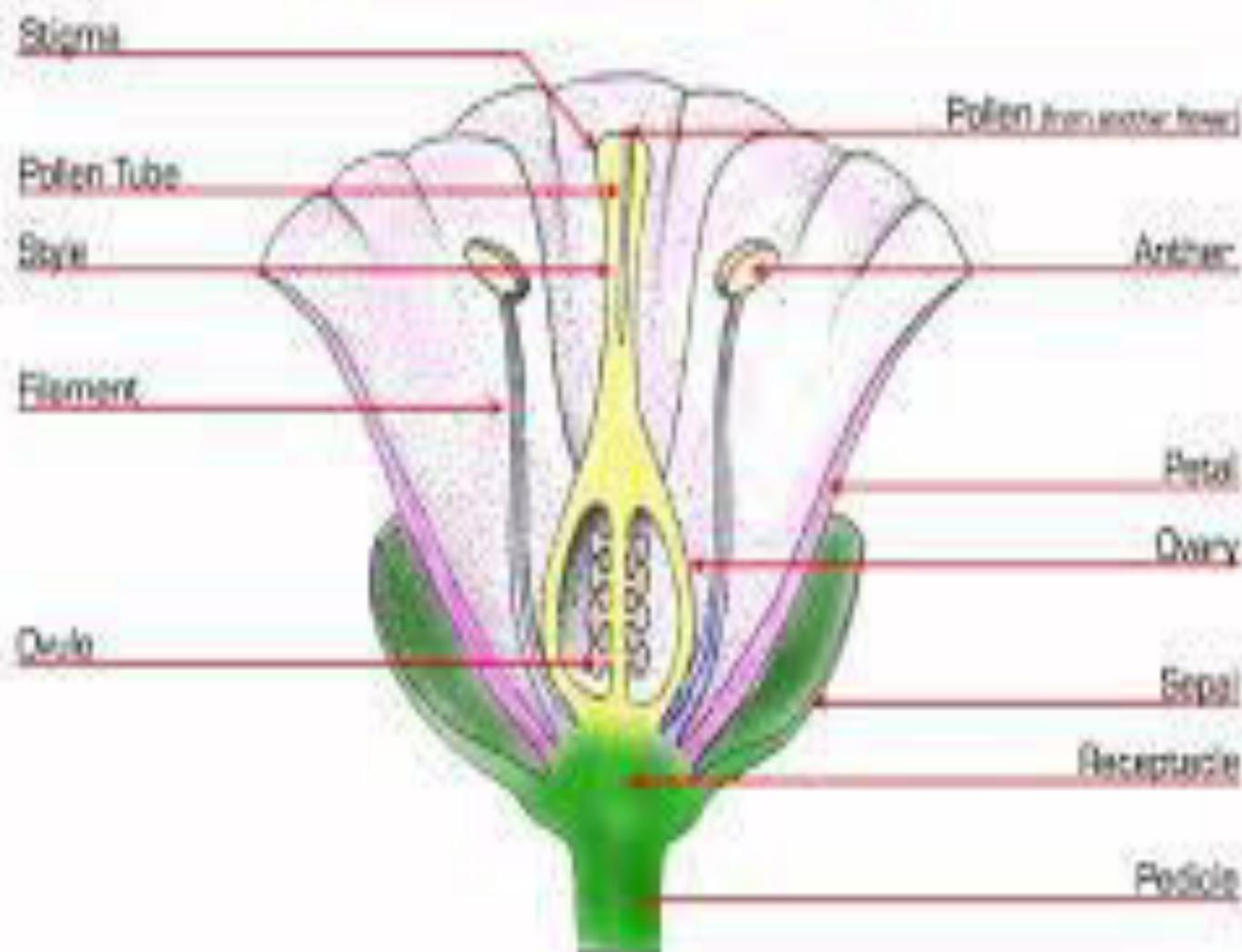
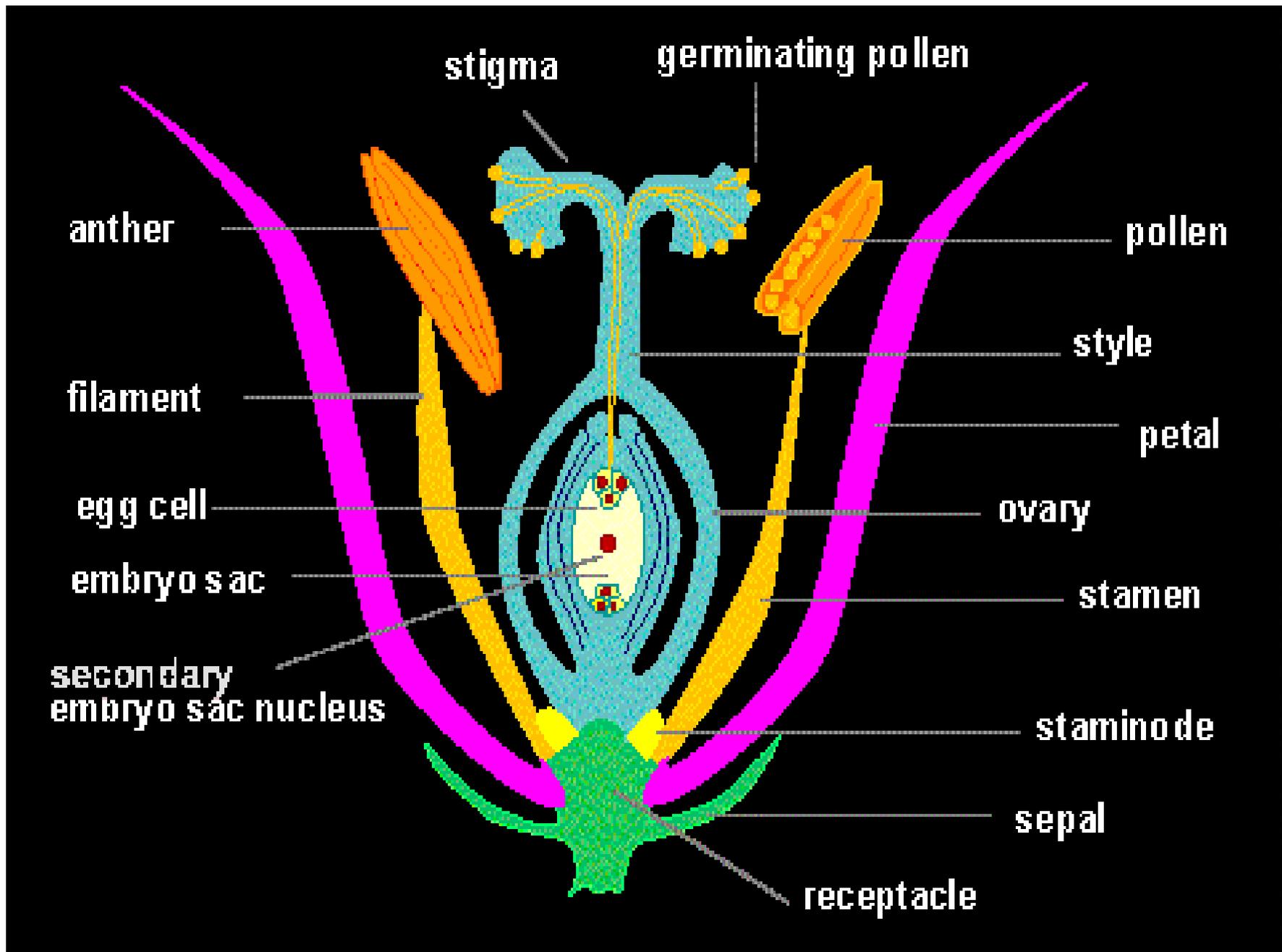
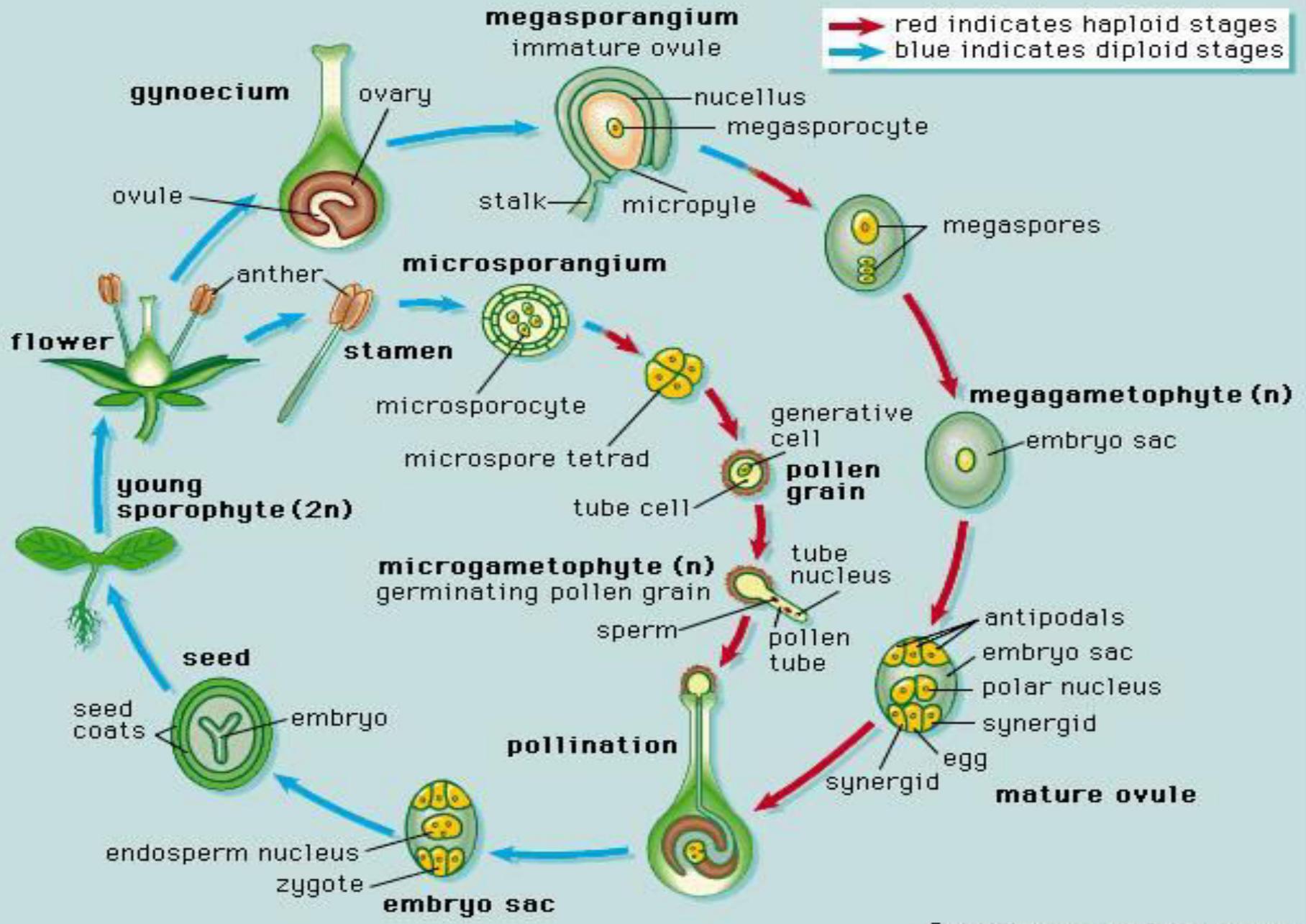
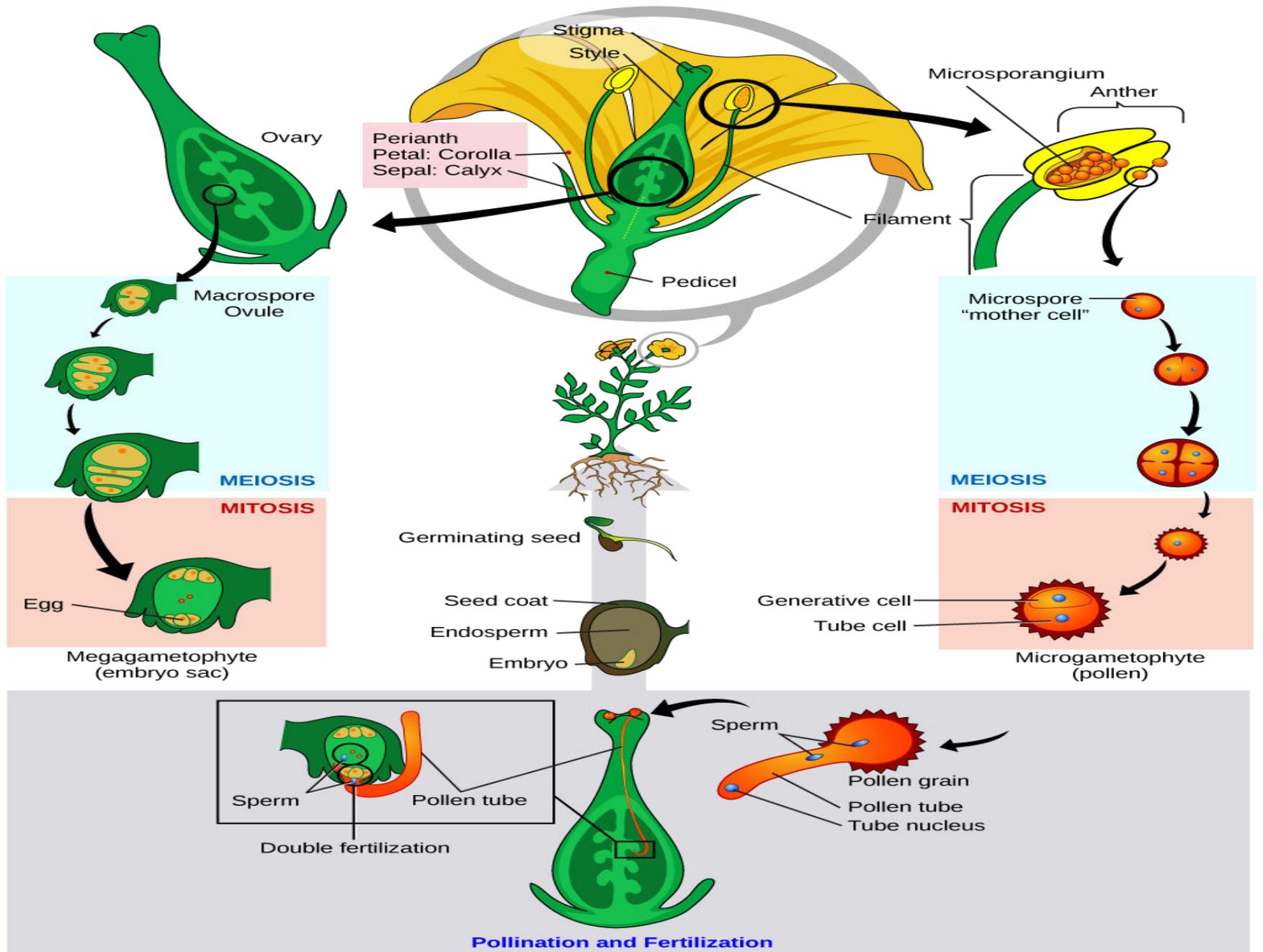


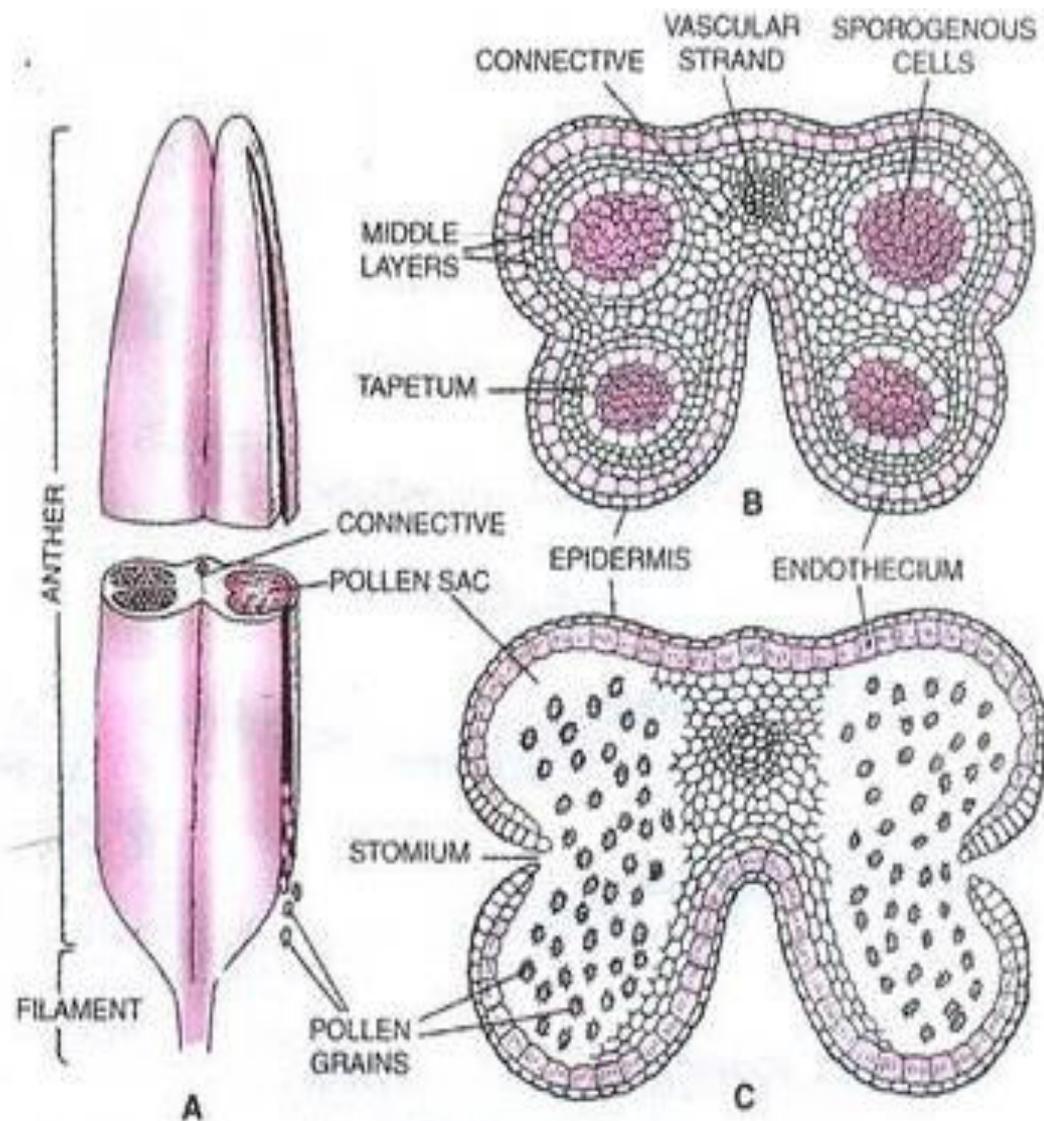
Gladiolus Flower



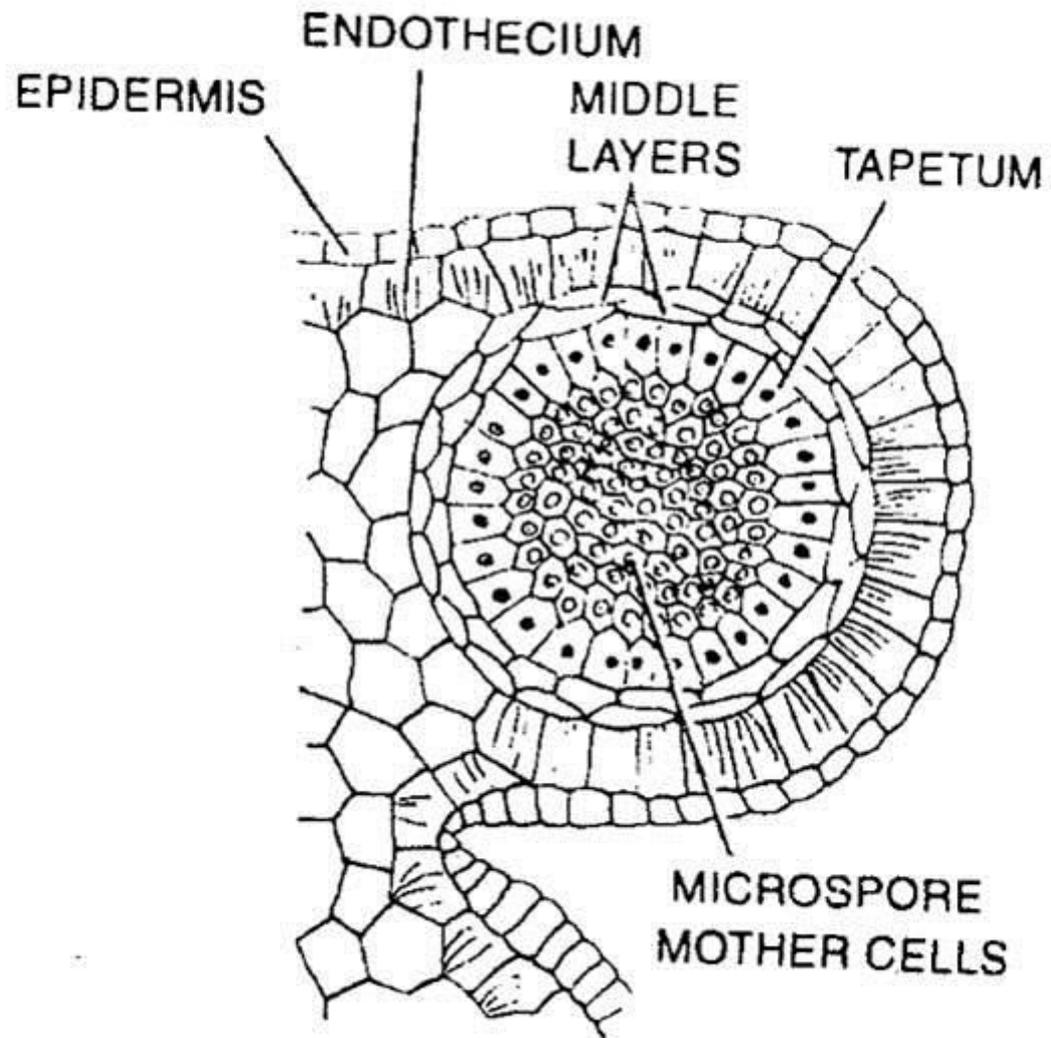


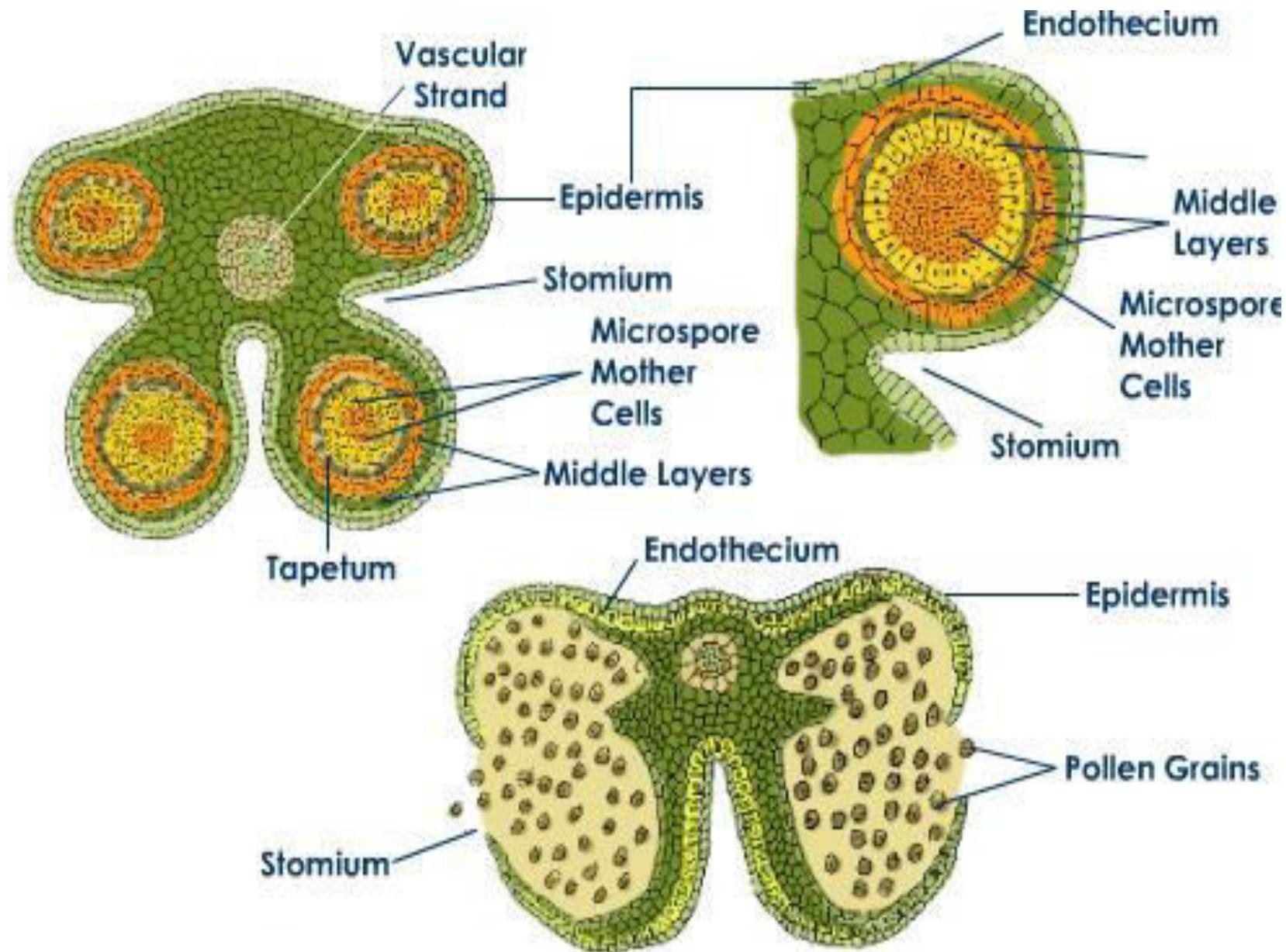






Structure of Anther. A, longitudinally dehiscent anther cut transversely to show pollen sacs and connective. B, T.S. young anther; C, T.S. anther at the time of dehiscence (common or longitudinal type).





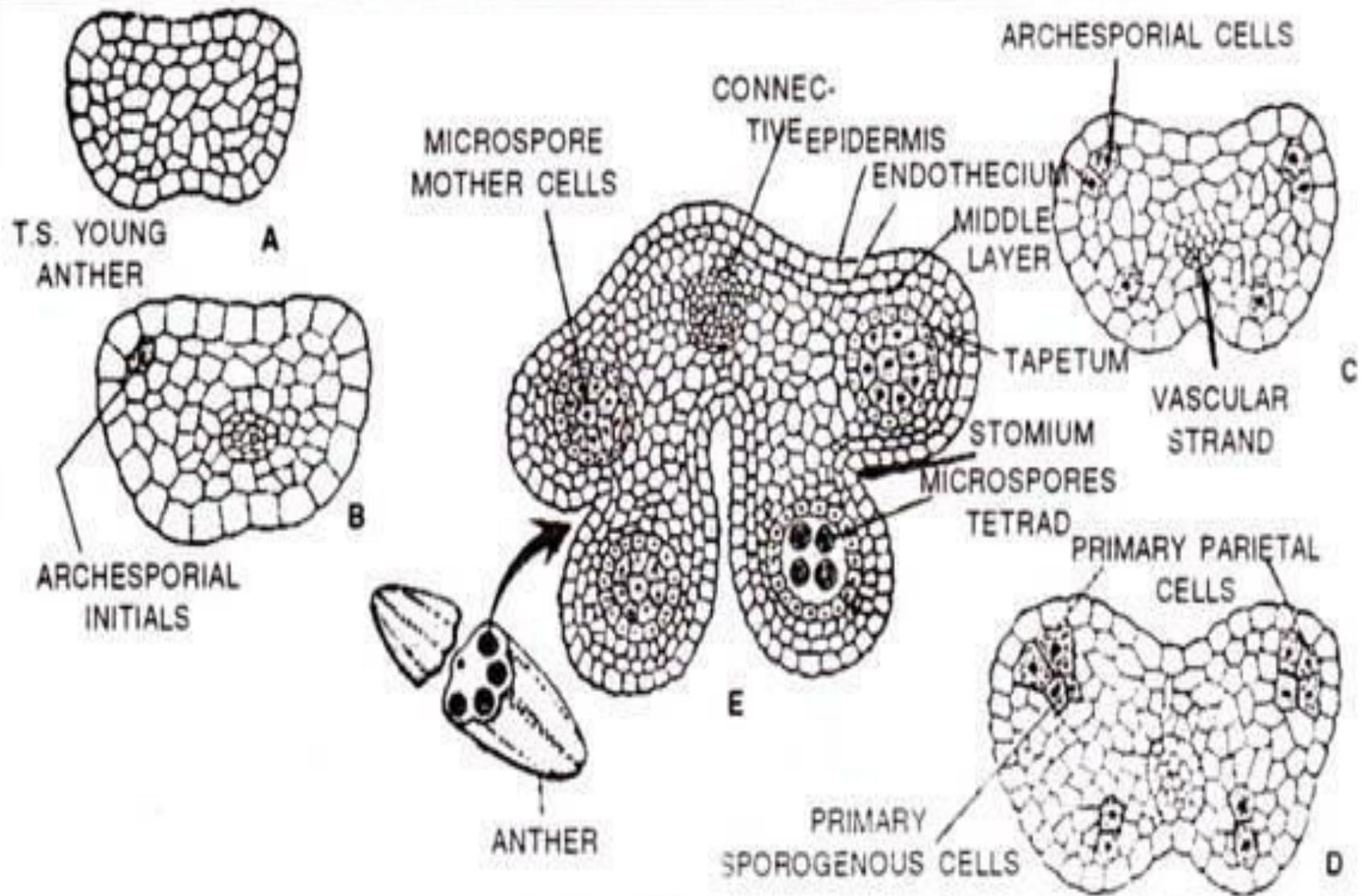


Figure 10.21. Stages in the development of anther. **A**, T. S. young anther; **B**, Differentiation of archesporial initials; **C & D**, Differentiation of primary parietal cells and primary sporogenous cells; **E**, T. S. anther showing four microsporangia containing microspore mother cells and microspore tetrads.

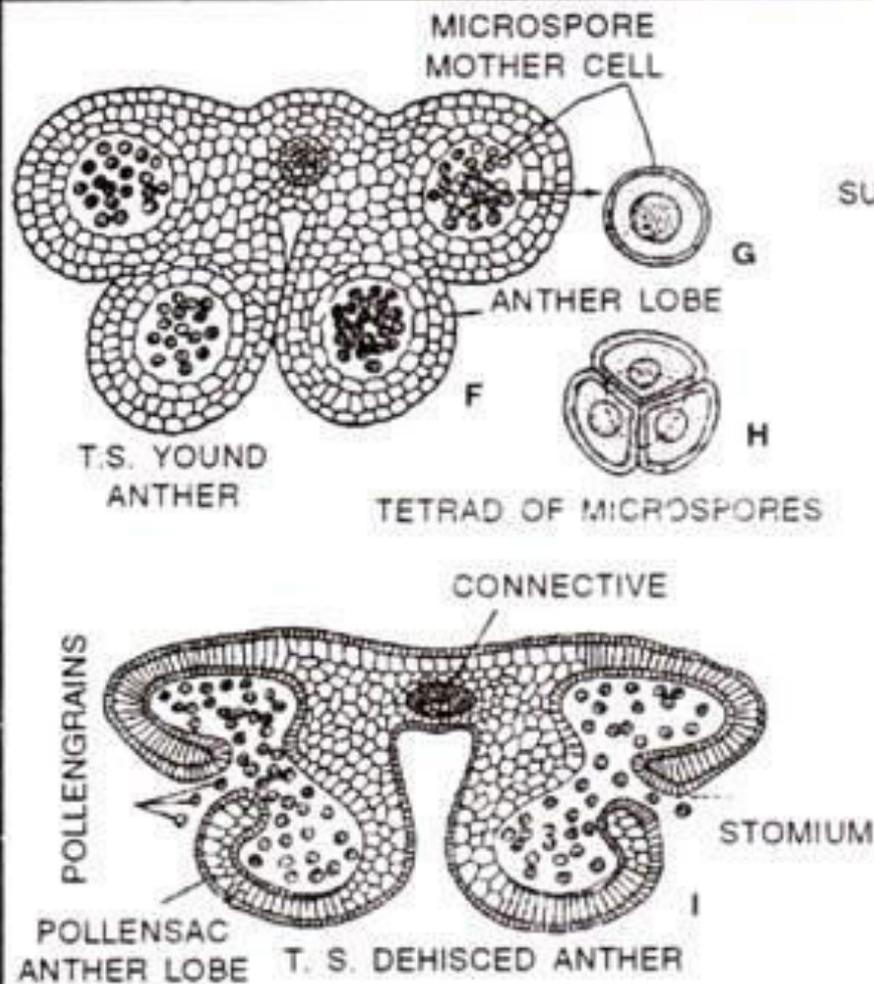


Figure 10.22. Development of pollen grains (microspores) and dehiscence of anther.

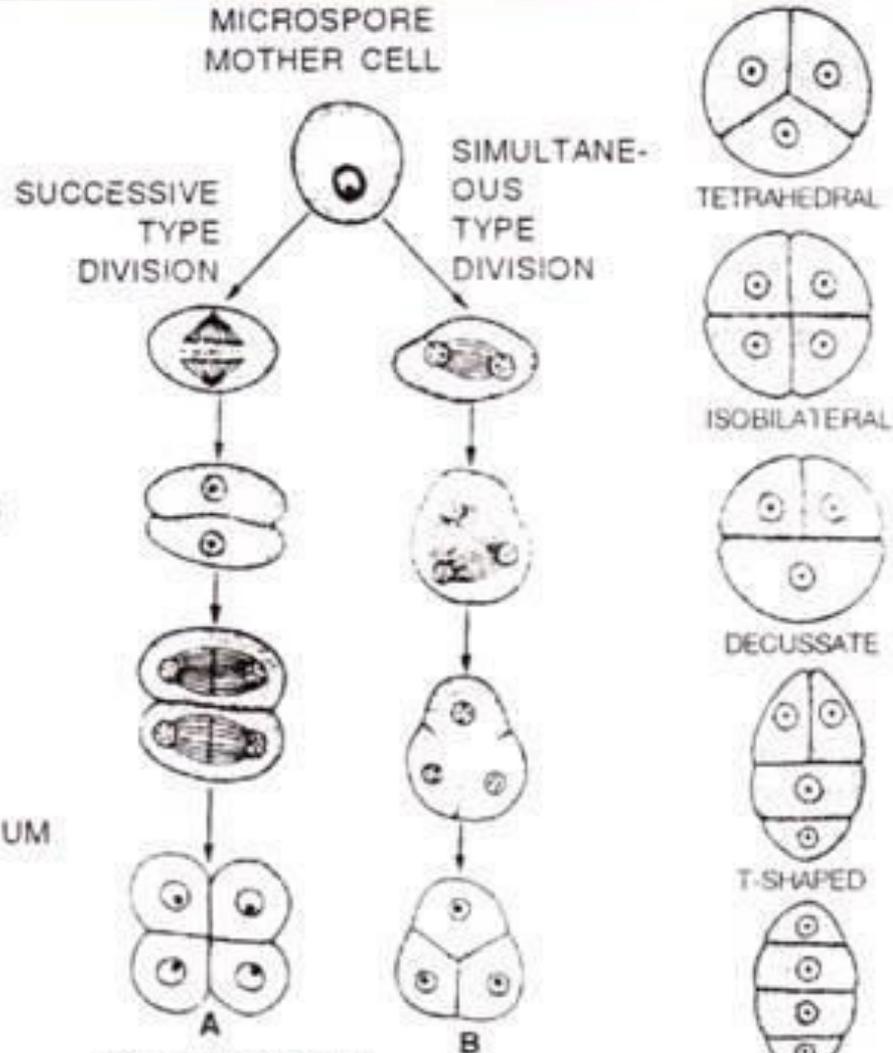


Figure 10.23(A). Microsporogenesis—**A.** Successive type in monocotyledonous plants. **B.** Simultaneous type in dicotyledonous plants.

Figure 10.23(B). Different types of microspore tetrads.

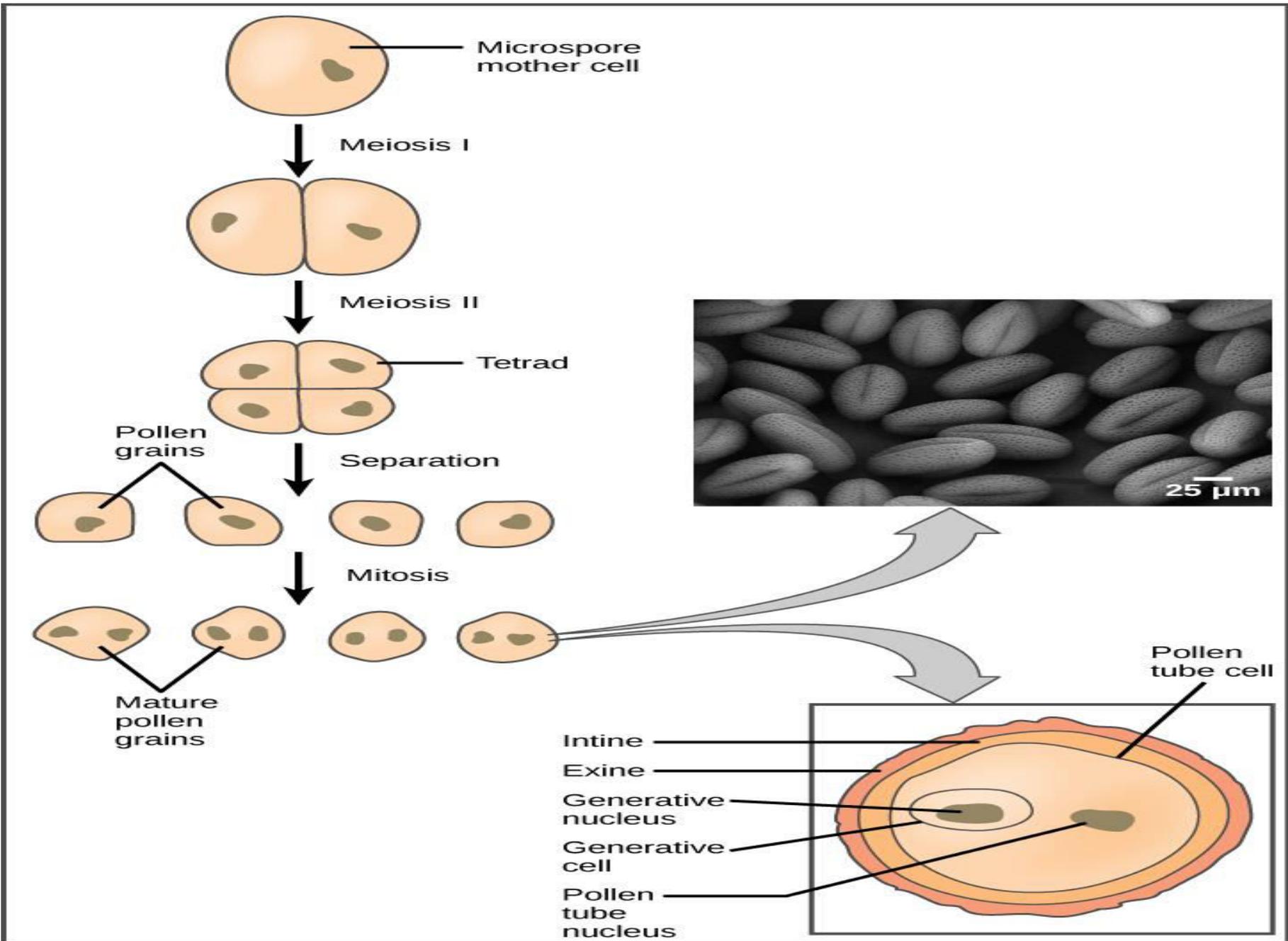
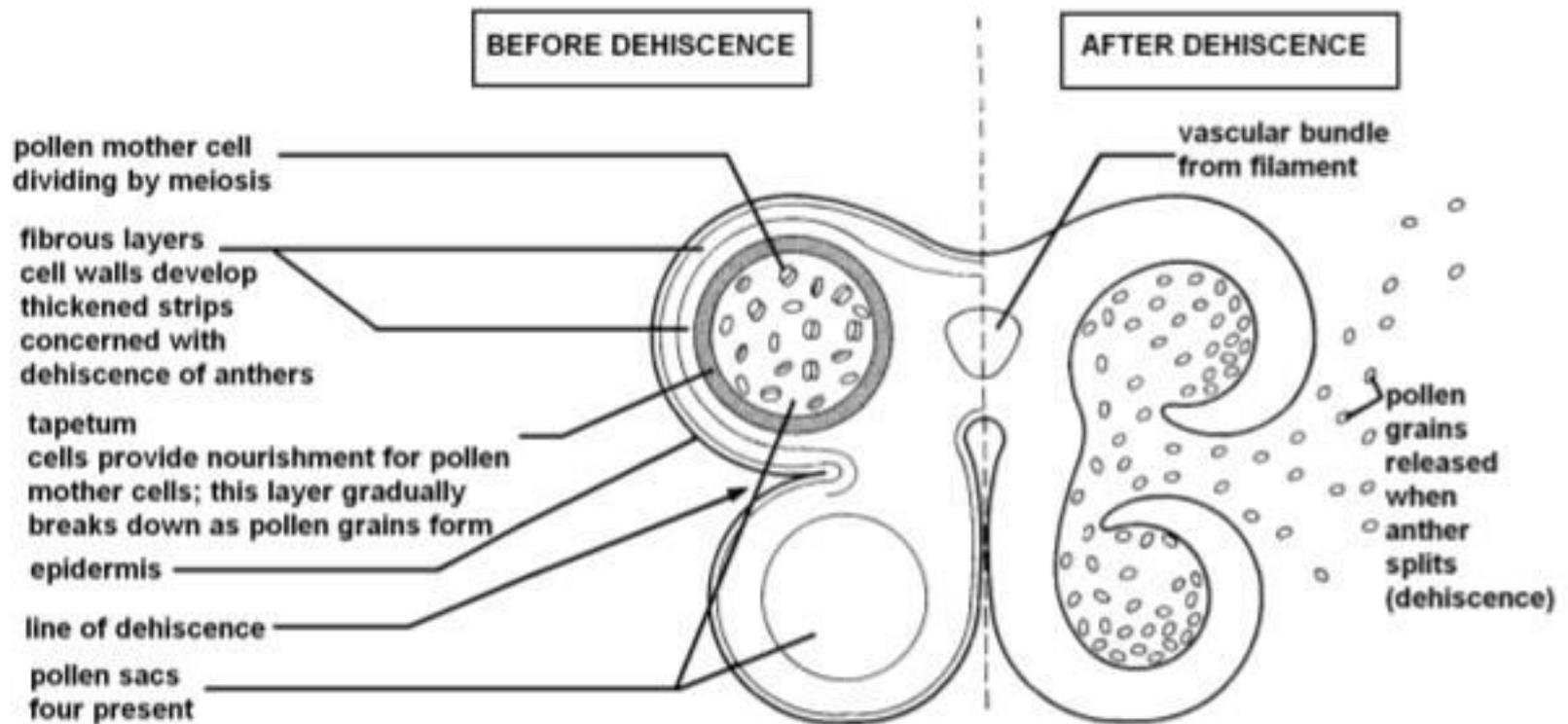
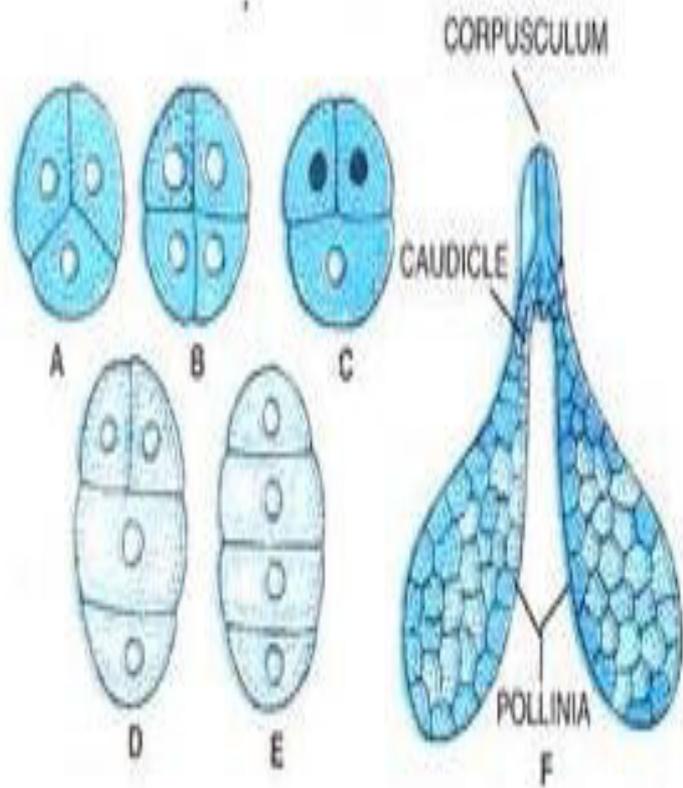


Fig. 22 TS mature anther before and after dehiscence.





Kinds of Microspore tetrads in angiosperms.
 A—Tetrahedral tetrad; B—Isobilateral tetrad;
 C—Decussate tetrad; D—F shaped tetrad; E—Linear
 tetrad; F—Pollinium of *Ak* or *Calotropis*.

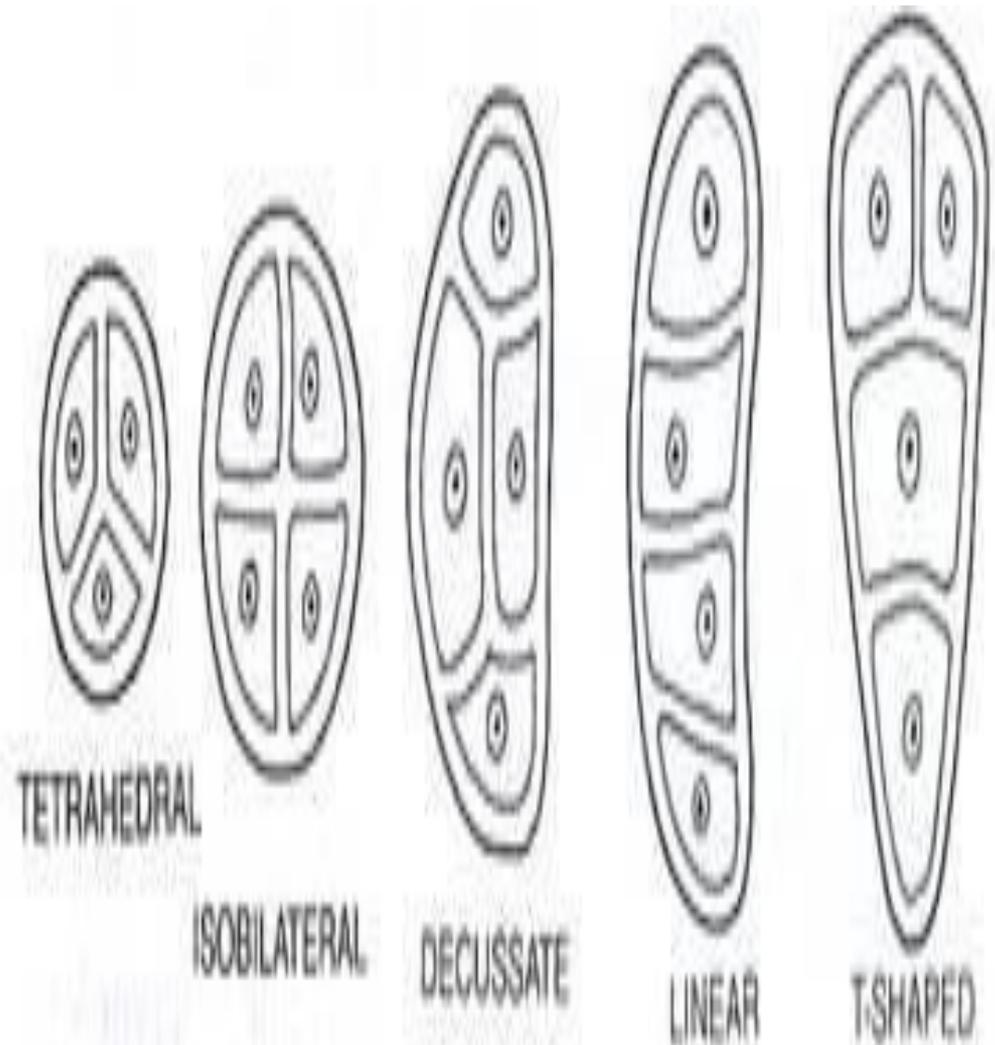
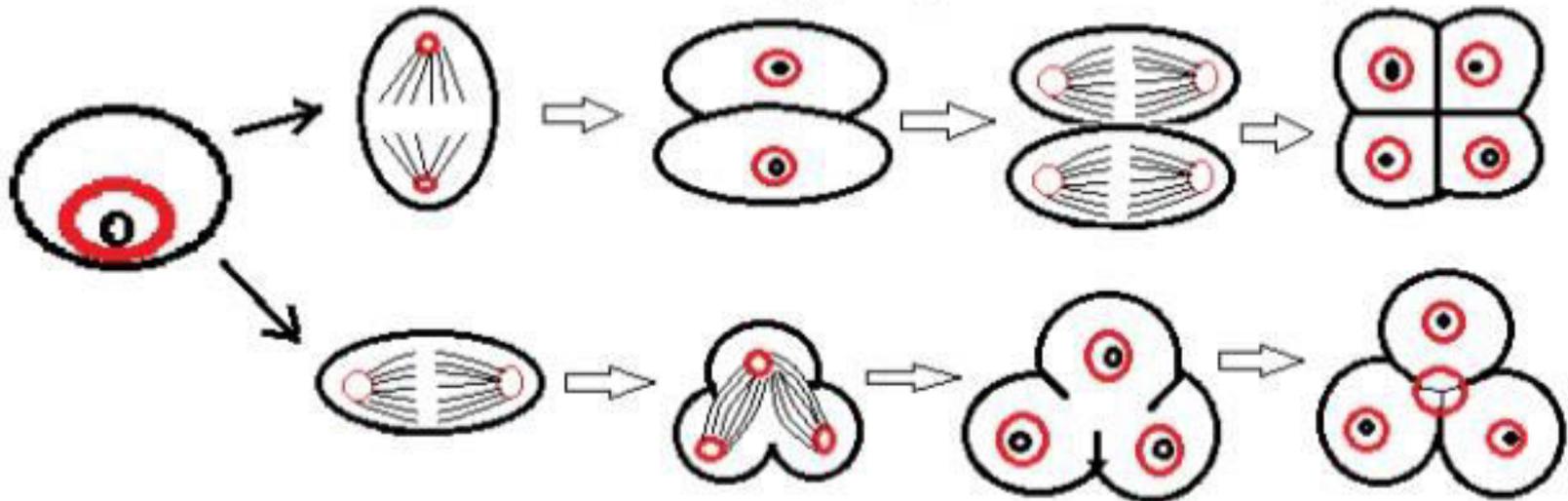


Fig. 2.5. Types of microspore tetrads in *Aristolochia*.

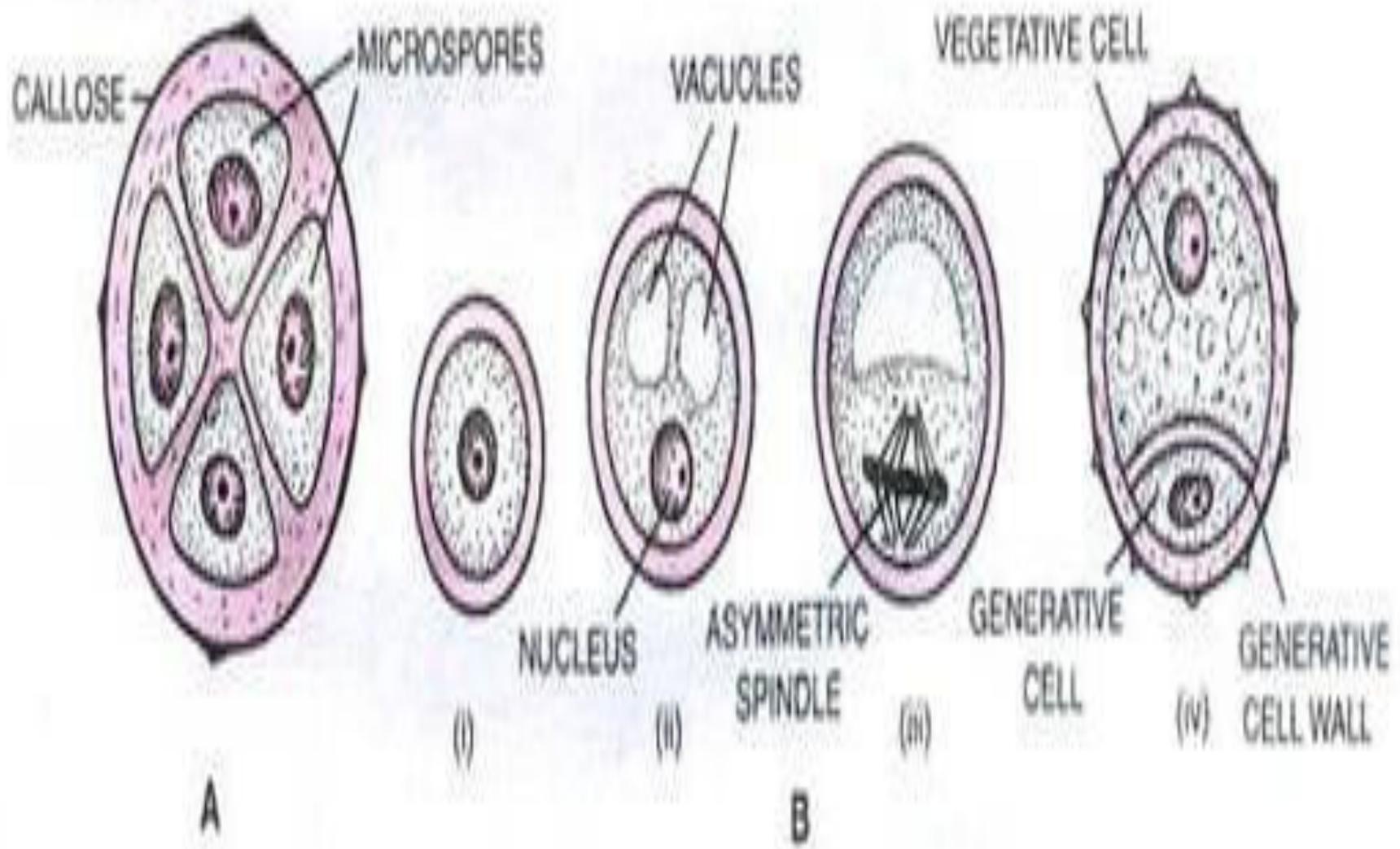
Two Type Of Cytokinesis In

Microsporogenesis :-

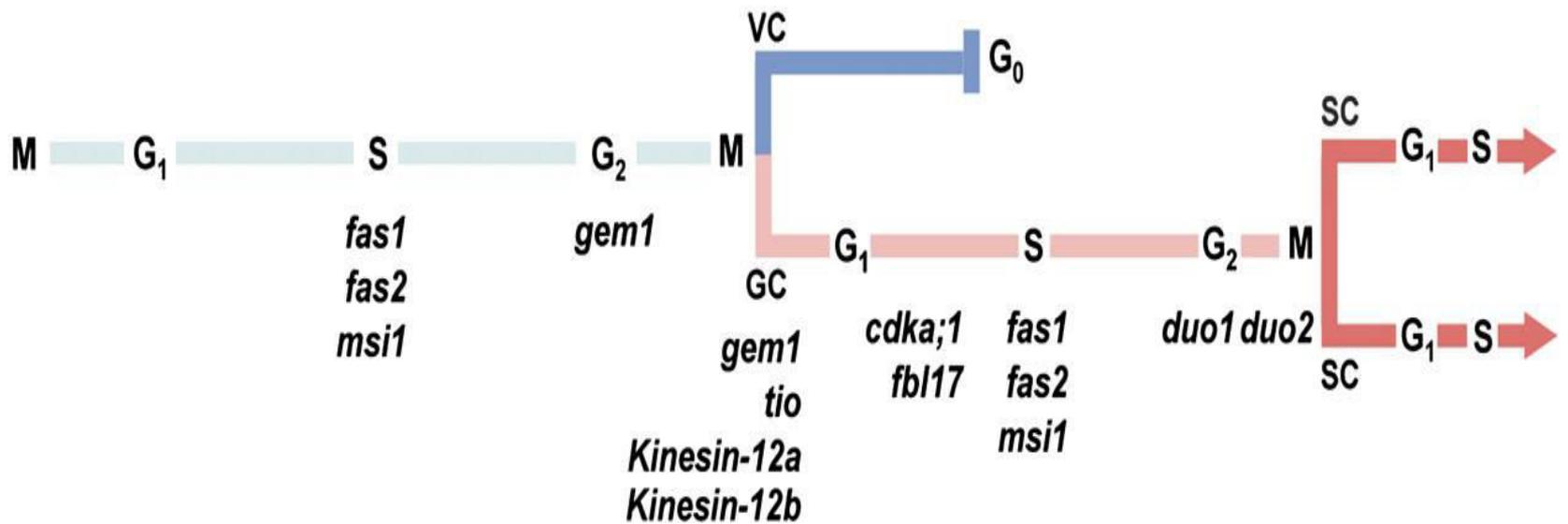
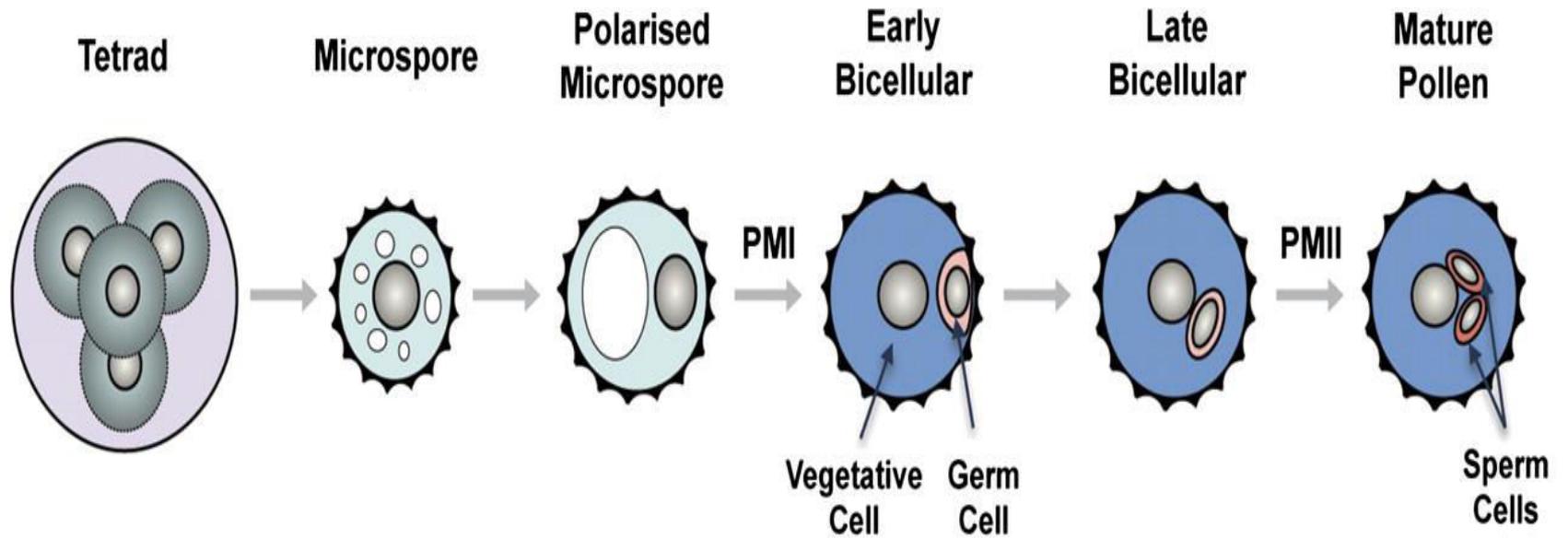
Successive Type (In Monocot)



Simultaneous Type (In Dicot)



Microsporogenesis. A, a microspore tetrad. B, a microspore maturing into a pollen grain.



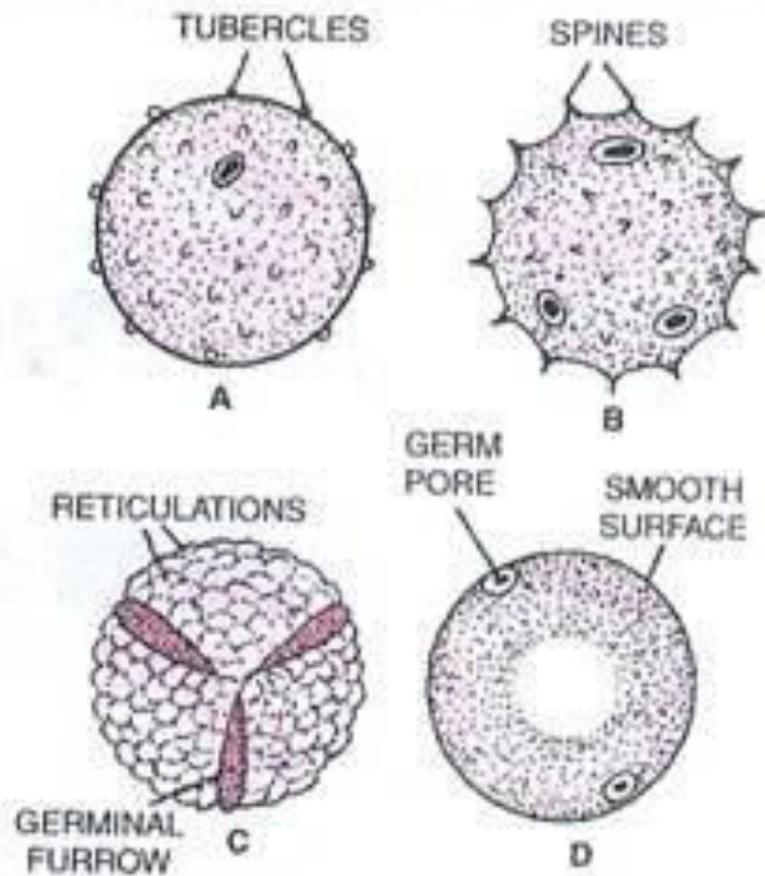
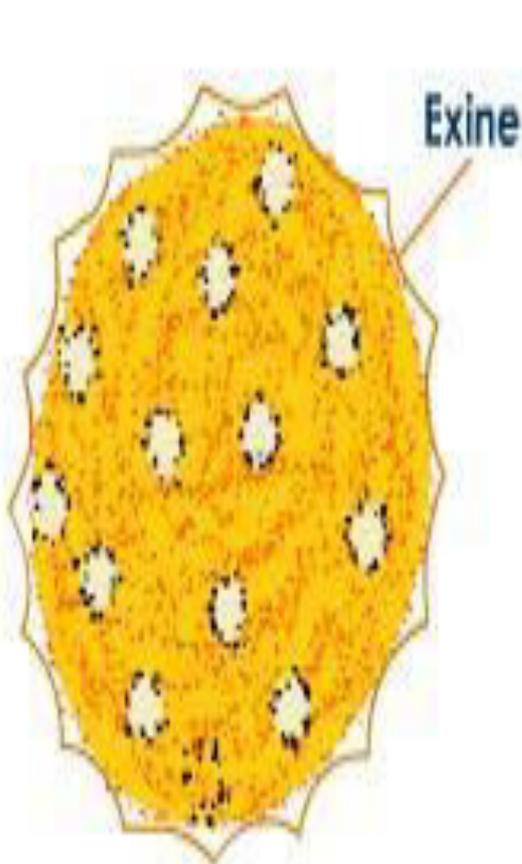
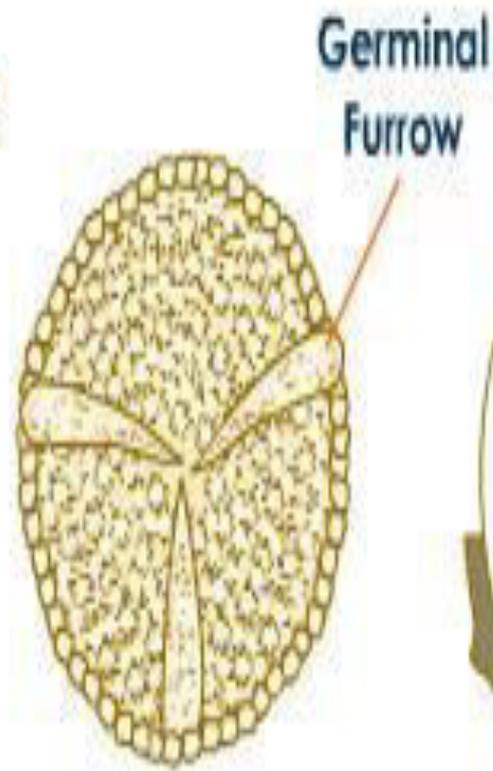


Fig. 2.6. Common pollen grain sculpturing.





A



B



C

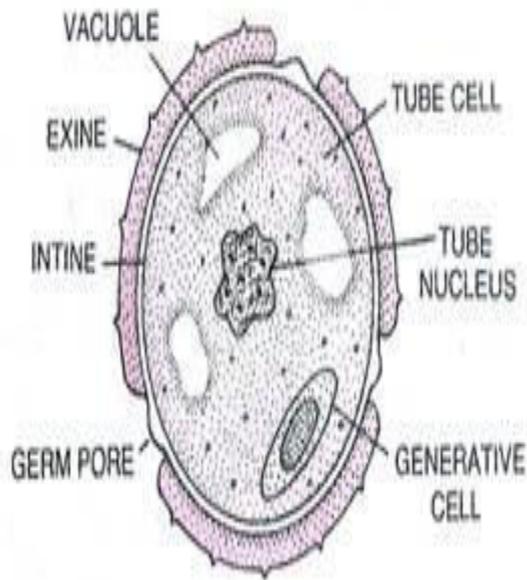
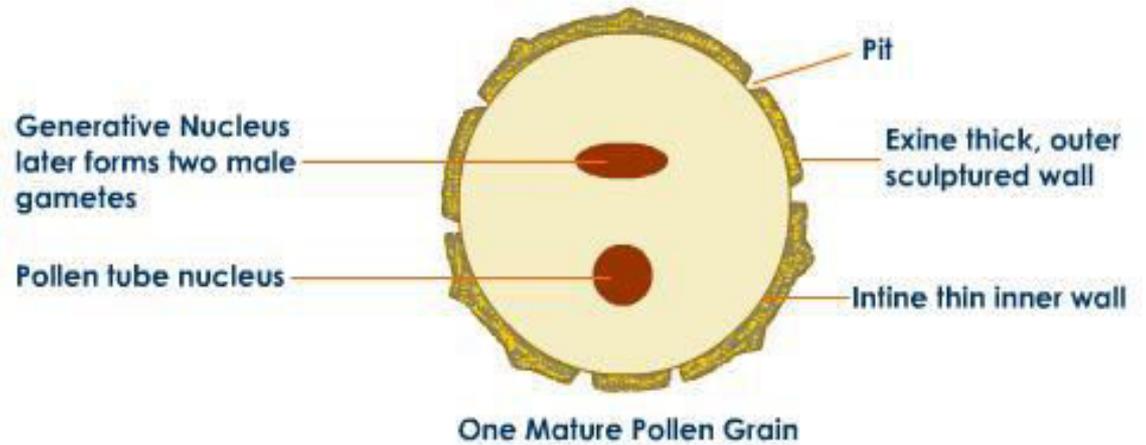
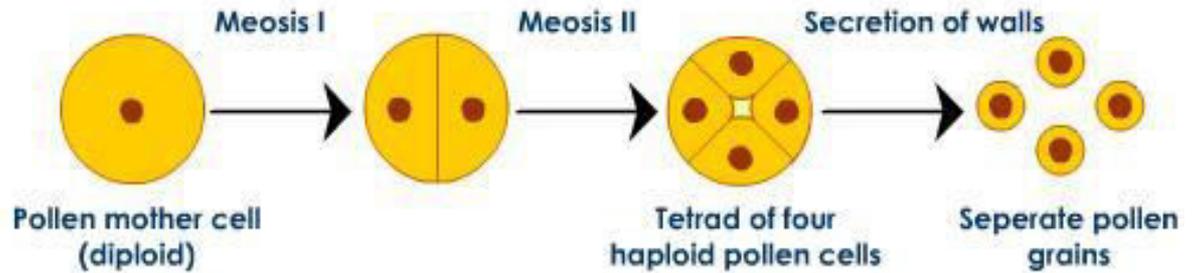
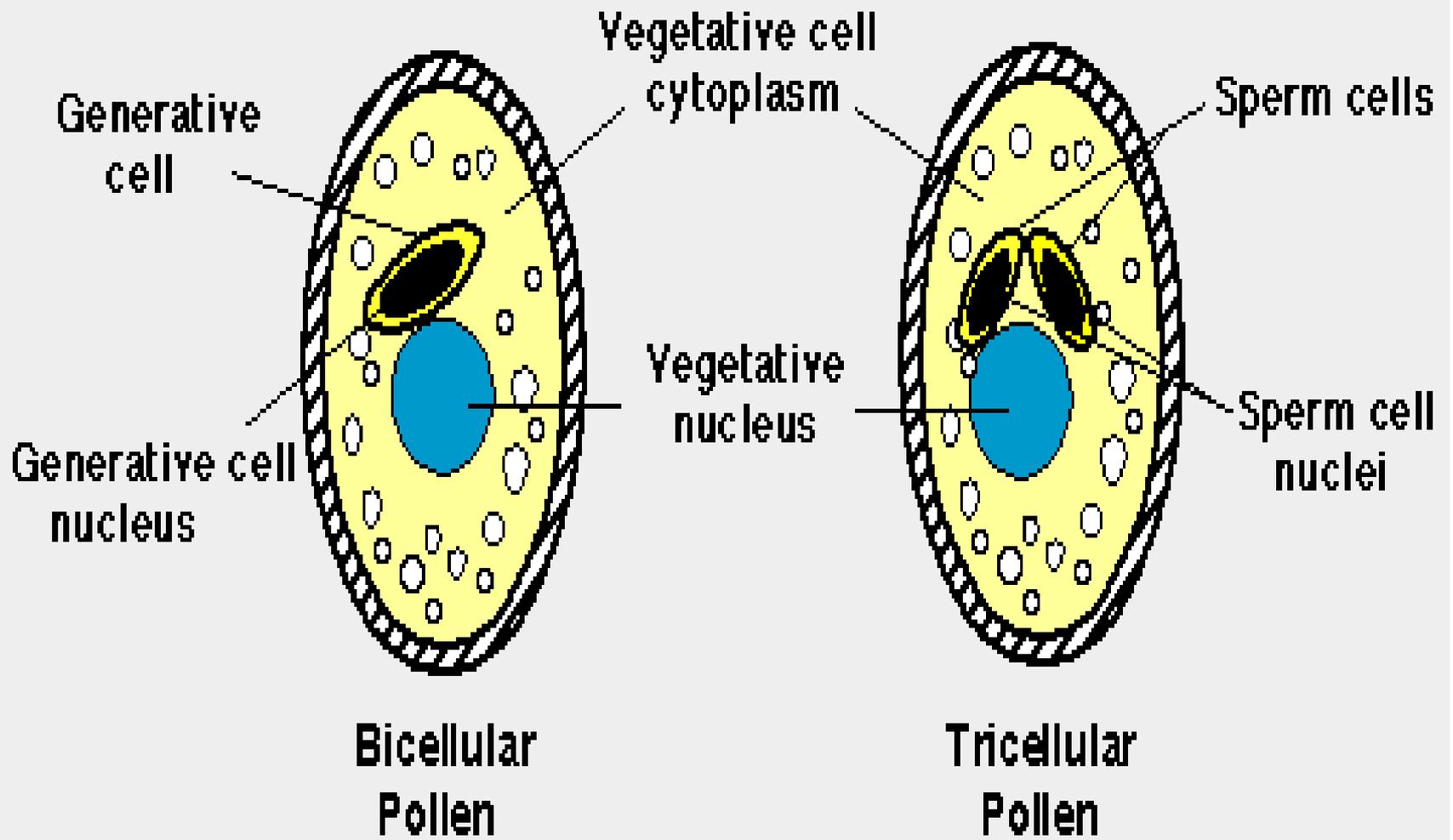


Fig. 2.7. Section of a mature 2 celled pollen grain of an angiosperm.







PC, Pollen coat

Te, Tectum

Ba, Bacula

FL, Nexine I / Foot layer

No, Nexine II

Ex, Exintin

En, Endintine

PM, Plasma membrane

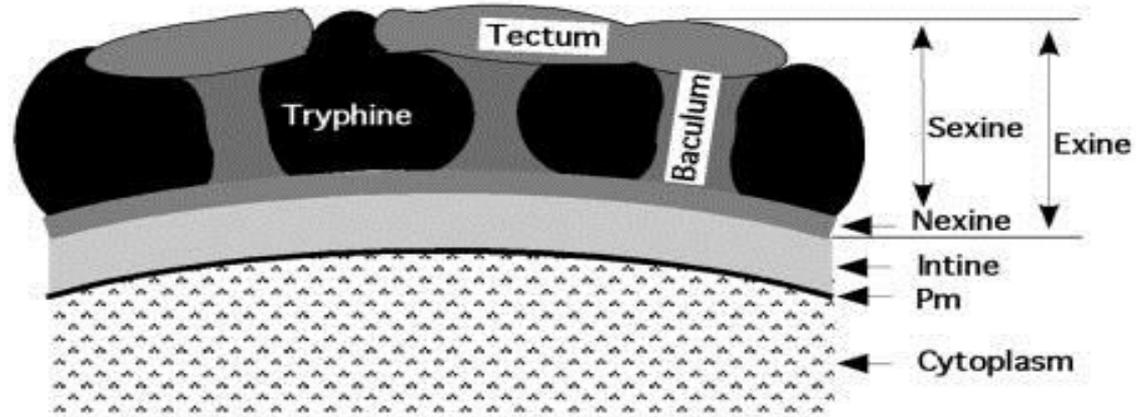
Sexine

Nexine

Exine

Intine

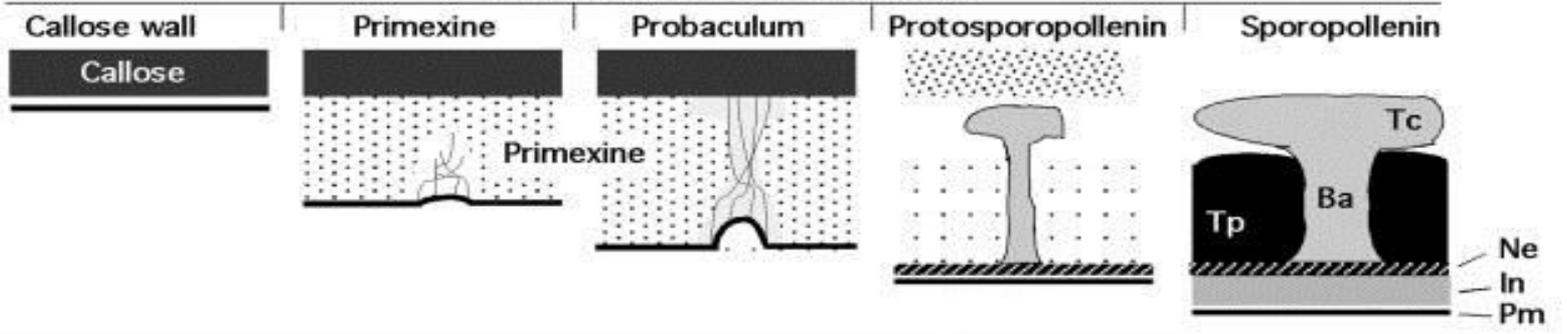
(a)



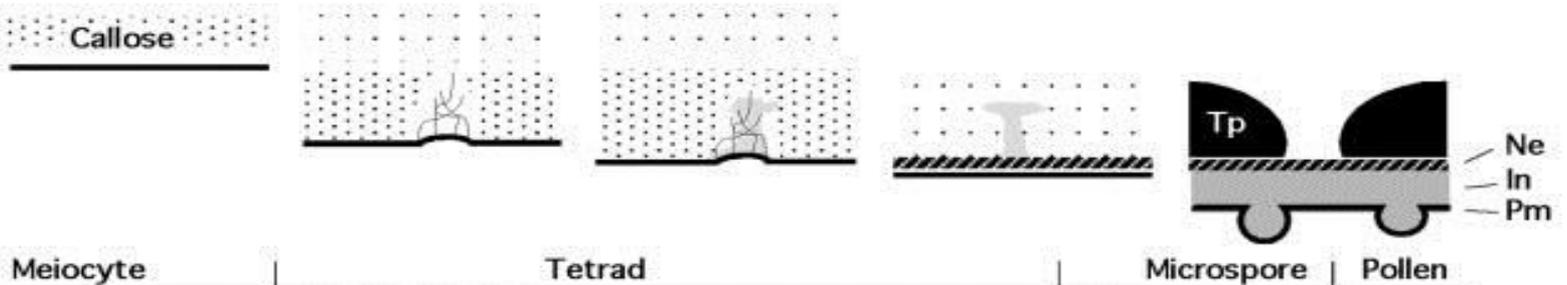
(b)

Stages of exine development

WT



cals5



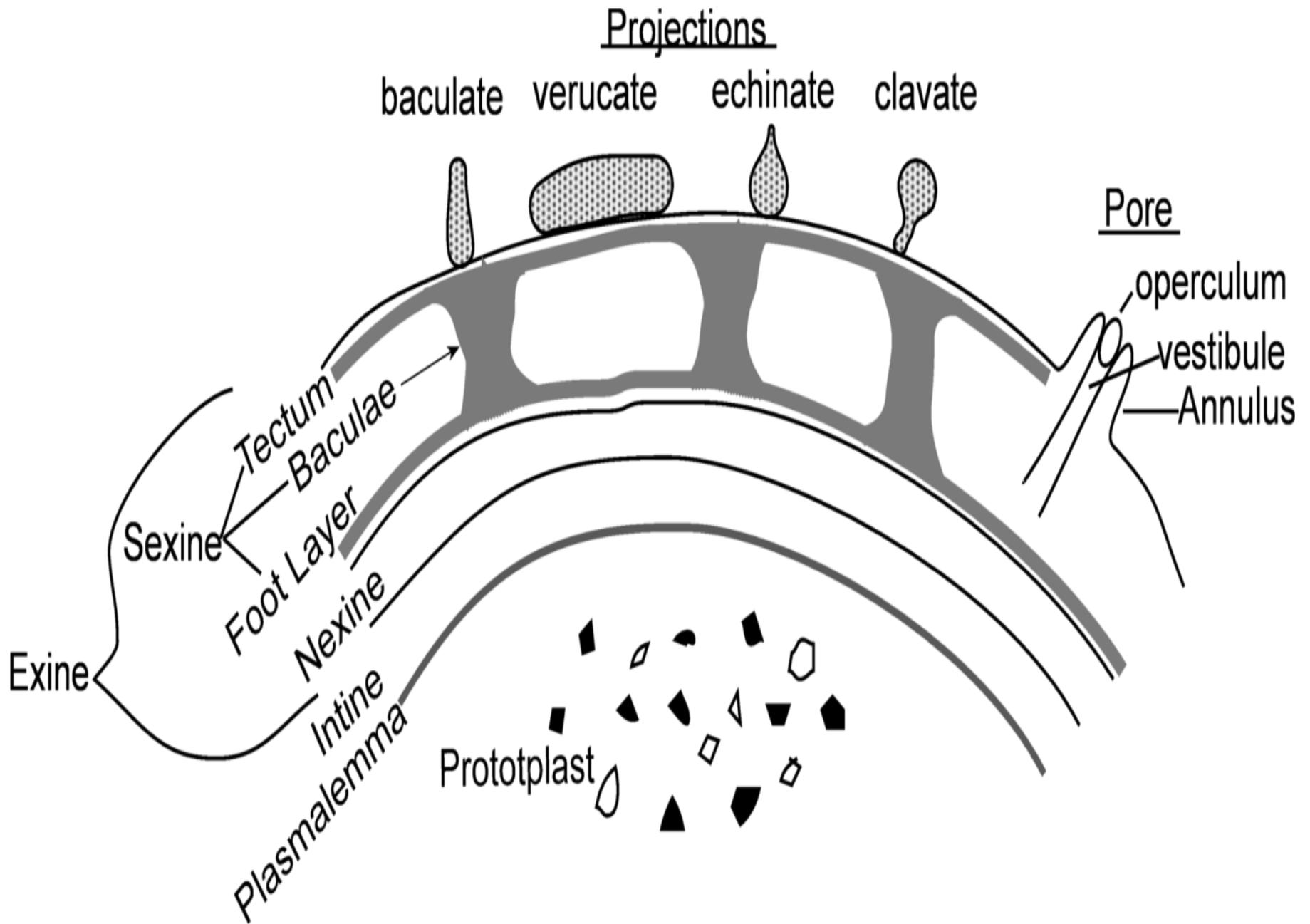
Meiocyte

Tetrad

Microspore

Pollen

Stages of microgametogenesis



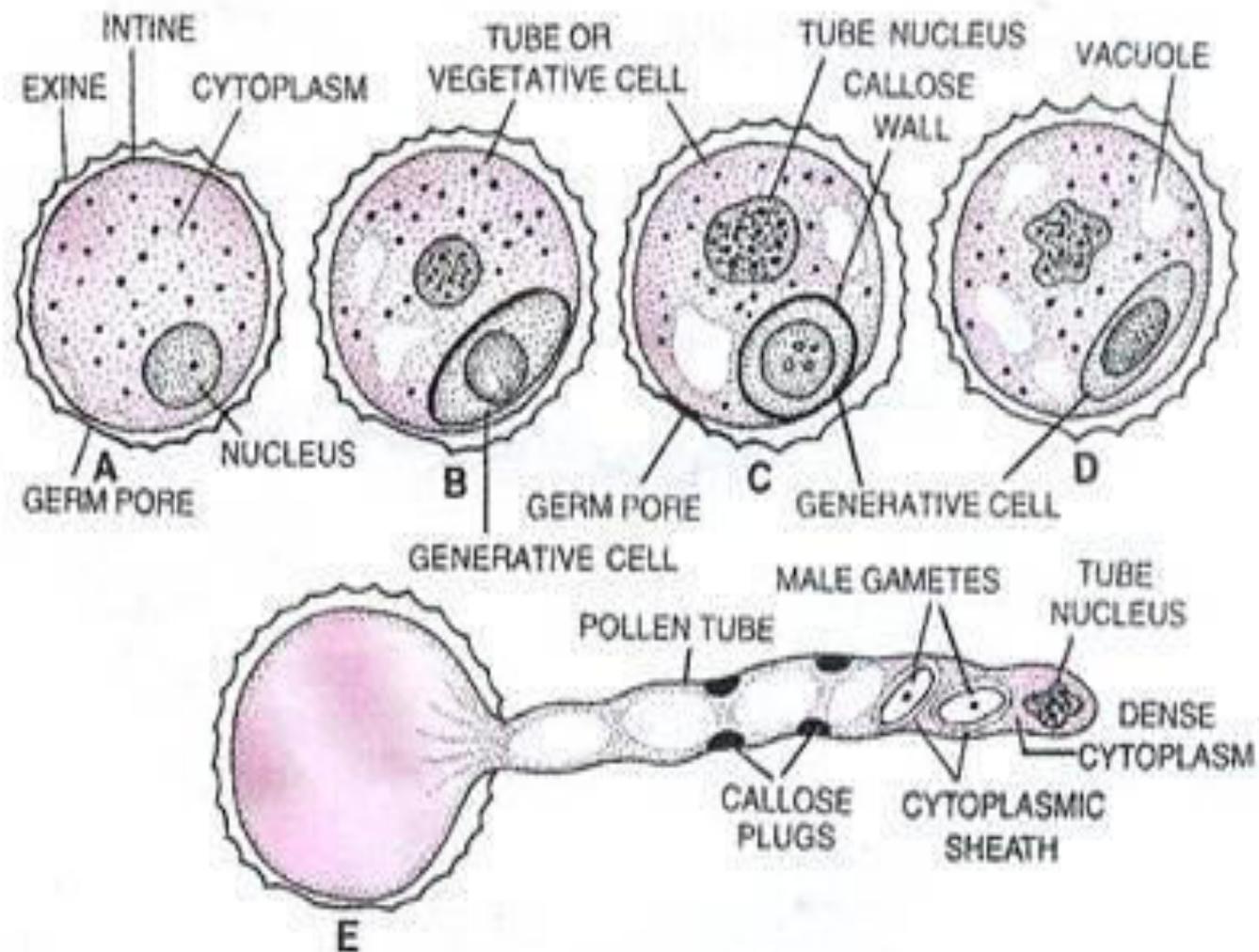


Fig. 2.9. Germination of pollen grain and formation of male gametophyte in an angiosperm.

Structure of pollen grain:

