



Butte Germplasm beautiful Jacob's ladder

Polemonium pulcherrimum

Selected Class Release "Natural"

Uses: Revegetation

Southcentral, Interior, Southeast Alaska

Background Information

Polemonium pulcherrimum grows wild in Alaska in dry, rocky places (Hultén, 1968). It grows in alpine, subalpine, mid and low-elevation sites.

The name, Jacob's Ladder, refers to the story in religious texts (i.e. *Genesis 28:12*) in which Jacob sees a ladder ascending to heaven. This picture shows the ladder-like arrangement of its leaflets.

Another common name for this plant is skunkleaf. If the leaves are crushed a skunky smell emerges.

The showy blue flowers with yellow in the middle stand out in most landscapes. In the wild it will reseed itself. In a raised bed, if fertilizer is added, these plants will bloom all summer long.

As a perennial, it has deep, fibrous tap roots.



Butte Germplasm

Plant Identification Number: 9097741

Butte Germplasm beautiful Jacob's ladder was collected on the Bodenburg Butte south of Palmer, Alaska, by the PMC staff in 2000 (Wright, 2006). A butte is an isolated hill rising abruptly from the surrounding area. The swift elevation change from 10 ft. to 900 ft. characterizes this outcropping left by retreating glaciers. This mountainous, dry area is home to many winter-hardy plants.

This native forb is a Selected Class Release by the Alaska Plant Materials Center (PMC). This means it has been grown and harvested at the PMC and continues to exhibit excellent performance.

Butte Germplasm beautiful Jacob's ladder is recommended for use in revegetation projects because its seedlings are vigorous and able to survive in dry areas. The touch of blue adds variety to a project.



Map from Hultén, 1968.
Used with the permission of Stanford University Press.

Distribution

According to Walsh (1974), *Polemonium pulcherrimum* can be found south of the 68th parallel in Alaska, Canada, and the Yukon. It is found as far south as Northern California and Colorado.

Butte Germplasm beautiful Jacob's ladder seed is maintained by the Alaska Plant Materials Center for commercial production.

Interesting Note

The scientific name *Polemonium* derives from Greek and was a name for a medicinal plant associated with the Greek philosopher, Polemos of Cappadocia (Hebda, 2003).

In Latin, *pulcherrimum* means most handsome.



Butte Germplasm beautiful Jacob's ladder

Butte Germplasm beautiful Jacob's ladder for Alaska Revegetation Purposes



Butte grows easily and quickly in most situations, although slower than most grasses used for revegetation purposes. When the grass seed mix is spread evenly and Butte is at least 5% by weight of the seed mix, beautiful Jacob's ladder should perform vigorously and eventually contribute to the revegetation results.

Its blue flowers and unusual leaves add to the visual appeal of roadside revegetation projects.



Polemonium pulcherrimum seed.
~413,115 seeds per pound
~ Length: 2 mm; Width: 1 mm



Butte in production at a farm near Fairbanks, Alaska.

To Produce Butte

Conventional farm equipment is needed. A drill for seeding to a depth of ~1/4 inch may be used, but the seed can be broadcast. Soil should be well-drained.

Seeds do not need pre-treatment. Plant seeds after the last frost (Moore and Hunt, 2006).

Cultural practices of light irrigation, cultivation of weeds, and a low nitrogen/high phosphorous fertilization should enhance growth.

Harvest seeds when the capsule becomes tan. Seed pods may be collected by hand, clipper, or combine. Let pods dry, then clean brown seeds with a brush cleaner, hand screening, and air. Keep seeds dry before storing in a freezer or other cool, dry area (Moore and Hunt, 2006).

Some interesting characteristics:

- If the soil is too rich, Butte's leaves will droop;
- Butte self-seeds readily;
- Seeds become slimy after harvest if they become wet.

References

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