



How to Germinate Seeds of Alaska Wild Iris by Patricia S. Holloway

Alaska wild iris, *Iris setosa*, is one of the most important landscape wildflowers in Alaska. For many years, plants used in landscaping were harvested from the wild, decimating populations near urban areas and along roads. Irises propagate easily by vegetative division in spring or late summer. Division is the only reliable method of propagating clones with a specific flower color such as white, pale lavender and rose-colored flowers. Seed is the most reliable propagation method for large quantities of irises. It is also the method of choice if a variety of flower colors is desired. Plants from seed can have a mixture of colors in all shades of purple from deep velvety purple to pale, pale lavender and occasionally white. It is exciting to throw out handfuls of seeds and see the variation in flower sizes and colors that result from seed.

Meadows may be established simply by tossing the seeds in a ditch or field, although germination may take 2-3 years. The seeds of Alaska iris are dormant. The buried seeds must be exposed to chilling temperatures (cold stratification) in fall and spring to break that dormancy. Depending on when the seeds are sown in late summer or fall, germination may take place the following spring or a year later. Below is a method of speeding up germination and sowing seeds for commercial sale in cell packs. This process allows for fall harvest of seeds, cold stratification in the refrigerator, then planting in containers or flats in spring.

1. Collect wild iris pods that are brown and just beginning to open. Spread the pods onto newspaper or a shallow tray. Air dry for at least one week, turning the pile to dry evenly. Iris pods average 1.25 inches long and contain an average of 70 seeds per pod (range 0 - 150). The largest pods don't necessarily contain the greatest number of seeds.
2. Separate the seeds from the pods by vigorously shaking the pods over a screen (e.g. hardware cloth, soil sieve). The holes must be large enough to allow the seeds to drop through but leave the pods and large trash on the screen. Small bits of chaff, dried leaves, pod pieces can be removed by blowing air over the pile of seeds.
3. Seeds may be sown directly outdoors in fall in the field or flats. Because of complex dormancy requirements, seeds may not germinate until the second year. Store seeds dry in plastic bags at 40°F (4°C) up to one year or in the freezer for longer periods.
4. Cold stratify the seeds by mixing one part (by volume) seeds in at least 2 parts clean, moistened sand and place into a closeable plastic bag. White sand works best because the brown seeds show up well and are easy to find. Instead of sand, vermiculite or peat may be used. The medium must be moist with no standing water. Think of moist corn meal. Any standing water in the bottom of the plastic bag will inhibit oxygen and promote the growth of molds.
5. Seal the plastic bag and store in the refrigerator at 40°F (4°C) for 5 months. Do not freeze. For direct field sowing in June, start this stratification process in January. For greenhouse planting in March, start the stratification process in October.
6. After 5 months, remove the seeds from the sand or vermiculite using a sieve. Sow immediately into a sterile peat-lite potting mix without allowing the seeds to dry out. Sow 3-4 seeds per container. Water well and cover the flats with 2 layers of black plastic to exclude all light for 10 days. Seeds will germinate in about 7 days, and complete seedling emergence will occur in 2-3 weeks. Don't forget to remove the black plastic after 10 days.
7. Seedlings will be large enough to transplant following 12 weeks in a greenhouse or grow room. Most will bloom in 2 years.