

U.G - Sem - IV Dept of Botany - Dr. Sunil Pandit E. Notes.

Question → Describe the male gametophyte of cycas?

Ans → The microspore or pollen produced in micro-sporangium of male sporophyte is the first cell of the male gametophyte. It germinates and produces male gametes which represent male gametophyte.

The microspore is almost spherical covered with a double layered coat. The outer coat is thicker and called exine and the inner coat is thinner and known as intine.

Development of male gametophyte before pollination → The development of male gametophyte begins with the division of microspore. The microspore is haploid (x) which divides transversely into two unequal cells. The smaller cell is vegetative in nature and called as prothallial cell. The larger cell is antheridial cell which divides transversely by a curved cell and forms a small generative cell and a large tube cell.

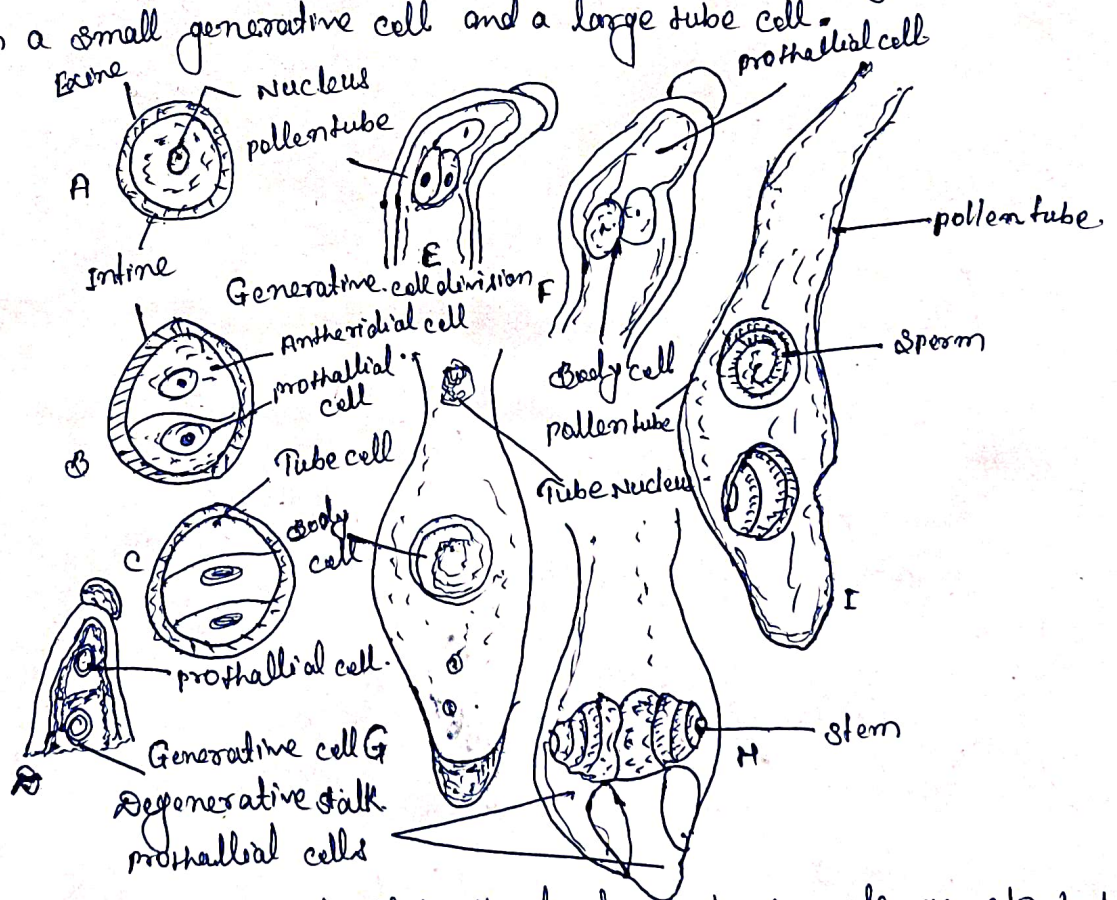


Fig:- A-I stages in the development of male gametophyte.

The antherozoids become free when the mother cell ruptures and reach to the pollen tube.