2011), and presents a risk to livestock (Clawson, 1933; Talcott, 2003).

Other: Lambstongue ragwort was used by settlers and ranchers to determine range "readiness". When it was in flower, the range was believed to be sufficiently developed for grazing to begin, hence the common name "gauge plant" (Welsh and others, 2003). In western folklore it was blamed for causing bedwetting (Welsh and others, 2003).

Status

Please 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: Lambstongue ragwort is a perennial forb in the sunflower family (Asteraceae). It has a short semi-rhizomatous caudex giving rise to 1 or more upright stems growing 10 to 60 cm (4 to 24 in) tall. The basal and lower stem leaves are petiolate, 3 to 20 cm (1 to 8 in) long and 1 to 4 cm (0.4 to 1.6 in) wide. The leaves are lanceolate to oblong in outline. The margins are typically entire, but sometimes serrate or dentate. The upper stem leaves are smaller. The herbage is covered with cobwebby hairs when young. The stems and leaves become more glabrous as the plant matures. The inflorescence is a compact to loose cyme. The flower heads have ray and disk flowers. The ray flowers have yellow petals, 4 to 15 mm (0.2 to 0.6 in) long. The bracts surrounding the floral head have black tips. The fruit is an achene with a white pappus (Welsh and others, 2003). There are approximately 400,000 seeds/lb (USDA-NRCS, 2012).

Five varieties of lambstongue ragwort are currently recognized. Barkley (1997) provides a taxonomic key to varieties.

Distribution:

Lambstongue ragwort occurs throughout western North America from British Columbia east to Manitoba and south to New Mexico and California. For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site.

Habitat: Lambstongue ragwort occurs in low lying desert shrub communities to alpine plant communities from 5,000 to 11,000 ft. It is commonly found in grassy meadows, sagebrush, mountain brush, ponderosa pine, aspen and fir communities.

Adaptation

This species is adapted to fine to coarse textured soils with a pH of 6.5 to 8.5 (USDA-NRCS, 2012). It is most commonly found in habitats receiving 30 to 64 cm (12 to 25 in) of annual precipitation.

Establishment

The full stand seeding rate, based on 50 pure live seeds Pure Live Seed (PLS) per foot at 12 inch spacing, is 5 lbs PLS/acre. When planted in a mixture, the seeding rate should be adjusted according to the proportion of the mix.

Management

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.

Blaisdell and Mueggler (1956) reported light mortality of lambstongue ragwort from spraying 2,4-D in sagebrush rangelands.

Pests and Potential Problems

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

Environmental Concerns

Lambstongue ragwort is toxic to cattle and livestock and should not be planted in grazed areas.

Seeds and Plant Production

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

Mature seed can be removed from the floral heads using 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%.

Plant Production:

Lambstongue ragwort seed exhibits physiological dormancy. Extensive cold moist stratification is required for germination (Baskin and Baskin, 2002; Skinner 2009). Seed is sown into containers in late fall and early winter and placed outdoors for natural stratification. Germination begins in March and may span two to four weeks. Soil moisture should be maintained. Water soluble fertilizer is applied once per week. In Washington, the plants are stored in a lath house during winter and are protected from extreme cold temperatures with mulch. The plants are then transplanted the following spring. Flowering and seed production occurs 1 to 2 years after outplanting (Skinner, 2009).

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

There are currently no commercial releases of lambstongue ragwort.

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Prepared By:

Derek Tilley, USDA NRCS Plant Materials Center, Aberdeen, ID

Loren St. John, USDA NRCS Plant Materials Center, Aberdeen, ID

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