## FROM SEED TO SEED

## Educational films on seed production



## BOTANICAL CLASSIFICATION

Anyone who wants to produce seeds should have a general understanding of botany, the science of plants. Plants are at present classified according to the anatomy of their flowers, their reproductive organs and their fruit. They are classified by their Latin names. Using Latin names ensures precise classification, whereas using everyday language can lead to confusion. For example, the term ?squash? covers very different species, such as cucurbita pepo, cucurbita moschata and cucurbita maxima.
In this film we will only use certain latin names: families, such as Fabaceae, Asteraceae, Solanaceae or Cucurbitaceae; then the genuses such as Cucurbita, species such as Cucurbita Maxima and finally the varieties. For example, the cucumber is a member of the Cucurbitaceae family, the Cucumis genus, and the Cucumis Sativus species. It is divided into many varieties. The melon also belongs to the Cucurbitaceae family and the same Cucumis genus but it is from a different species, Cucumis Melo, which is also subdivided into many varieties.
Plants of the same variety will be very similar in their characteristics such as shape, colour and size. All varieties within the same species can cross with each other.Most of the time, varieties from different species cannot cross. For example, there is no risk of a cucumber crossing with a melon. But there are exceptions. Crosses are possible between species that are botanically close, such as between the Cucurbita moschata species and the Cucurbita argyrosperma species. Crosses between plants from different genuses are impossible.

Acquiring this knowledge will help you to use the cultivation methods best adapted for seed production and avoid unwanted cross-pollination.

