

## Storing Vegetable Seeds

Most gardeners experience a crop failure at some point due to seeds not emerging from the soil as expected. I have had this happen more than once. There are many possibilities for the poor performance. If the planted seed was newly purchased, conditions such as inclement weather, improper planting or improper irrigation are most likely to blame and not poor quality of the seed. However, if the particular seed was saved from a previous season, chances greatly increase that seed quality diminished due to improper storage or collection methods.

A common error is to store unused seed in an unsealed container such as a cardboard box. Further, the box of seed is then often placed in a garage or a shed and forgotten about until the next spring. Unfortunately, these are not ideal storage options for a few reasons. One major reason is that fluctuations in humidity can greatly impact seed viability, where constant, low humidity is best. Additionally, extreme temperature fluctuations also diminish seed shelf life, and so a cool basement storage room, with seed packets stored in an air-tight container is better suited.

Another option is to store seed in a refrigerator or a freezer. This can greatly extend the amount of time seed remains viable. However, it is imperative that seed stored in these be kept in sealed containers due to natural high humidity.

Another issue that can be confusing when purchasing seed is whether to purchase open-pollinated or hybrid types. Seeds from open-pollinated varieties will grow genetically the same or very similar to the parent plant and can be easily collected by the home gardener in some situations. Vegetable seed relatively easy to collect from open-pollinated varieties include tomatoes, peppers and various legumes.

Other open-pollinated varieties such as root crops, squash, melons, corn and cabbage related plants are much more difficult. Reasons for this may include plants readily hybridizing with other closely related vegetables or weeds, difficulty in removing seed without proper equipment and knowing when to actually harvest seed.

Opposite of open-pollinated varieties, hybrid plants are produced using two genetically different parent plants. Hybrids are more common than open-pollinated types because they have improved characteristics such as producing higher yields, improved disease resistance or yielding earlier. Unfortunately, plants grown from seeds collected from hybrids will not be the same variety as the parent and almost always have inferior characteristics.

Storing and collecting seed can be enjoyable. However, if seeds are being stored as a hedge against a future emergency, one must actually know how to successfully start seed on their own. This includes knowing what crops must be planted earlier indoors, and having some basic supplies on hand to start the seed.

Much information concerning storing seeds is available online. One useful fact sheet can be found at: <http://www.ext.colostate.edu/pubs/garden/07221.html>. Many experienced gardeners start and store their own seed. They are often a valuable resource.