FROM SEED TO SEED

Educational films on seed production

MELON

The melon belongs to the Cucurbitaceae family and to the Cucumis melo species. It is an annual plant that is divided into several types with different shapes, colours and tastes. For example, there are the musk melon, cantaloupe melon, melons for candying, and the winter melon that can be stored for several months.

Pollination

The melon is a monoecious plant, meaning that it bears both male and female flowers on the same plant. Female flowers have an ovary under the flower. It is in fact a miniature melon that will develop. The male flowers are at the end of long stems. The flowers only open during one day. It can be self-fertilised, meaning that the female flowers can be fertilised by pollen from a male flower on the same plant.
Cross-fertilisation is, however, the most common. Insects, above all bees, pollinate melon flowers. All varieties of Cucumis melo cross-fertilise between each other, including with wild melons. But cross-pollination is impossible between melons and cucumbers, watermelons, or squashes.
To avoid cross-pollination, keep a distance of 1km between two varieties of melon. This can be reduced to 400m if there is a natural barrier such as a hedge.

There are several methods to produce seeds from different varieties of melon grown in the same garden. The first is to cover one variety with a net and to place a bumblebee hive inside. Another one is to cover two varieties with two different nets : you open one while the other is closed on one day, and alternate the next day. Leave the wild insects to do their work. The production in this case will be lower as some flowers will not be pollinated.
The third method is to pollinate the flowers manually. This is not as simple as for squashes or zucchini, as melon flowers are very small and it can be difficult to identify the moment of blossoming. Above all, melons will abort about 80% of the female blossoms. Hand pollination is even less effective than insect pollination, so only about 10-15% of the hand-pollinated blossoms will develop into fruits. These three methods are described in greater detail in the modules on mechanical isolation techniques and on manual pollination in the ABC on seed production.

The melon's life cycle

Melons grown for seed are cultivated in the same way as those for consumption. Depending on the variety, melons need different temperatures. It is better to grow at least 6 plants for seed production to ensure good genetic diversity. Ideally, grow a dozen.
Take great care to select the plants you keep for seeds according to the specific characteristics of the variety, such as precocity, plant vigour, the number of fruit, its capacity to be grown in open fields in temperate climates, the taste and sweetness of the flesh. Get rid of sick plants. It is easy to identify the level of maturity of the melon seed: the fruit must be ripe and ready for consumption.

Extracting - sorting - storing

To extract the seeds, open the melon by cutting it in two. Remove the seeds using a spoon. Enjoy eating the rest of the melon. Simply rinse the seeds under water and let them dry in a shaded area. To be sure that the seeds are dry, they should break when you bend them.
Always place a label with the name of the variety and species as well as the year in the package, as writing on the outside may rub off. Ideally, put them in the freezer for a few days to destroy any parasites.
Melon seeds have a germination capacity of 5 years on average, but they can germinate for up to 10 years.