Topic: Taxus; Fertilization B.Sc. Botany Hons. II Paper: III Group: A

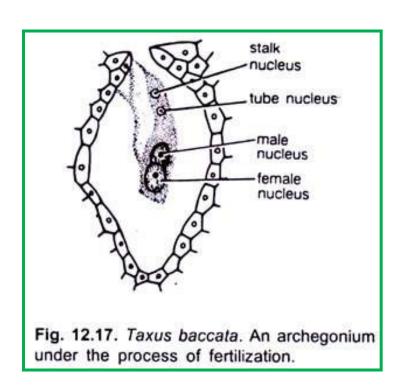
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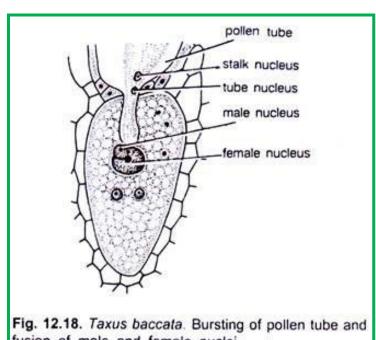
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Fertilization in Taxus

- The tip of the pollen tube present near the neck of the archegonium, bursts, and both the male gametes.
- Along with stalk nucleus and tube nucleus, are liberated into the archegonial venter.
- The functional male nucleus (larger one) and the egg nucleus fuse and result in the formation of a zygote.
- The other three nuclei (i.e. stalk nucleus, tube nucleus and smaller male cell) degenerate.
- As there are several archegonia in the female gametophyte, several eggs may be fertilized, resulting into a simple polyembryony. But ultimately only a single embryo attains maturity.

The process of fertilization in *Taxus canadensis* has been studied by Dupler (1917).





fusion of male and female nuclei.