

Growing food at home series

Seed saving

Pack D Notes 11

Collecting seed from your own plants is easy, cost effective and contributes to maintaining plant biodiversity. These seeds come from plants that have adapted to your local conditions and they are often more resistance to pest and diseases, than plants grown from seed collected in different foreign environments.

Seeds commonly available through garden centres supermarkets and other outlets are either hybrids or open pollinated.

Hybrid seeds

Hybridisation occurs in the wild haphazardly, and in a controlled environment by seed manufacturers. These seeds are a cross of two different varieties, to gain specific traits from each parent that will be advantageous for the new plant. Most seeds used for food crops are hybrids. This is related to our food distribution system that requires food plants to have qualities which allow transportation over long distances and long term food storage, and plants are crossed to produce these qualities. Flavour is not top priority. Collecting and growing food plants from supermarkets and grocers will not necessarily produce the desired food, due to being grown from hybrid seeds. Hybrid seeds are not suitable for seed saving; though you can plant seeds collected from hybrids, the next generation plants do not necessarily have the selected characteristics.

You will find hybrid or F1 written on the packets to indicate a hybrid seed.

Open pollination seeds

From plants that are pollinated by natural mechanisms such as insects, birds, wind and humans. They are genetically diverse which allows plants to slowly adapt to the local environment conditions. The seeds saved from an open pollinated plant will come true when sown and grown. That is: be just like their parents, year after year.



This is true as long as the pollen is not shared between different varieties of the same species as certain varieties can cross pollinate. An example being cabbages and cauliflowers grown close to each other that flower at the same time may cross pollinate, and these seeds from these plants will be a mix of both parents.

Not all open pollinated varieties are heirlooms.

Heirloom seeds

Heirloom varieties are ones that have been handed down through the generations, within a family or the community. They have adapted to the local environment they have been grown in with advantages of growing strong in these conditions.

All heirlooms are open pollinated, but not all open pollinated are heirlooms.

Where in plants are the seeds?

Seeds are stored in various parts of the plants. They can be found either in the:

- Seed head - carrot, dill, fennel, lettuce, parsley, parsnip, silverbeet
- Pods - beans, broccoli, cabbage, pea, mustard
- Fruits - capsicums, chilli, cucumber, pumpkin, tomatoes

Seed collection

Collecting seed is easy and successful when following basic steps. The plant you collect from needs to be healthy, not able to cross pollinate with others of similar varieties, be insect free and dry. Start by selecting a plant/s you would like to collect seed from and source non-hybrid seeds of this plant. Prepare your soil well and grow the plant/s. As the plant comes closer to flower follow the steps below to collect your own future crops. Local seeds are preferred as they are adapted to local environment conditions.

- Select the best plants
- Collect mature seeds
- Dry the seed
- Store the seed

Select the best plants

If you want to collect a variety that is unfamiliar to you grow numerous plants to become familiar with its characteristics. To collect seed for good future plants you will need to ensure the plants you collect from are good quality, this may mean harvesting from other plants and leaving the best one for seed collection. This plant will need to be labelled - others will need to be told not to pick from it! Watch for the best growing plant that has good disease resistance, survives periods of harsh weather and obviously is the strongest, healthiest one in your plot. If you are growing similar plants e.g. different types of broccoli there is a risk of crop pollination you will need isolate the plants you wish to collect seed from.



Collect mature seed

The seeds will need to fully mature and may need to be left on the plant to fully develop. Pick in dry weather and after dew has gone.

- Seed heads that can scatter need to be picked progressively as they ripen
- Seeds that are in pods can be left on the plant until the pod dries
- Fruits such as tomatoes are best picked when the fruit is ripe and turning soft. They can be squeezed out onto a paper towel. Pumpkins and capsicum seeds can be scooped out of the cavity, set on paper towel to dry
- Clean the seeds of extra material, how to do this will vary according to the seed
- For plants in wet containers such as tomatoes, cucumbers and pumpkins, scoop out the flesh into a container of water and rub them vigorously. Pour them through a sieve and run water over them to remove all the flesh. Let them dry on a plate or grease proof paper for 10 days
- For seeds that are in a dry casing such as peas and beans or form a seed head like carrots, onion and lots of garden flowers and kitchen herbs let the seeds dry on the bush. If the weather is wet the plant can be taken out whole and hung in a dry place. Clean the chaff and stems by gently rolling then willow

Dry the seed

Cleaned seeds will need to be spaced away from each other and kept in a cool dry location. They can be laid out on a wire rack or screen away from the wind, hung in small quantities in paper bags or kept on paper towel. Generally the larger the seed the longer it will take to dry. A simple test is to bite into one of the seeds, with reasonable pressure, and if no impressions are left it is dry. Label the seeds with the variety and date collected.



Store the seed

Make sure the seeds are not infested with weevils before storing them. This can be done by placing the dried seeds in a sealed container in the freezer for two days. Wait until the container is back to room temperature before opening it to prevent moisture condensation.

Place the seeds in a paper or zip lock plastic bag with silica gel to absorb moisture and stop them from decomposing. Make sure they are well labelled with the name and date on it.

Some seeds can be kept for a long time, whilst others are only fresh for a season. Keeping the seeds in a constant low temperature in a dark place will prolong their life.

Seed to start with

Easiest

basil
bean
coriander
dill
fennel
lettuce
nasturtium
pea
tomato

Easy

broccoli
carrot
calendula
capsicum
celery
chilli
marjoram
mint
mizuna
parsley
peanut
pumpkin
rocket
spring onion
sunflower
thyme
watermelon

Further information

The Seed Savers' Handbook, Michel and Jude Fanton,
Published by The Seed Saver's Network
<http://www.seedsavers.org/>

Sources of Seeds

Local community gardens
Diggers Garden Club
Nurseries

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