GERMINATION CODES
& SEED-STARTING BASICS
FOR NATIVE PLANTS

PRAIRIE MOON NURSERY
Seeds germinate most successfully in cool soil. Sow seeds in late fall (after hard frost) or early spring.

Seeds need scarification: To scarify, lightly rub between two sheets of sandpaper before artificial stratification.

Legume: Rhizobium Inoculum may be added. Most legume species harbor beneficial bacteria called rhizobia on their roots. Genus-specific strains of this bacterium called inoculum can aid in the fixation of atmospheric nitrogen and improve long-term health of native plant communities. Inoculum is naturally-occurring in most soils and additional amendment is usually not needed. However, in low fertility soils, it may be necessary. Genus-specific strains are available at prairiemoon.com/inoculum

We remove the hulls from these legume seeds.

Hemiparasitic species which needs a host plant. Good hosts for many parasitic species include low-growing grasses and sedges.

Plant fresh seed or keep moist

Best planted outdoors in the fall.

Impermeable seed coat. Needs nicking.

Not sure. Your input would be of interest to us.
The seeds of many native plants have built-in dormancy mechanisms that protect them from germinating before killing frosts or in times of drought. In the wild, seeds will lie dormant until the proper conditions for growth occur. In cultivation, the successful gardener must become familiar with several simple pre-sowing seed treatment methods which will unlock the dormancy mechanism and stimulate quicker, more consistent germination.

We have developed the following seed germination codes to help you successfully grow the native seed sold by Prairie Moon Nursery. These seed treatment suggestions have been compiled from our own experience, available literature, and feedback from other growers and customers. These are only suggestions and not the definitive source of germination information. If your experience reveals successful methods other than these, please let us know.

Until you are ready to plant or apply pre-sowing treatment, seed should be stored in an open container in a cool, dry place, or in a sealed (airtight) container under refrigeration (33-38°F). Avoid rapid or frequent changes in temperature or humidity and protect against rodents.

Sow seeds shallowly, no deeper than the width of the seed and keep seedlings carefully weeded. Periodic watering is helpful to establish seedlings. Native perennial plants can be slow-growing. An adequate root system with supporting top growth is the first priority. Full flowering happens once a mature plant is established.

**GERMINATION CODE A: SPECIES THAT WILL GERMINATE WITHOUT PRE-TREATMENT**

- Andropogon gerardii - Big Bluestem
- Bouteloua curtipendula - Side-oats Grama
- Cephalanthus occidentalis - Buttonbush
- Dalea purpurea - Purple Prairie Clover
- Echinacea purpurea - Purple Coneflower
- Elymus hystrix - Bottlebrush Grass
- Eragrostis spectabilis - Purple Love Grass
- Helenium autumnale - Sneezeweed
- Hypericum prolificum - St. John’s Wort
- Koeleria macrantha - June Grass
- Monarda fistulosa - Wild Bergamot
- Monarda punctata - Spotted Bee Balm
- Panicum virgatum - Switch Grass
- Pycanthemum spp. - Mountain Mints
- Salvia azurea - Blue Sage
- Schizachyrium scoparium - Little Bluestem
- Sorghastrum nutans - Indian Grass
- Sporobolus heterolepis - Prairie Dropseed
- many Symphyotrichum spp. - Asters
- Veronicastrum virginicum - Culver’s Root
Place stratification sand into a bowl. We use a 1/3 cup fine sand to 1/8 oz seed ratio (slightly more or less depending on seed size). Add water. We used 1 to 2 teaspoons of water per 1/3 cup of sand.

Add your seed to the stratification sand and mix together. Our package label will indicate the suggested number of days for artificial stratification i.e. C (60) = 60 days of cold, moist conditions needed.

Refrigerate the seed mixture in a sealed plastic bag marked with start and finish dates. Check periodically so that the mixture does not dry out. If premature sprouting occurs, plant immediately.

Mix only enough water to allow sand to form into a ball.

Once cold, moist stratification is complete, sow the seed into rows when the threat of below-freezing temps has past. Keep rows well weeded and thinned.
Using our germination codes, calculate the date to start cold, moist stratification pre-treatment. Rinse or complete a short soak. Pour into a coffee filter, paper towel or fine screen to drain.

Arrange seed in a single layer and allow all excess water to drain off.

Fold seed loosely into the coffee filter or paper towel to allow for weekly spot checks. The seed and paper should be damp but not wet.

Add a dry paper towel to your labeled resealable bag to help to maintain even moisture while pulling excessive moisture away. Do not allow the stratification medium to completely dry out or stay soggy.

Place the sealed bag in your refrigerator (not freezer) and monitor weekly, or as needed, until it is time to remove for sowing. Replace coffee filter or paper towel often; repeat from step 1. Once seed has completed the recommended stratification period, or if excessive early sprouting occurs, plant immediately.
Outdoor sowing between late fall and early spring is a practical and efficient technique that allows seeds to germinate in their natural timeframe. This is especially true when planting many different species.

When outdoor sowing, it is good practice to plant on a weed-free site, clear of vegetation. The requirements for each species vary, but a good rule of thumb is to plant the seed **NO DEEPER** than the width of the seed. Species with very small seeds should be surface-sown, then firmly pressed to make sufficient contact with the soil. Cover with burlap to keep the area from drying out.

If you expect to move the plants once mature, it works best to sow the seed into rows. Mark the rows well and keep weed-free and well thinned.

**SEED STARTING MEDIUM**

We use fine sand as a medium to artificially stratify seed. We like this sand because, unlike other seed starting medium, the uniform color and fine texture allows you to see your seed. Buy Stratification Sand at:

prairiemoon.com