



Seed Saving Definitions

Bi-sexual flower- each flower has both types of reproductive organs in the same flower. Also known as *perfect flower*.

Dioecious-half of plant will have only staminate flowers and half will have pistilate flowers. Example, spinach and asparagus.

Fertilization-process in which sperm cell travels through pollen tube to ovary. Process complete when sperm fuses with an ovule and leads to formation of a seed.

Inbreeding- when a sperm of an individual plant fertilizes the ovule of the same plant. Also known as *self-fertilization*.

Monoecious- each plant has both sexes of flowers. Example-corn, cucumbers, squash.

Outbreeding- when sperm of one plant fertilizes ovule of a different plant in the same species. Also called *cross-pollination*.

Pistil-female reproductive part of flower. Consist of stigma-to receive pollen, style-connects stigma to ovary, and ovary- matures into a fruit, ovules-fuse with sperm to become seeds.

Pollen Tube-a conduit that transports sperm to ovules.

Pollination-process which transfers pollen from staminate to pistilate flowers in plants. Resulting in fertilization and reproduction.

Stamen-male reproductive part of a flower. Consists of anther, which produces pollen containing the plants sperm and the filament that supports the anther.

Strong Inbreeders-plants that rely almost completely on self-fertilization to reproduce. Cross breeding with another plant from same family can still occur but is rare. Pollination occurs by some type of external movement like the wind or an insect visit. Examples, tomatoes, peas, common beans and lettuce.

Strong Outbreeders-rely completely or almost completely on cross fertilization to reproduce. Pollination relies on sufficiently large enough population of crop flowering at the same time, adequate insects or adequate wind/airflow and environmental conditions that allow for pollen to remain viable to transfer to another flower. Examples-beets, spinach and broccoli.

Unisexual flower- only one productive organ per flower. Also known as *imperfect flower*.