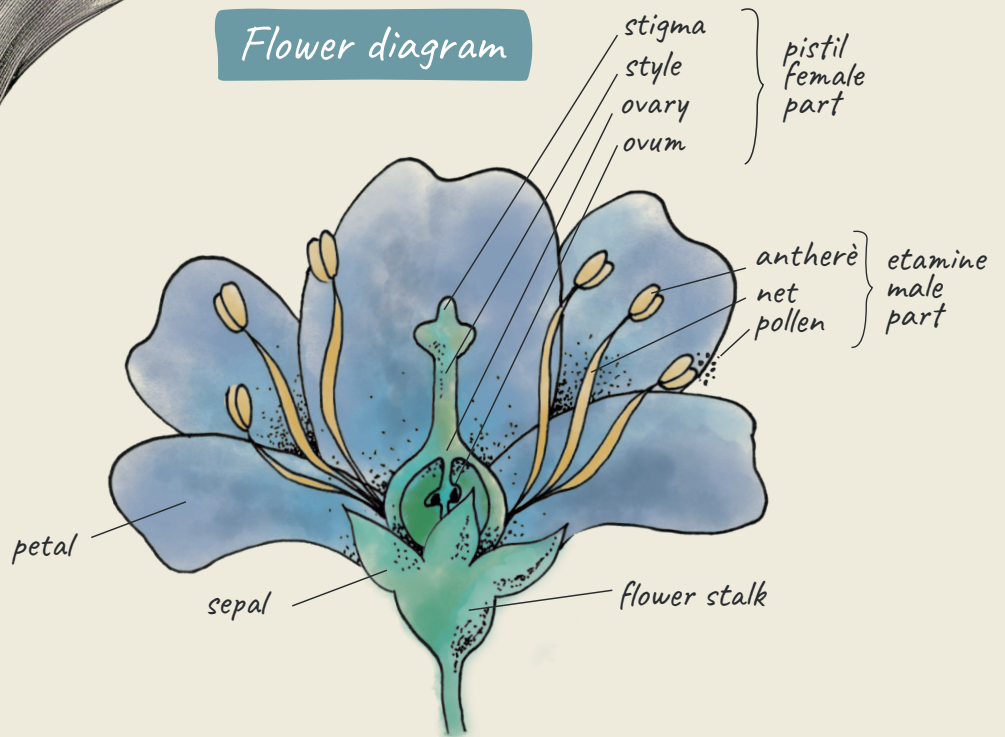
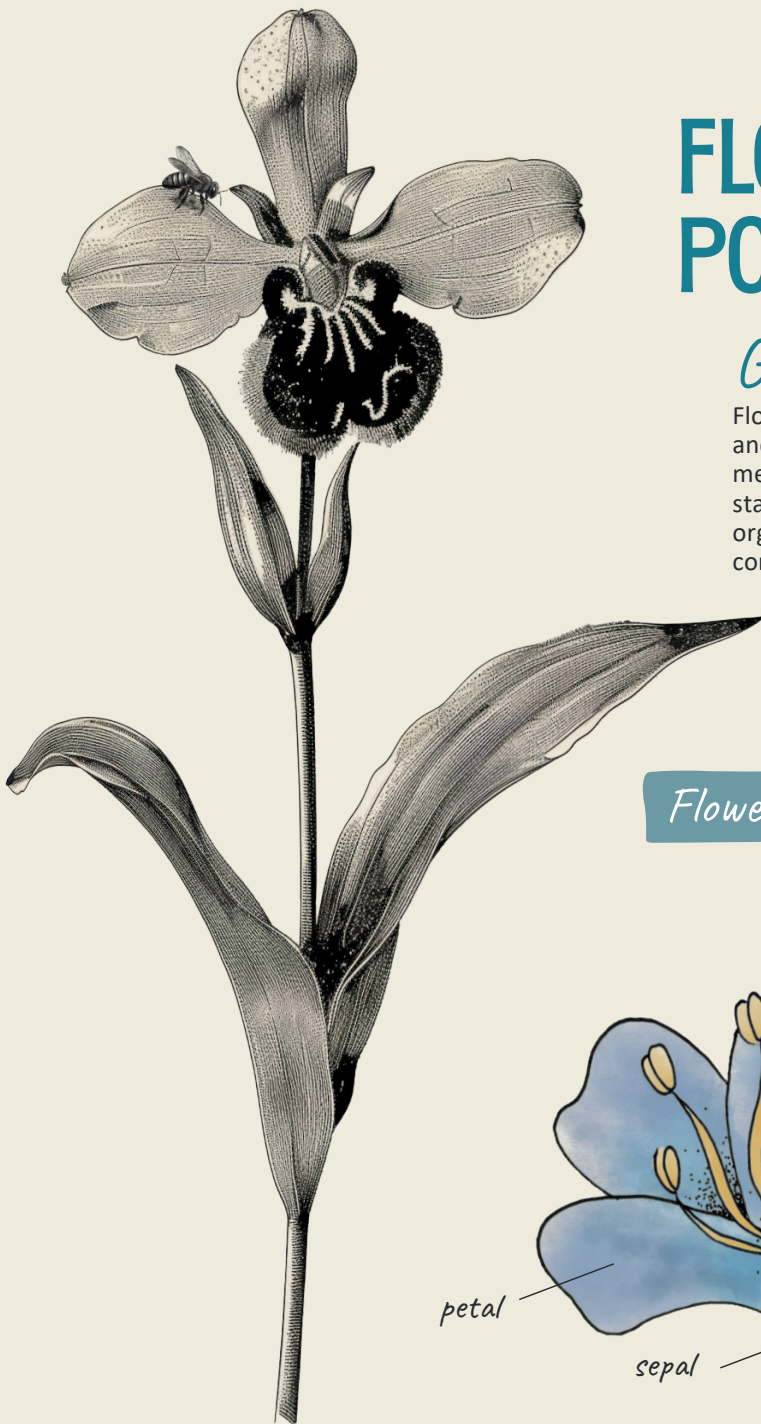


FLOWERS AND POLLINATION

General Information

Flowers contain the sex organs of flowering plants, and pollination consists in their reproduction: it means the transporting of a grain of pollen from the stamen (the male organ) to the pistil (the female organ). The pistil then transforms into fruit, containing the seeds.



Ophrys-apifera



Curious fact

To stand out from others, flowers can use various techniques: movements, groupings, scents, flowering period, etc.

The flower of the wild orchid known as the “bee orchid” (*Ophrys apifera*) imitates a female bee, even down to its scent! It attracts the males of certain species, which try to mate with her! Pollen sacs (pollinia) then come to attach to the insect, which will unwittingly transport them to another bee orchid.

Botany

Certain plants have hermaphrodite flowers, equipped with male and female organs. Other species have separate male and female flowers. When the male and female flowers are on the same plant, this is known as a monoecious species, such as the courgette. If the male and female flowers are on different plants, this is known as a dioecious species, such as the kiwi fruit (Actinidia).



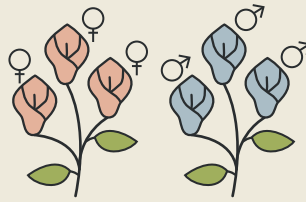
Hermaphroditic plant



Monoecious plant



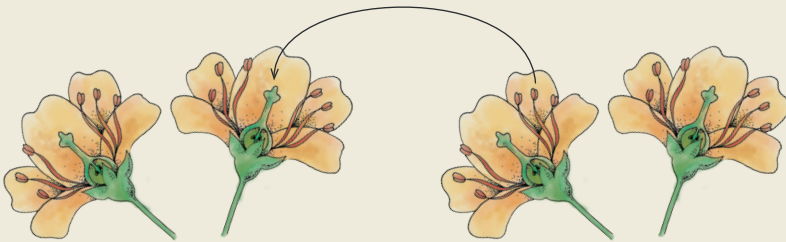
Dioecious plant



Self-fertilisation



Cross-fertilisation



Self-fertilisation and cross-fertilisation

With hermaphrodite plants, self-fertilization is sometimes possible. But the ideal remains pollination with pollen from a flower from another plant, for genetic mixing: cross-fertilization.

Quiz

To ensure pollination, what means of transport do these plants use?

Answer: A total of 10% use the wind (anemogamous plants), like the hazel tree. As for the remaining 90%, they are pollinated by animals, mainly insects (entomogamous plants).

In exchange for transporting pollen, the plant offers rewards to the pollinators. It is a mutually beneficial relationship. The plants offer food (pollen and nectar – up to 30 g of nectar per flower per day!), shelter, or other rewards such as materials for building nests (petals, fibres, etc.)

