



Pollen grains generally contain three nuclei—two sperm nuclei and one tube nucleus. When the pollen lands on the stigma of a flower of the same species, the tube nucleus begins forming a tube that grows down to the ovary. The two sperm nuclei then move down the tube to the ovary. The waiting ovule contains an egg nucleus, two polar nuclei that fuse, and five other nuclei that eventually disintegrate. One sperm nucleus unites with the egg nucleus in an ovule. This process is called “fertilization.” After fertilization occurs, the egg begins to develop into a seed.

The other sperm nucleus unites with the fused polar nuclei in the center of the egg. This stimulates the formation of a substance called endosperm, which is food for the developing embryo. One or more seed coats develop around the growing embryo.

At this point, the flower withers, and the ovary develops into a structure called a fruit. Some fruits, such as cherries and oranges, are edible by humans, and some, such as the dry pods of the Fast Plants, are inedible. The fruit

helps protect the seeds and serves as a way to disperse them. Some fruits, like cherries, contain only one seed; others, like oranges and squash, contain many seeds. A squash, cut lengthwise, has the familiar shape of most flower ovaries.



*There was only one seed in this dissected cherry.*

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