

Illustrated Tutorial to Sowing Native Plant Seeds

By Alan Yen

A quick primer on seed ecology

- Most native plant seeds
 - are produced in the summer and fall.
 - stay dormant in the dry soil.
 - Fall rain and winter cold stimulate seed germination.
 - germinate late fall to late spring, depending on species.
- It helps to mimic the natural rhythm when growing seeds at home; this means planting seeds in the fall.
- Exceptions: some species have more complex ecology, requiring, for example, going through the guts of animals, or heat (forest fire), etc. They are beyond the scope of this introductory tutorial.

Before you start

- Have seeds, potting soil, pots, and labels ready.
- Regular potting soil works fine; seeding starter mix also work well, but can be costly.
- Consider mix soil 1:1 with sand or pumice to help drainage. This helps bulb/tuber/rhizome type plants such as lilies, trillium, camas, and others.
- Consider using grit or pea gravel as top dressing to help drainage and reduce moss growth.

Getting ready



Mix soil with sand if using sand and fill up pot with potting mix.



Tap down surface gently with the bottom of another pot. This firms the soil to help drainage.



Soil is tapped down and ready to plant



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Seeds come in many forms and sizes.

Roundleaf alumroot
Heuchera cylindrica



Red flowering current
Ribes sanguineum



Rosy pussytoes
Antennaria rosea



Balsamroot
Balsamorhiza sagitata



Sow seeds on the surface and spread them. Adjust the number of seeds to the pot and seed size. In general, do not plant more than about 20 seeds per pot.



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Cover the seeds with a thin layer of soil and match the depth of this layer to the diameter of the seeds. Usually this means a very thin layer of soil.



Even the surface.



Surface dressing: chicken or turkey grit. These are small rocks, often granite, and are available in feed stores. Either size works fine. Surface dressing helps drainage and reduces moss growth.



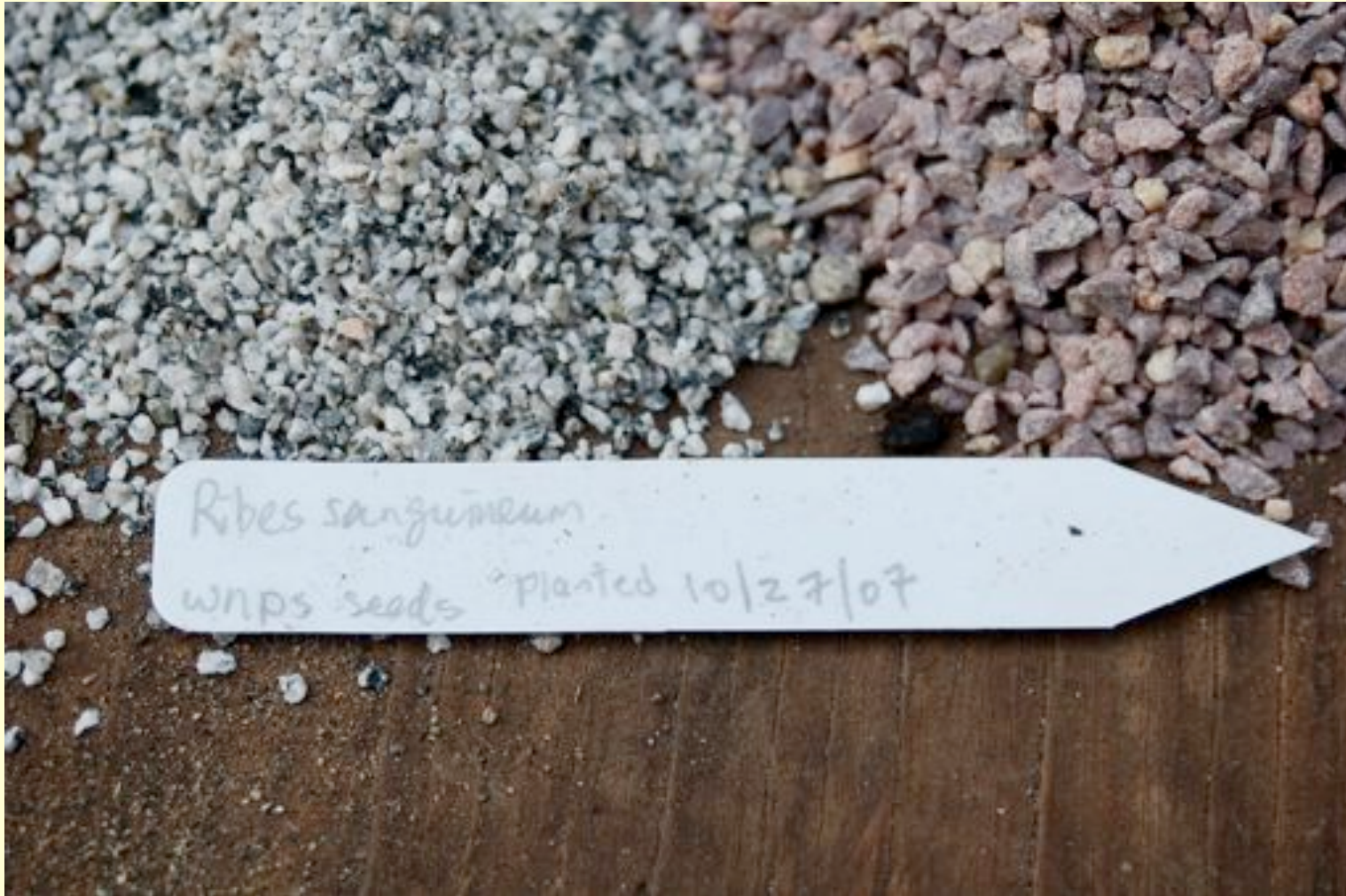
Apply a thin layer of grit.



Tap down gently and even the surface.



Make a label, including plant name, planting or harvest date, source of seeds, etc. Use a pencil.



A finished pot. Water the pot, gently.



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If you have many species, use a flat, and water the flat.



Cover the flats to protect the pots from animals. Leave the flats outside and let nature do its work over the winter.



Seedlings emerge in the spring; they come in many shapes and sizes.



Yellow bell
Fritillaria pudica



Roundleaf alumroot
Heuchera cylindrica



Red columbine
Aquilegia formosa

More information:
Useful books - see citations in the next slide



References

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3. Cullina, W. 2002. *Native trees, shrubs, & vines, a guide to using, growing, and propagating North American Woody Plants*. A Frances Tenenbaum Book, Houghton Mifflin Company, New York. 365p. *(An excellent manual for many garden-worthy North American species, but somewhat short on western US species)*
4. Cullina W. 2002. *The New England Wild Flower Society guide to growing and propagating wildflowers of the United States and Canada*. A Frances Tenenbaum Book, Houghton Mifflin Company, New York. 322p. *(An excellent manual for many garden-worthy North American species, but somewhat short on western US species)*
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6. Kruckeberg, A. R. 1996. *Gardening with native plants of the pacific northwest*. Second edition. University of Washington Press. Seattle, WA. 252p.
7. Pettinger A., and B. Costanzo. 2002. *Native plants in the coastal garden (A guide for gardeners in British Columbia and the Pacific Northwest)*. Revised and updated. Whitecap Books. Canada. 232p. *(A very useful book that includes propagation and gardening information for numerous plants found on the west side of the Cascades. Also has information on designs and plant choices for various habitats)*
8. Rose, R., C. E. C. Chachulski, and D. L. Haase. 1998. *Propagation of Pacific Northwest Native Plants*. Oregon State University Press. Corvallis, OR. 248p. *(A very useful propagation manual and contains an excellent list of references)*
9. Schmidt, M. G. 1980. *Growing California native plants*. University of California Press. Berkeley, CA. 366p. *(A classic book for growing California native plants and is very applicable to our plants as well.)*

Useful web sites

Native plant propagation protocols online from the Native Plant Network (*see how national parks and forest service propagate plants for restoration purposes*).

- <http://www.nativeplantnetwork.org/network/search.asp>

USDA PLANTS national database.

- <http://plants.usda.gov>