

## Double Fertilization.

fusion of two male gametes brought by pollen tube to two different cells of the same female gametophyte in order to produce two different structures.

Found only in Angiosperms

First discovered by Nawaschin 1898, in *Fritillaria* & *Lilium*.

After entering one of the synergids, Pollen tube releases the two male gametes into the cytoplasm of the synergid.

one male gamete fuse with egg nucleus & form diploid nucleus  $\rightarrow$  zygote & process is called syngamy.

Other male gamete fuse with polar nuclei in the central cell & produce a triploid primary endosperm nucleus.

Here fusion of three nuclei called triple fusion.

Two types of fusion, Syngamy and triple fusion take place in an embryo sac — Double Fertilization.

central cell after triple fusion becomes the primary Endosperm cell (PEC) — develops into Endosperm.

Zygote develops into an Embryo.

