Germination Guide

The seeds we offer are rare because they are not domesticated, hybridized, or genetically modified for human convenience. You won't find them in your local garden center, which is cool, but they aren't designed to accommodate humans. They're wild seeds and have evolved to thrive and survive in their natural environment, not your back yard. Most will, but you'll need to find out what the seeds need, what climate is natural for them, and replicate it as best you can.

First you need to know your zone, or climate, and compare it to where the seed came from. If you live in the desert and the plant came from the tropics, it's going to need a support system. If it came from the desert, it may take a long time to germinate, because it's used to waiting for rare spring rains, and it won't pop up the first time you water it.

There are many tricks to coaxing seeds to germinate. First, the basics:

1. Most seeds should be planted just below the soil surface, no more than twice their thickness. Tiny seeds don't contain the energy to dig their way through dense soil, and some actually need light to germinate. "Surface sow" means the seeds need to be on top of the soil, not under it. They still need to be kept moist and warm, (a sheet of glass or clear plastic helps), but if you bury them, they'll sit there forever.

2. Nearly all seeds contain "germination inhibitors", chemicals or a hard shell to keep them from sprouting at the wrong time. If they all sprouting as soon as they hit the ground, they'd all grow in one place, crowd each other out, and never get enough light to mature on their own.

3. Any seed with a hard coat (beans, morning glories, etc.) can be helped along if you "scarify" them, nick or scratch away part of the surface so water can get in. Soaking hard seeds till they swell speeds things up. Otherwise, they'll sit in the ground till they've absorbed enough water to convince them it's safe to sprout. This could take weeks or months, and you'll think your seeds failed. Often, stubborn seeds germinate on the compost pile after the gardener gave up and tossed them. Prepare hard seeds before you plant them and they'll sprout much sooner.

4. Seeds that come from climates that have cold winters need to be chilled before they'll sprout. If they came up in autumn when they first fell, the winter would kill the new seedlings. So they are designed to withstand weeks or months of cold before they'll germinate. You can sow them outdoors in fall and let them go through winter naturally, or "stratify" them, store them in your fridge (the vegetable compartment, not the freezer!), for a couple of months before planting them in a warm, moist spot. It is very important that stratified seeds be planted right away after their cold nap. If they don't sense warmth and light, they'll go back to sleep and you'll have to start over.

5. Some seeds need really special treatment before they'll sprout, like a forest fire, or a trip through an animal's intestines. You can replicate these conditions with chemicals (smoke paper, orange juice), but you'll need to know ahead of time. We always include special germination info in the seed's description, so you know before you buy it. Print out the description so you'll remember where the seed came from and what it needs.

6. Most seeds aren't so fussy. They need warmth, moisture, and decent soil with good drainage (so they don't sit in water and drown). The majority of the seeds found here are from warm climates, sub-tropical or tropical, and all need good drainage. They do NOT need potting soil that contains fertilizer or pesticides, just honest good dirt with good drainage and enough organic material to make it fluffy. Desert seeds (cactus, Puya, Yucca, etc.) need serious drainage and are better planted in sand than soggy soil. Read up on soil if you don't know already what you've got.

7. Many seeds here are from the tropical rainforest and need to be planted right away. They're adapted to dropping into rich, warm humus and sprouting in the tropical heat. Don't put them in a drawer. Put them in the dirt. We pre-treat really fragile seeds like Camellia and Clivia and send
them to you wrapped in moist paper. This is a lot of work, but it's the only way you'll ever be able to grow those seeds.

8. We don't send germination instructions with every seed. Presumably, you're an experienced gardener and already know that desert seeds need sand and tropical seeds need the opposite, or at least you know where to look it up. If you haven't grown something before (ours, or anyone else's), look it up and learn what it needs before you buy it. Your climate may be perfect, or you may need to build a greenhouse to keep it alive. Enter the botanical name in Google, plus GERMINATION, and read what experts and other gardeners have to say. Too many seeds and plants come with cookie-cutter "just add water" instructions that may not fit your climate or temperament. "Full sun" means one thing in Maine and another in Texas. We'll always be happy to answer questions, but we sell uncommon seeds that often need special attention. The more you learn, the cooler plants you'll be able to grow.

Be patient and have fun! Now for some specifics!

Passifloras

Passiflora seeds are famous for slow and stubborn germination, but the results are worth the effort.

Soak your seeds in beer or orange juice for 24 hours. Fermentation helps break down the seed coat. Plant the seeds about ½" deep in rich, moist soil and keep them at about 80°, using bottom heat if possible. The best place is right in your compost pile, where it's warm. Label your pots, bury them up to the rim and forget about them. Germination can take several weeks to several months.

Myles Irvine's website is extremely helpful to serious enthusiasts. Check out [www.passionflow.co.uk](http://www.passionflow.co.uk).

Rice

Fill a container with about 6” of potting soil. Add water until it’s 2” above the soil level, then add the seeds. They'll sink and sit on the surface of the soil under the water.

Rice needs warmth. Place the container in a sunny area. Keep the water about 2” above the dirt until the plants are established.

When plants are about 5”- 6” tall, increase the water level to 4” deep, then let it lower slowly. By the time the plants are ready to harvest, (90-120 days), the water should be almost gone.

When ripe, the stalks will change from green to gold. Wrap them in newspaper and leave to dry in a warm place for 2-3 weeks. Roast them in a 200° oven for about an hour, then remove the hulls by hand. You're now ready to cook with your own home-grown rice.
**Gunnera**

Fill a 5 gallon pot with fertile, moisture retentive medium.

Sow seed thinly over the surface, and tamp seeds into the soil without touching them, as skin oils interfere with germination.

Mist often and keep moist. Provide bottom heat and ventilation. Seeds will germinate in 30 to 60 days. After 2 years, transplant to a permanent site where it will have room to spread out.

Growth after the first winter is incredible.

**Salvias**

Sow seeds on the surface of a well-drained potting mix. Don't cover them. Put the pots inside a clear plastic bag or cover with glass to keep the surface from drying out. Place in a bright window out of direct sun. Keep the seeds moist, misting if necessary.

Seeds need warmth to germinate. A heat mat helps if you're not in a warm climate. Most Salvias seeds will develop a gelatinous coating when they're moistened, and some develop a fuzzy mold prior to germinating. This is a good thing.

Depending on the species, Salvias may sprout in a couple of weeks to several months. Wild species can take even longer. This is a natural mechanism to make sure some survive. Be patient. They will show up eventually.

These are opinionated plants. It's part of their charm. Have fun!

**Melons**

Melons need fertile soil, lots of room and abundant heat.

Sow seeds in place about two weeks after last frost. Plant them 1” deep, 12” apart, in rows 5’ apart. Or plant in hills, 4 to 5 seeds per hill with hills about 5’ apart.

In short-season climates, start transplants indoors about a week before last frost date and set out 2 to 3 weeks later. Don't let your plants get root-bound.

Melons may be trellised, but larger varieties really need a cloth sling to support each fruit.

For sweeter melons, let them go a bit dry the last week before they ripen. Too much moisture makes them bland and more prone to rotting in the field.