# FROM SEED TO SEED

#### Educational films on seed production



#### **AUBERGINE OR EGGPLANT**

The aubergine or eggplant belongs to the Solanaceae family and to the Solanum melongena species. It is a perennial plant in tropical countries but annual in temperate regions. There is a great diversity in the size, shape and colour of aubergines.

### Pollination

The aubergine flower is hermaphrodite and self-fertilising, which means that male and female organs are on the same flower, and that they are compatible. They are said to be autogamous. Crossing between varieties can, however, occur. Its frequency varies depending on the environment and the number of pollinating insects. For plants grown in places well sheltered from the wind, you can regularly shake them during flowering to encourage pollination.

To avoid cross-pollination, grow different varieties of aubergines 100 meters apart. This distance can be reduced to 50m if there's a natural barrier, such as a hedge. In tropical climates, distances of up to one kilometer are necessary. Mechanical isolation can also be used with a mosquito net. See the module on isolation techniques in the ABC of seed production.

## Life cycle

Aubergines grown for seeds are cultivated in the same way as those for food. To ensure good genetic diversity, you should grow between 6 and 12 plants of each variety. Aubergines are plants that require a lot of heat to develop well. You should therefore adapt sowing time to the date you can plant outside.

Once the flower blooms, it will take between 60 and 100 days, depending on the variety, for the fruit to be ready for consumption. But watch out, the seeds are not ready at this stage.

Plants used for seed production are chosen amongst those that are healthy and vigorous and that you have been able to observe throughout their growth.

With regard to the plants, you should look for regular and vigorous growth, numerous flowers, well-developed fruit or good capacity of adaptation to cold climates. As for the fruit, you should choose those with the best flavour, the typical shape of the variety, the size, the colour of the flesh and the skin, the absence of bitterness in the fruit, and the thickness of the skin. You should not select fruits for seeds from already picked aubergines as this does not enable you to observe all of the growth characteristics of the plant. Avoid choosing sick plants for seed production.

At complete maturity, the fruits become soft and they change colour. White aubergines become yellow, purple ones become brown. If the fruit have not had the time to fully mature on the plant they can be left to mature in wooden boxes in a cool and dry place.

# Extracting - sorting - storing

To extract the seeds, choose fully ripe but not fermented fruits. There are two methods for extracting seeds. For a small harvest, cut the aubergines in four and remove the seeds with a knife. For larger crops, peel and chop the aubergines in cubes and place them in a jar of water. Mix in a blender for a few seconds. The good seeds will sink to the bottom of the container. Take out the layer with the flesh, the left-over skin and the undeveloped seeds using a sieve. Take the good seeds and clean them in the sieve under running water. It is then important to dry the seeds within two days at most. Place them on a fine-meshed sieve or a plate in a warm, dry, airy or well-ventilated space (between 23° and 30°C).

For smaller quantities, use coffee filters, as they are very absorbent and the seeds do not stick to them. Place at most a small teaspoon of seeds in each filter. Hang the sachets on a clothes rack in a dry, airy and shaded place.

Write the name of the variety, the species and the year of production on a label and place it inside the packet. Writing on the outside may rub off.

A few days in the freezer will kill any parasite larvae. The germination capacity of aubergine seeds is 3 to 6 years. To lengthen it, keep the seeds in a freezer.



