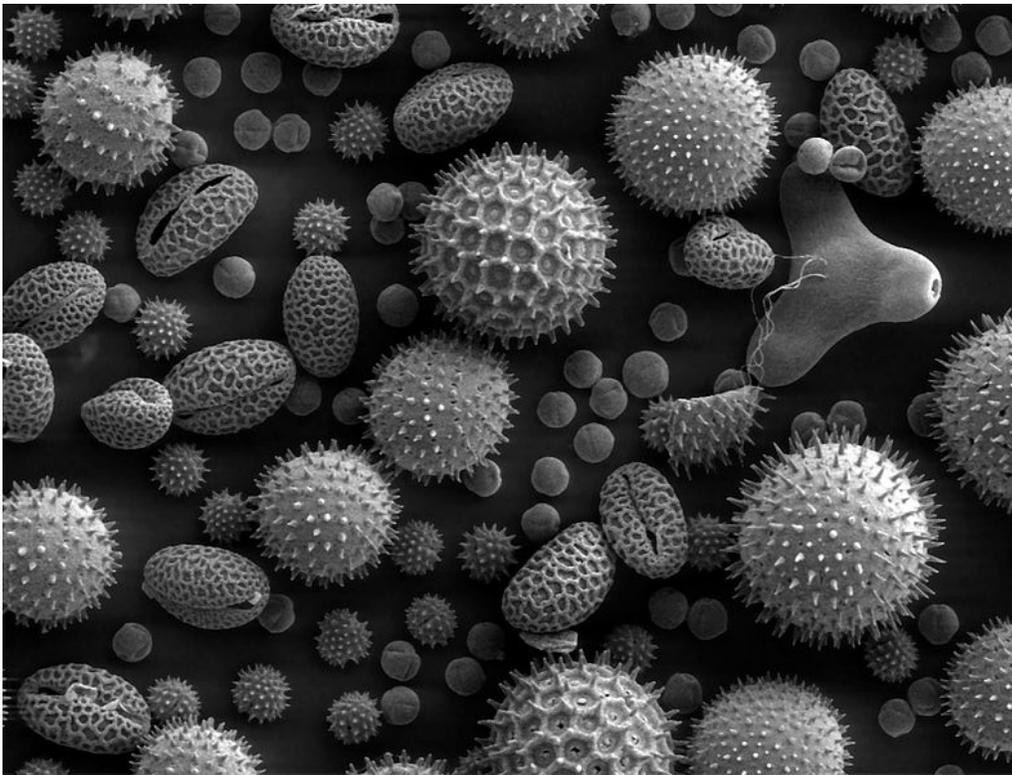
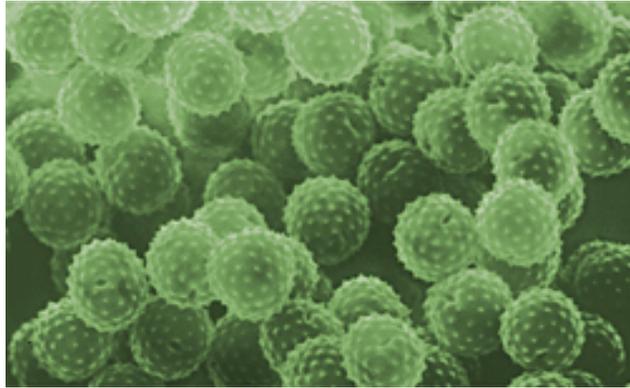
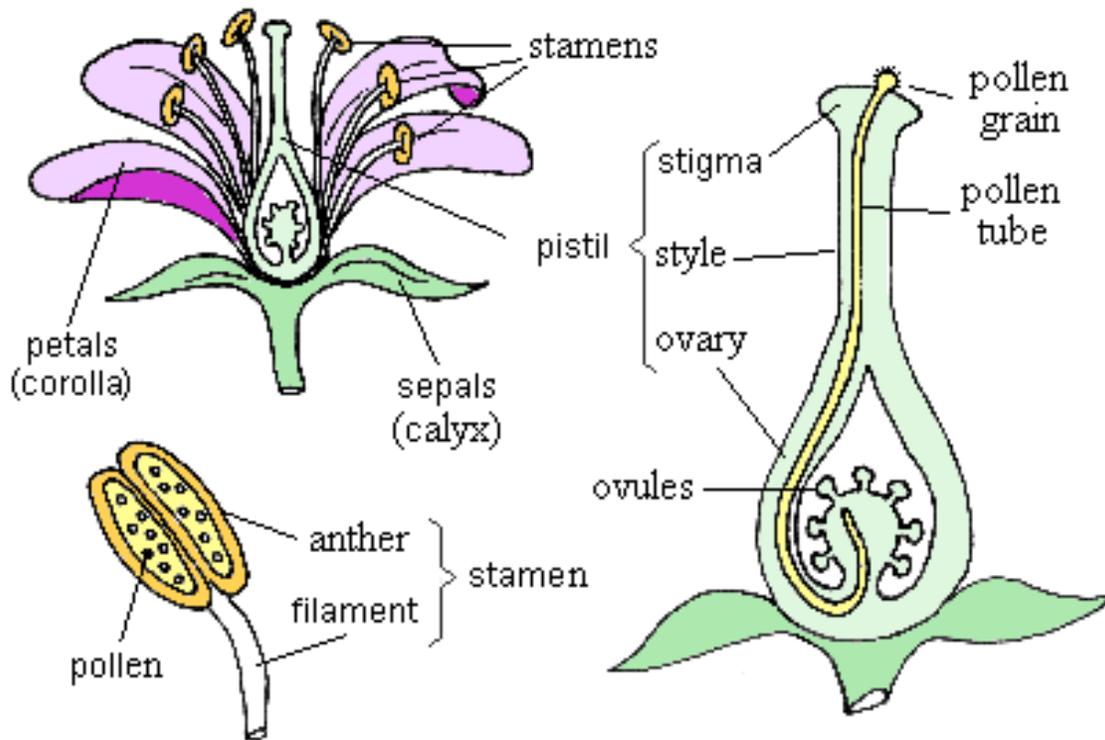


Pollen Station

Pollen is the male reproductive cell body produced by anthers of flowers. It is collected and used by honeybees as their source of protein. Pollen typically contains two sperm nuclei capable of fertilizing an egg.



Pollination is the transfer of pollen grains to the surface of a receptive stigma. Wind, insects, birds, or other agents are often required for the transfer. After a pollen grain lands on a stigma, it germinates and a pollen tube forms, creating a path that the two sperm nuclei will follow to the ovule.



Guided by chemical cues, the pollen tube grows through the tissues of the ovary to an ovule. It carries two sperm nuclei. When the pollen tube reaches an ovule, it penetrates the embryo sac and deposits two sperm. The two sperm are released to accomplish double fertilization.

In flowering plants, the pollen grains that reach the mature stigma of a flower will only develop a pollen tube if a certain chemical is present. This means that *only* the stigma of a flower of the *same species* as the ones that produced the pollen grains will stimulate the pollen tube to grow towards the ovule.