



Saving Seeds

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Collecting seeds

It is easy to collect seeds of vegetables and flowers for planting next year. Most vegetables are annuals, which are plants that grow, flower and produce seed in one year.

Annuals, like sweet peas, radishes and sunflowers usually produce lots of seeds, and are easy to grow. The best time to collect the seeds is on a sunny day when they are ripe, which for many plants means that the fruits are dry and opening. Dry them at room temperature, put them in paper bags and label them. If you want to store them for longer than one year, it is best to put them in a waterproof container, like an old-type jam jar, at the bottom of a fridge (at 0–5°C).

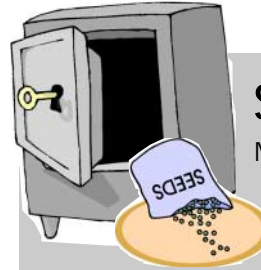


Sleepy Seedheads

Most seeds in our climate become dormant (French word "dormir" comes from Latin and means "to sleep") over winter, when they dry out and chill. It is a way for plants to survive winter. But seeds can sleep longer than that. Poppies can "pop up their flowerheads" from the ground even after 70 years! In north eastern China 1,300 years old Lotus seeds were found and they were still able to grow!



Some seeds, however, do not like to dry out. They mostly come from juicy tropical fruits, like avocados, mangoes or coconuts (coconut is a seed already). If you want to plant them, you have to do so immediately after eating the fruits! But there are seeds in our climate, which do not like drying out either, like acorns or chestnuts. These seeds cannot be dried and stored.



Seedbanks

Most seeds can be frozen and stored at –18 to –20°C in "seedbanks" for many years (maybe even 100 years or more!). This is best done by experts because seeds can be damaged if they dry out too much, or if they do not dry enough (ice crystals can form inside it and damage the cells). There are many expert seedbanks around the world, like the Millenium Seedbank in Wakehurst in England, which are saving seeds of mostly wild and crop plants, many of which are rare, very valuable or endangered. Svalbard Global Seed Vault is a seedbank in a tunnel, which was drilled into a mountain on the frozen Norwegian island of Spitsbergen, only 966 km from the North Pole!

Apple Tree Savers

The Irish Seedsavers are saving seeds of old, mostly Irish, varieties of grain, vegetable and fruit. They have a seedbank, which contains more than 600 rare and endangered vegetable varieties. Apart from that they have an apple orchard and a tree nursery, in which they are growing about 140 different types of Irish apple trees, with names like Lady's Finger, Irish Molly or Cavan Strawberry. These "native" apple trees produce much tastier apples and are more resistant to diseases as they were grown before the discovery of pesticides. This means they can be grown without the use of chemicals and produce far healthier fruits!



Making New Plants

In nature a lot of plants naturally produce hybrids. This is where a male plant of one species pollinates a female of another one and the resulting seed produces a plant that has some characteristics of each "parent". The new plant could, for example, have pink flowers like its "mother" and spiky leaves like its "father". In cultivation, people use this method to create flowers with unusual colours or shape of petals or to get higher yields of crops, with bigger fruits.



Scientists have also discovered a way of changing the inner structure of a plant to make it more resistant to herbicides, pesticides and predators. This is known as Genetic Modification (or GM). The scientists create a new plant by inserting a gene of a different plant (or even a bacteria) into the structure of another plant.