

NEWS RELEASE
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STORING GARDEN SEEDS

BACKYARD HORTICULTURE

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With the fall weather now upon us, many home gardeners end up with a quantity of garden seeds at the end of the summer growing season. Some of us even save seeds from our favorite open pollinated vegetable or flower plants for planting next year. Either way, it is important to know how to properly store seed in order to ensure good germination and growth next year.

If you like saving seeds from your plants, you should know that seeds have their best germination potential at the moment they reach maturity on the plant. From that moment on, all seeds decline in vigor until they will no longer germinate. However, you can slow this decline so they will continue to germinate well for several years by proper harvest and storage of the seeds.

The two most important factors shortening seed life are high seed moisture and high temperature. Two rules-of-thumb point out how important these factors are. First, for each one percent decrease in seed moisture, the life of the seed is doubled. Secondly, for each ten degree drop in storage temperature, the life of the seed is doubled. A good illustration of these two rules is with onion seed, a notoriously short-lived seed. Onion seeds of 14 percent moisture content stored at 90° F were all dead in one week. However, some of that same seed was dried to six percent moisture and stored in a sealed container so the seed could not regain moisture. After 20 years, the stored seed still germinated as well as when it was harvested. Therefore, you must first dry the seed to a safe level, then put it in a container that will keep it dry, and finally you should store the seed in a cool place.

How should seed be dried? If the seed matures in summer or early fall, it is easy to dry it outdoors because our relative humidity is low at that time. However, the seed should not be dried in direct sunlight. Spread the seed out thinly on a flat surface off the ground and in shade, and let dry for a week. Collect the seed in the late afternoon, place in a moisture proof container, and store in as cool a place as possible. In late fall or in humid weather, the seed may be similarly dried indoors where the temperature is above 70° F.

A mason jar with a new lid is an excellent moisture-proof container. Heavy plastic bags with sealable tops are also good. Cloth and paper bags (even if plastic coated) and thin plastic bags are not moisture proof, and should not be used as the storage container. Such bags can be used for keeping your various lots of seed separate when placed in a moisture-proof container.

While drying seed is the most important factor, storage temperature should also be considered. The seed should be stored at room temperature or cooler, below 75° F. Better is a refrigerator (38°- 45° F). For very long storage, a deep freeze is fine. The seed will not be harmed if it is properly dried before freezing. When removing seed from the freezer, handle carefully, because it is very fragile when frozen. Let the seed come to room temperature before doing anything with it.

You may want to save some seeds from wet fruits such as tomatoes and muskmelons. Scoop the seeds out or squeeze them out into a glass container and let them ferment at room temperature for a day or two. Then wash the juice off through a sieve or screen and dry them as described for dry harvested seeds. Do not exceed 95° F drying temperature in drying seeds.

Using the above methods should help maintain high germination in your seed for several years. For a chart of vegetable seed life expectancies, call the University of California Cooperative Extension office in Mariposa, 966-2417.