

What is Cold Stratification?

Stratification is a process of pre-treating seeds in order to simulate natural conditions that seeds would experience in the soil over-winter. Pre-treating seeds helps the seed "break dormancy" and initiate the germination process.

Methods of Cold Stratification

Peat Moss/Water

- 1. Place a 1/4 cup of peat moss (or more) in a mixing bowl. Slowly add water until you can form a ball with the peat moss/water mixture.
- 2. Add desired seed amount to the peat moss. Mix thoroughly.
- 3. Place peat moss/seed mixture in a ziploc bag and seal.
- 4. Label the variety and date clearly on the bag.
- 5. Place in the refrigerator for 1 month before planting. If seedlings start to sprout in the bag in the refrigerator, remove immediately and either plant in the ground or in pots until it's time to plant outdoors.

Soaking/Paper Towels

Most widely used method for native seeds, particularly milkweed.

- 1. Soak seeds for 1-2 hours.
- 2. Use a paper towel or coffee filter to drain the water.
- 3. Spread seeds out in a single layer on the paper towel.
- 4. Wrap a dry paper towel around the damp paper towel to help keep things moist but not too wet (which could become moldy).
- 5. Place in a ziploc bag and seal.
- 6. Label the variety and date clearly on the bag.
- 7. Place in the refrigerator for 1 month before planting. If seedlings start to sprout in the bag in the refrigerator, remove immediately and either plant in the ground or in pots until it's time to plant outdoors.

Common varieties of seeds that require cold stratification for spring planting:

- Milkweed (Asclepias)
- Lupine (Lupinus)
- St. John's Wort (Hypericum perforatum)
- Prairie Coneflower (Ratibida)
- Prairie Violet (Viola pedatifida)
- Pincushion Flower (Scabiosa)
- Marsh Marigold (Caltha palustris)
- Perennial Sunflowers (Helianthus)
- Wild Geranium (Geranium maculatum)
- Rudbeckia (most varieties)
- Purple Coneflower (Echinacea)
- Soapwort (Saponaria ocymoides)
- Primrose (Oenothera speciosa)
- Larkspur (Delphinium)
- Shooting Star (Dodecatheon meadia)
- Heliopsis
- Lavender/Hyssop (Agastache foeniculum)
- Catmint (nepeta)
- Ironweed (Vernonia gigantea)



References:

[&]quot;Seed Stratification Guide" https://www.prairienursery.com/resources-guides/seed-stratification/

[&]quot;How to Cold Stratify Seed for Spring Planting" https://www.americanmeadows.com/blog/2018/03/07/how-to-cold-stratify-seeds