



Germinating Peony Seeds (Outdoor Method)

Nate Bremer - Solaris Farms, Reedsville, Wisconsin, USA

Outdoor Germination Technique

(preferred for herbaceous peony seed)

The easiest way to germinate and grow peony seeds, is to plant them outdoors as soon as they are ripe, or in late summer if you obtain dry seed in the fall or winter. Some will emerge the spring after planting, although some will take an additional year. Fresh seed collected in late summer and early autumn planted immediately is more likely to germinate more quickly.

Steps:

- 1) Select a planting site that will receive at least ½ day of sunlight during the growing season, is well drained and does not become wet at any time during the year. The area should also be protected from drying wind or excessive heat. This area will serve as a nursery bed that will provide the young plants will suitable growing conditions for their first 2 to 3 years of life.
- 2) Fresh seed will be planted immediately after harvest (early autumn) and generally produces superior results. Dry seed, such as, those purchased in winter and spring should be planted in mid-summer. Dry seed takes longer to hydrate than fresh seed and dormancy is more difficult to break, thus they are given a longer period in damp warm soil.
- 3) Till or cultivate the area to a fine texture. Soil should be moist, but not wet.
- 4) Press peony seeds into the surface of the area, no more than ½ inch depth. The seeds do not need to be covered with soil, simply firm or pack them into the surface. Space seeds the 1 to 2 inches apart to conserve space in the controlled bed. Seeds may be given greater space, but maintenance in the form of weeding and watering may be greater. Please remember to place a long lasting garden marker in the seed bed so that plants can be identified later in life. Knowing the identity of what comes up in the bed is both interesting and valuable, especially if you end up with a superior plant that could be shared or distributed later on.
- 5) Cover the bed with approximately one inch of fine wood chips, wood/bark/mulch, sawdust, or wood shavings. The wood mulch will keep the bed evenly moist and supply the young seedlings with a degree of protection from atmospheric change. Young peonies appear to have an affinity to decaying wood, which promotes growth.
- 6) Cover the entire bed (wood mulch and all) with a sheet of clear plastic. You can bury the edges of the plastic with soil so that it seals and is not easily moved by the wind or other conditions. The plastic will create a greenhouse effect, warming them during their first stage of dormancy reduction. The plastic also will protect the seed bed from evaporation or excessive watering (natural or gardener produced). The covering should remain on the bed through the entire winter and be removed as soon as possible in the spring. If left on too long, the small seedlings will begin to grow under the plastic and will not be in synchronization with the season. We often remove the plastic when snow still remains and temperature are still below freezing at night.

7) Young seedlings will emerge as the temperatures allow in the spring. It is not unusual for seedlings to emerge in the bed for up to 3 years (most will come up in the first year), thus patience is required. The first season, the plants will only produce a single leaf (plumule). Keep them well watered (never wet), and protect them from hot sun if possible. The bed should be left intact for two to three years, after which time the seedlings will have grown large enough to transplant in early fall with greater spacing between them. Some may begin to bloom in the third year, some in the fourth year, and the stragglers in the fifth/sixth years. If they are well taken care of, most will bloom in year four.

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