



Saving Seeds



The best time to start thinking about saving seeds is before planting your garden. What crops do you want to save seeds from, and what are their isolation distances?

Isolation distance refers to the distance that 2 crops of the same type (e.g. 2 kinds of heirloom corn) should be planted away from each other so they don't crossbreed. Why don't you want plants to cross breed? Because the seeds you save from those plants and their descendants won't grow "true to type."

If you're interested in experimenting and just want to see what comes up, no need to worry about isolation distances! **If you're looking to save seeds from a specific variety, check our planting & seed saving guide for isolation distances for common crops.**

In Case of Frost

For a **soft frost** (between 28° - 32° F), **water the plants well and cover them** with sheets, blankets, or landscape fabric for extra insulation and warmth.

For a **hard frost** (less than 28°F, which will kill most annual crops), **if your seed pods aren't ready, pull the plant up by the roots** and hang it upside down to dry. The plant will draw nutrients from the roots to give the seeds a better chance of ripening to maturity.

You're ready to save seeds. Now what?

First, **make sure the fruit or vegetable is mature** - otherwise, the seeds won't be mature either, and they won't germinate (sprout).

The time it takes for the fruit to mature varies depending on the plant. For tomatoes, you can harvest and save seeds when the fruit is ready to eat.

For zucchini and cucumber, the fruit should sit on the vine until it's past the point where you want to eat it.

There are 3 main ways to save seeds: Dry processing, wet processing, and fermentation. Check the other side of this sheet to learn about all 3!

Annuals v Biennials

A **biennial** plant is one that requires **2 growing seasons** to complete its life cycle - that is, produce seeds. Annual plants produce seeds the same season they're planted, but biennial plants need a period of cold called vernalization in order to flower and produce seeds their second year.

Common biennial crops include **carrots, beets, rutabaga, turnip, parsnip, leeks, onions, kohlrabi, Brussel sprouts, kale, broccoli, chard, and celery.**

For most biennials (other than leek and onion), plant in late summer/early fall if you want to overwinter them to save seed.

Once nighttime temperatures are regularly in the mid 20°'s, dig up the plants for winter storage. Remove all the leaves and store the crops for winter in a container - common storage mediums are sand, sawdust, and shredded leaves. Ideal storage conditions are just above freezing and moist, since humidity will prevent the plants from dying. A basement or root cellar is a great place to store plants.

Plant your overwintered crops as soon as the soil can be worked in the spring. For Rosebud (gardening zone 4), this usually means mid-April. Save seeds following the dry processing method in the summer and fall.

How to Store Seeds

Make sure seeds are completely dry, and store in a cool, dark, dry place, where the seeds won't be found and eaten by mice or other pests.

Be sure to label your seeds with the variety, where they were grown, the date, and any other conditions that would be good to know.

For example: "Pale perfect purple tomato, Three Sisters Farm, 2020, frost hardy (seeds harvested after a soft frost)"

An easy way to store seeds is in sealed paper envelopes inside either a plastic bag or plastic tub. If you're saving seeds for a few years, keeping them in the fridge or freezer can help extend their lifespan, since the germination rate (the percentage of seeds that sprout) goes down as seeds get older.



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Wet Processing

Wet seed processing: soft fleshed fruits, melons, peppers, eggplant, tomatillo, winter squash

Fermentation processing: tomatoes, cucumbers, pomegranate, some melons, and any seeds that have a gel sack surrounding them after washing

Step 1: Remove the seeds from the fruit

Step 2: Rinse the seeds either in a colander or a bowl or jar of water, and make sure they're free from debris.

Step 3: Decant the seeds by pouring in clean water, mixing, and pouring out the liquid - repeat until the water is clear and only seeds remain on the bottom. Get rid of any floating seeds - they aren't mature and won't germinate. Remove the sunken seeds and let them dry for several days before storing.

Dry Processing

Common crops: legumes (beans), grains, brassicas (broccoli, cauliflower, cabbage), grains, lettuce, onions, beets, carrots, celery, most flowers

General guidelines: If the seed and its surroundings are dry and brittle to the point that they crack open, the seeds are ready to be harvested

For crops like lettuce, make sure to harvest the seeds when the pods are dry but before the seeds are blown away. You can cut the plant at the root (leave roots in the soil to help prevent erosion, unless planting cover crops!) rather than removing individual seed pods if that's easier.

To harvest seeds, remove the seed pod from the plant. Separate the seeds from the chaff (the other plant material surrounding the seed, like the pod) - there are a few ways to do this. If you have a brown paper bag, place lettuce seeds inside and shake it to remove them from the pods, followed by using a fine mesh screen or kitchen sieve to separate the seeds from the chaff. For plants that are more secure in their seed pods (marigolds, radishes) you may need to separate the seeds from the pod by hand.

Fermentation Processing

Common crops: tomatoes, cucumbers, pomegranate, some melons, and any seeds that have a gel sack surrounding them after washing

Step 1: Remove the seeds from the fruit.

Step 2: Ferment the seed pulp by placing it in a jar and covering with water for a few days. Cover the jar with newspaper, a paper towel, or a rag to allow air flow while preventing insects from entering the jar.

Why ferment seed pulp? Wet seeds are encased in a gel that is a germination inhibitor - think of the gel that surrounds tomato seeds. By fermenting the seeds for 3 to 5 days, this gel is removed - meaning your seeds will be ready to plant in the spring!

Step 3: Decant the seeds by pouring clean water into the jar, mixing with the fermented seed pulp, and pouring out the liquid - repeat until the water is clear and only seeds remain on the bottom. Get rid of any floating seeds - they aren't mature and won't germinate. Remove the sunken seeds and let them dry for several days before storing.

Sources:

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<http://nelsonseedlibrary.weebly.com/processing-methods.html>

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