

From Forest Nursery Notes, Winter 2010

**8. Bringing alpins down to earth.** Fieseler, K. International Plant Propagators' Society, combined proceedings, 2008, 58:297-298. 2009.

## Bringing Alpines Downs to Earth<sup>®</sup>

### Kirk Fieseler

Laporte Avenue Nursery, 1950 Laporte Avenue, Fort Collins, Colorado 80521 U.S.A.

Email: kfieseler@gmail.com

### INTRODUCTION

The alpine areas of Colorado are found at elevations above 11,500 to 12,000 ft. The vegetation found in these alpine zones is full of species that have ornamental characteristics and garden-worthy growth habits that merit their cultivation at lower elevations. For the last 20 years I've experimented with growing some of these species at my nursery (Laporte Avenue Nursery) in Fort Collins, Colorado (elevation 5,300 ft).

### PROPAGATION METHODS

Of the 20 or so species (with every species comes its own propagation and cultivation story) that I've had luck with, all have started with seed collected in the fall from alpine areas some 20 years ago. Now all sexual and asexual propagating material originates from our nursery. Sexual propagation starts with seed that is dried for a short period (1–4 weeks) and then seeded in late fall-early winter in 4-inch pots filled with a well-drained medium [peat, perlite, and sand, (7 : 10 : 3, by vol.)] and top-dressed with small granite grit. The seed pots are placed in an unheated cold frame and allowed to experience natural winter temperatures, until germination occurs in the spring. Some seed pots don't germinate until the following spring.

Asexual propagation methods involve taking cuttings or dividing plants usually timed after active vegetative growth has occurred — mostly late spring early summer. Standard misting systems are used to encourage root growth, hormones are generally not used.

Once plants are successfully germinated or rooted they are transplanted to a standard 2½-inch pot and grown in an insert tray with 32 plants to the flat. Fungicides such as Banrot<sup>®</sup> and Rootshield<sup>®</sup> are used as a drench to help the transplants reestablish their root systems.

Flats of the new transplants are placed under a mist system for a short period (1–3 weeks) until growth resumes. After that, plants are top-dressed with ¼ inch minus grit to inhibit moss and fungus gnats. Then, flats are placed on the floor in unheated double-poly quonsets where they finish their growth and are overwintered and held until delivery in the spring.

These vegetative propagation methods require that we have established stock pots of plants or plants growing in the garden. Because all of our alpine production starts with our own seed, or vegetative material, we have specialized rock gardens or trough gardens devoted to our alpines. These rock gardens are constructed with raised beds of well-drained soil surrounded by large sandstone rocks to create the perfect microclimate habitats for our alpines. Our trough containers (made from peat, cement, and perlite) are useful for growing the alpines that grow slowly or need a specialized soil mixture.

As a small specialized nursery we are able to provide the care and attention to the cultural differences for our varied crops. With all the consolidation, over promotion of the same old products with new names, and bland mega-retailing in our busi-

ness, we feel lucky to still have a small devoted customer base which allows us to carry on with our business now entering into our 21st year.

**Table 1.** List of the Colorado and western alpines that Laporte Avenue Nursery currently produces.

Scientific name/common name	Propagation/cultivation notes
<i>Aquilegia jonesii</i> Jones' columbine	By seed, loves lime, full sun, let dry between watering
<i>Aquilegia saximontana</i> dwarf Rocky Mountain columbine	By seed, easy in troughs or open garden, needs some shade
<i>Boykinia</i> (syn. <i>Telesonix</i> ) <i>jamesii</i> James' saxifrage	Seed or division, will take sun or shade, excellent trough plant
<i>Dodecatheon pulchellu</i> shooting star	By seed needs moist soils, shade
<i>Dryas drummondii</i> Yellow Mountain dryad	By seed, no stratification needed give well drained moist soils
<i>Dryas octopetala</i> mountain dryad	Same as above, not much bloom in cultivation
<i>Gentiana parryi</i> Parry's gentian	By seed, slow grower, long lived, good bloomer once established
<i>Heuchera cylindrica</i> var. <i>alpine</i> alpine alumroot	Takes shade, easy
<i>Lewisia rediviva</i> bitterroot	Underground and go dormant after flowering
<i>Minuartia obtusiloba</i> (syn. <i>Arenaria obtusiloba</i> ) cushion sandwort	By seed or division, easy, full sun
<i>Penstemon hallii</i> Hall's penstemon	By seed or division, grows well in a trough
<i>Penstemon whippleanus</i> Whipple's penstemon	By seed, easy to grow in open garden
<i>Phlox condensate</i> alpine phlox	By division or cuttings, needs full sun
<i>Phlox kelseyi</i> 'Lemhi Purple' Lemhi purple phlox	By cuttings, full sun, long lived, slow growing
<i>Primula rusbyi</i> Rusby's primrose	By seed or division, needs afternoon shade, even moisture
<i>Pulsatilla patens</i> pasqueflower	By fresh seed, not long lived in the garden
<i>Silene acaulis</i> moss campion	By division, very easy, a little shy in flowering, shade to full sun
<i>Tetranneuris</i> (syn. <i>Hymenoxys</i> ) <i>acaulis</i> sundance daisy	By seed, no stratification needed, strong grower, long-lived in the open garden
<i>Tetranneuris</i> (syn. <i>Hymenoxys</i> ) <i>grandiflora</i> old man of the mountain	By seed, monocarpic life cycle