Topic: Taxus ; Male Gametphyte
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Dr. Sanjeev Kumar Vidyarthi
Department of Botany
Dr. L.K.V.D. College, Tajpur, Samastipur
L.N. Mithila University, Darbhanga

Male Gametophyte:

- A microspore develops into a male gametophyte. It is uninucleate at the time of shedding.
- Dispersal of the microspores takes place by wind.
- A few microspores are taken up to the micropyle by the wind, where they are caught into the pollination drop.
- Through this drop the microspores are taken up to nucellus where they germinate.
- At the time of germination, the microspore nucleus divides and forms a tube

cell and a generative cell.

- The exine ruptures and the intine comes out to form a pollen tube.
- The tube nucleus moves towards the tip of the pollen tube.
- The generative cell divides soon into a stalk cell and a body cell.

In the later stages two unequal male gametes are formed by the division of the body cell. Rohr (1973) has studied the formation of male gametes of Taxus in vitro conditions. He noticed the gametes to be similar, unlike in nature where they are unequal. The pollen tube reaches up to the archegonial neck by penetrating the nucellus. The prothallial cells are absent in Taxus.

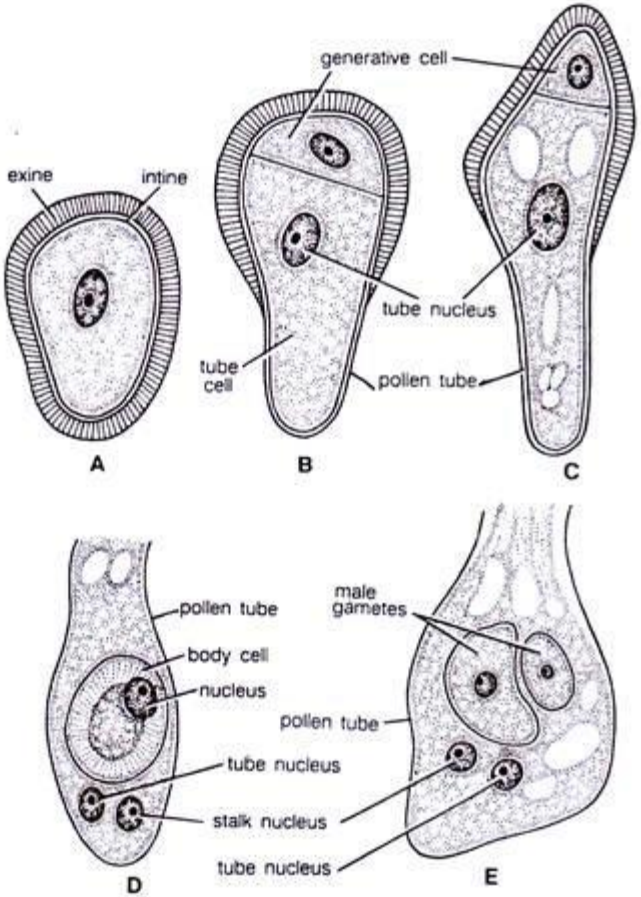

Fig. 12.14. *Taxus canadensis*. Development of male gametophyte (after Dupler, 1919).