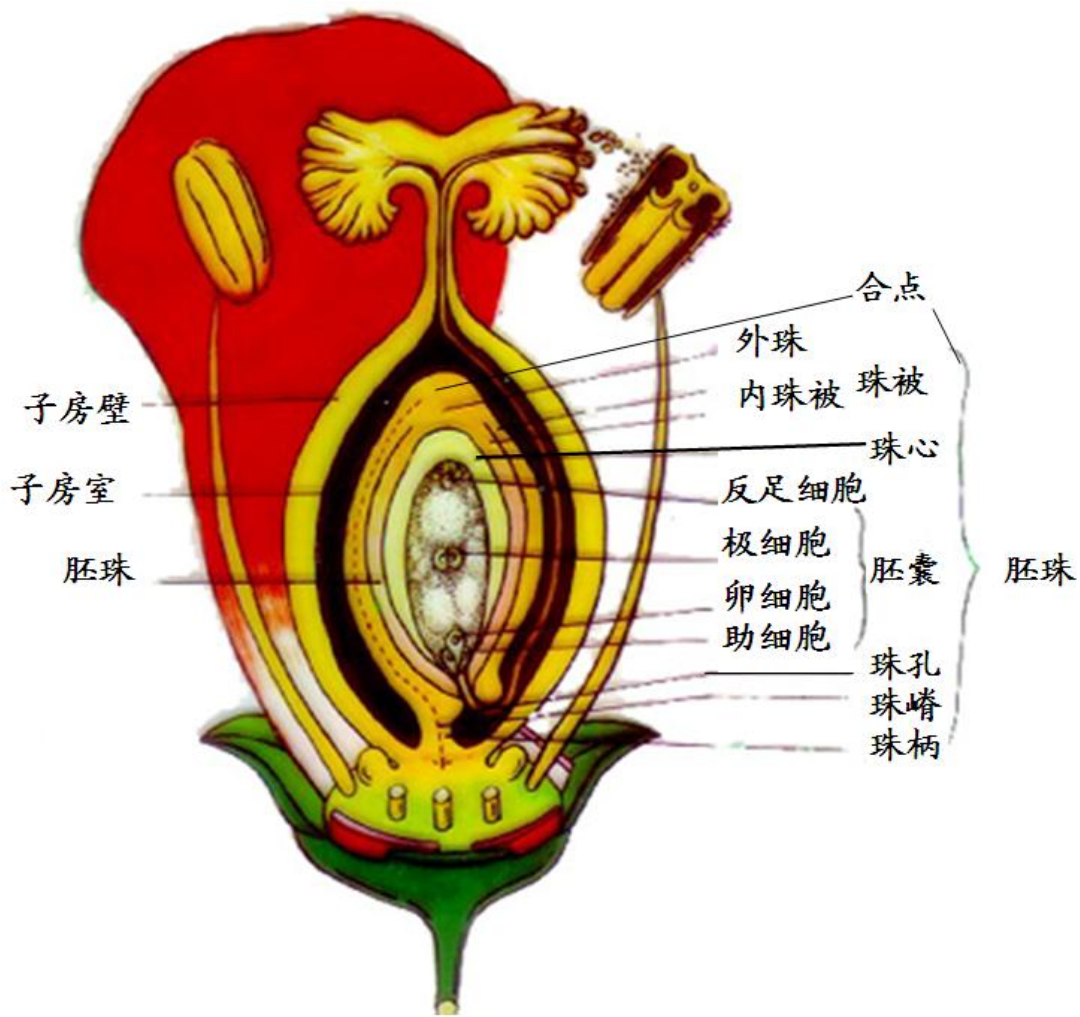


第四节 胚珠的发育和胚囊的形成

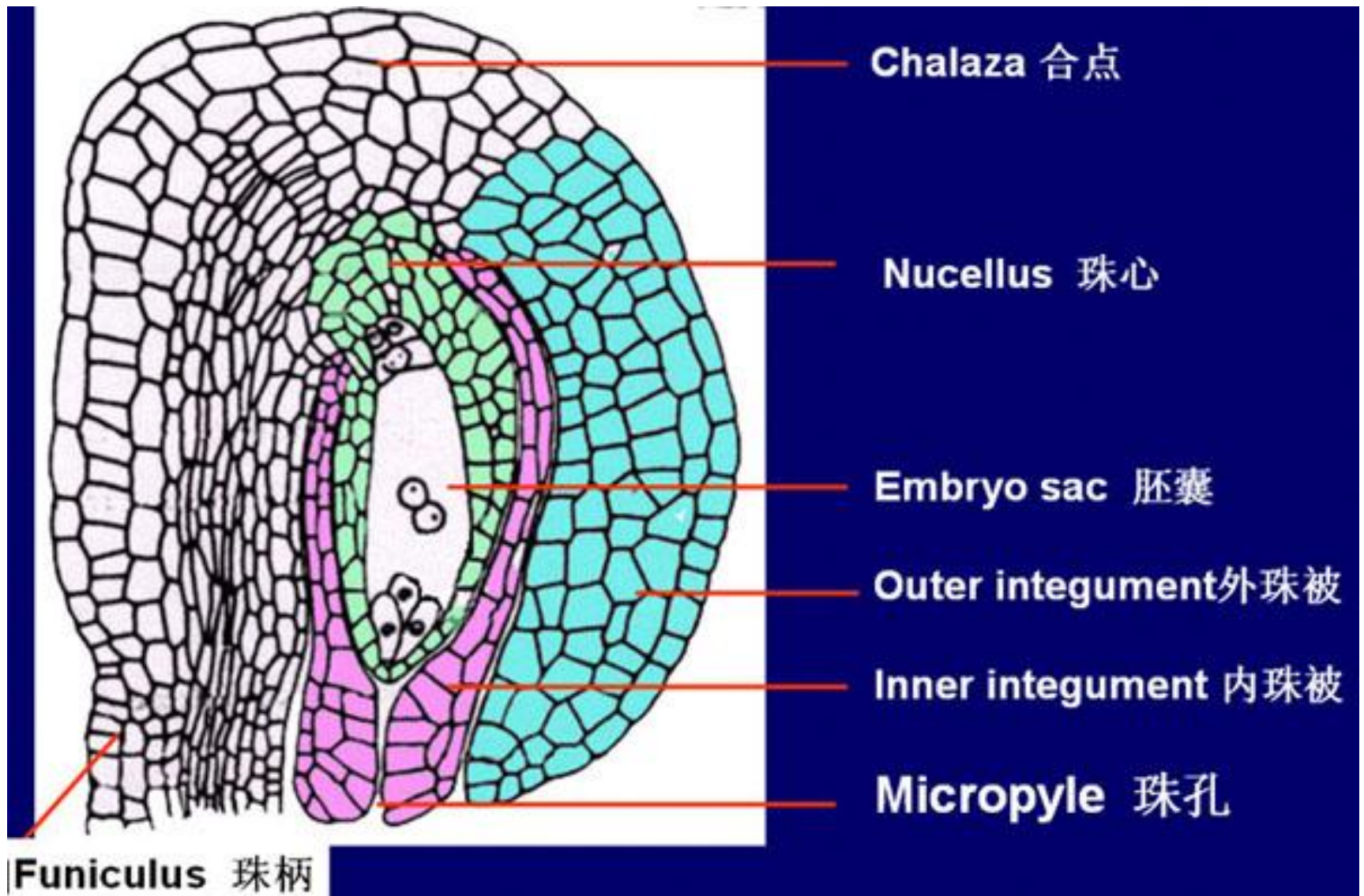
**胚珠的发育
大孢子的发生
胚囊的形成**



- **胚珠:**
- 由心皮内表面沿腹缝处形成的突起发展演变而成的
- **珠心:**最初产生的一团突起 **心皮:** 变态叶, 大孢子叶

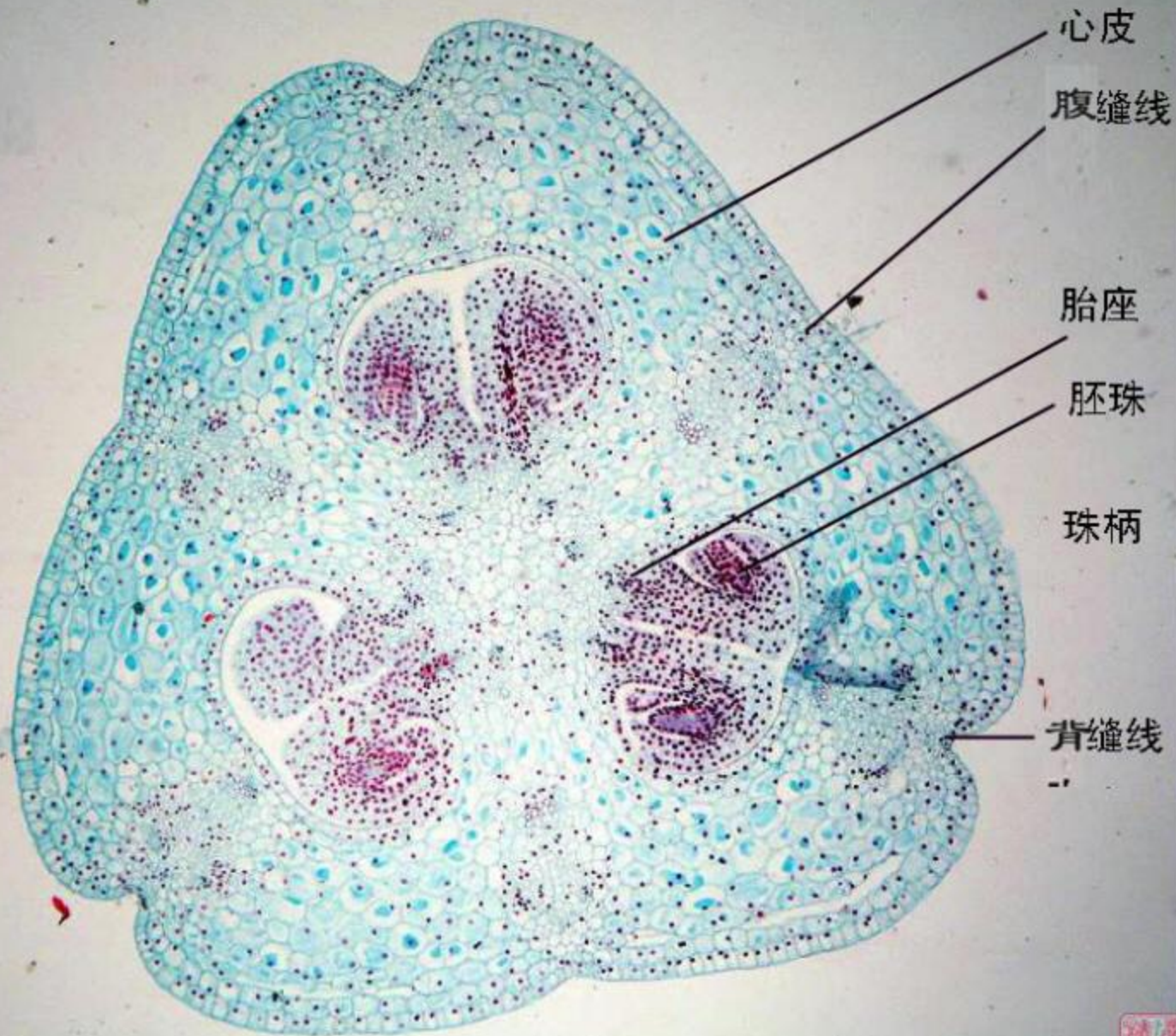


- **胚珠关键词:** 珠被 珠心 珠柄 珠孔 合点



胚珠纵切面

一、胚珠的发育



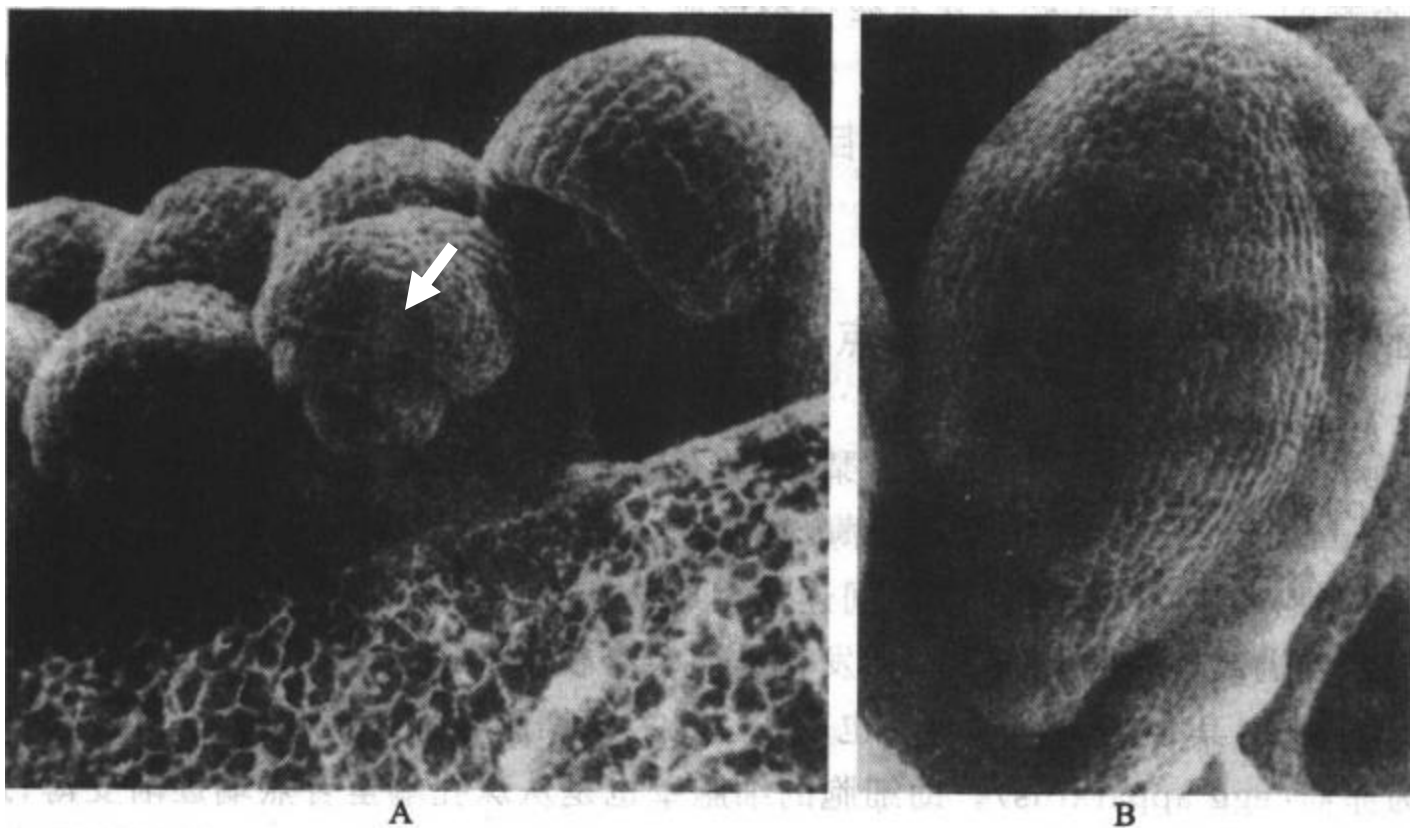
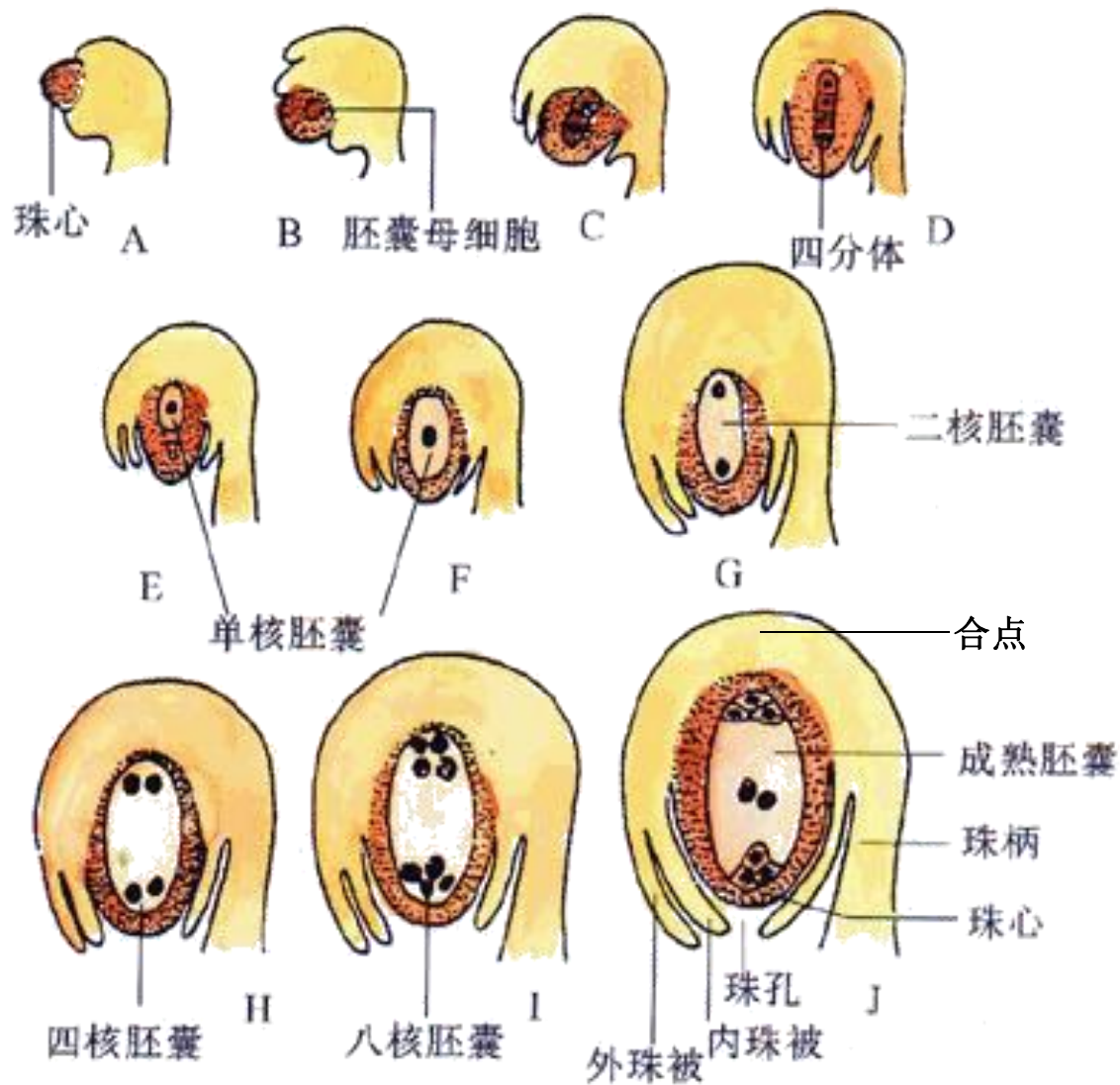


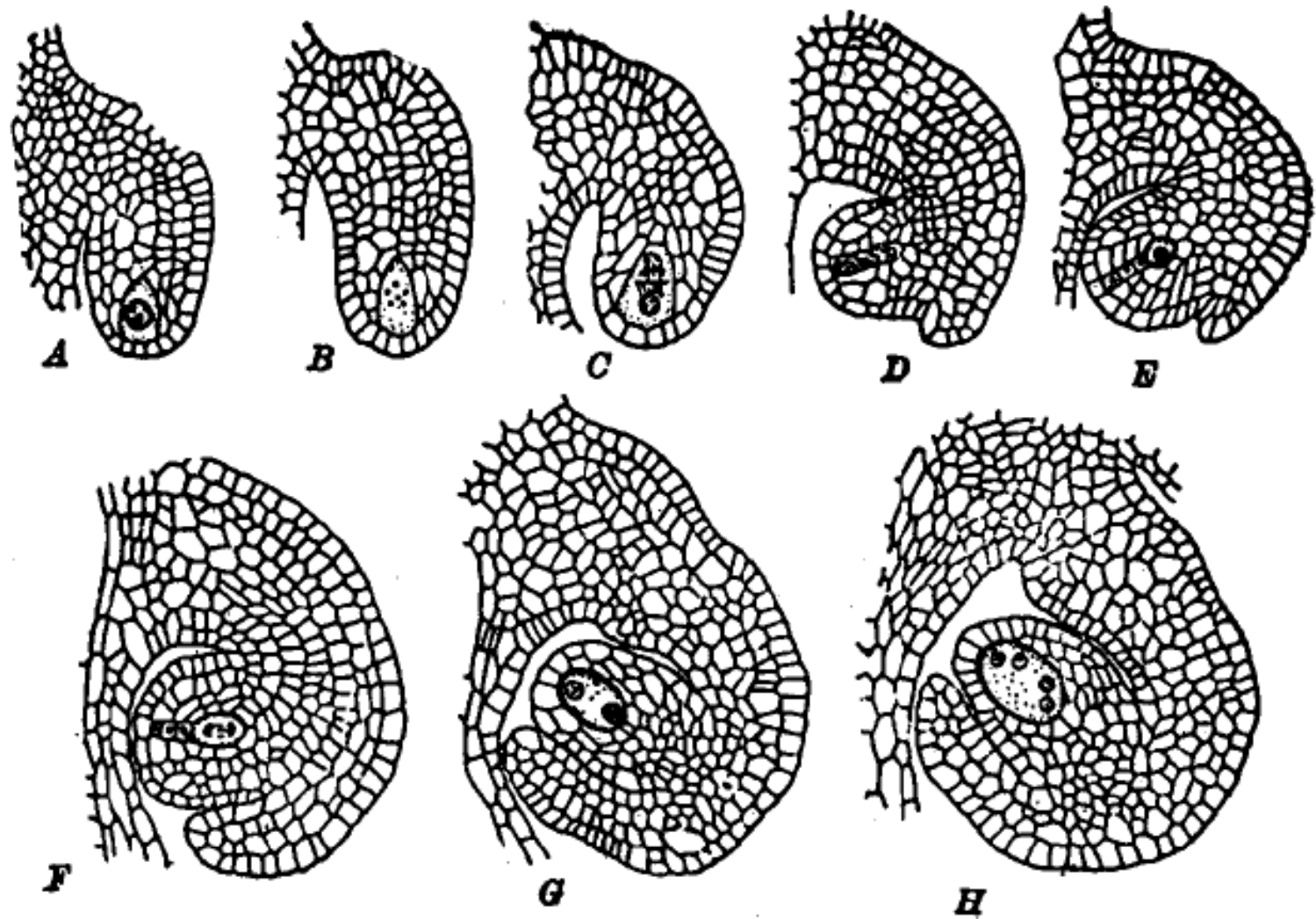
图 8-18 胚珠发育的扫描电镜图

A. 西番莲(*Passiflora versipililo*) 幼期胚珠, 双层珠被正包向珠心 B. 倒生型成熟胚珠

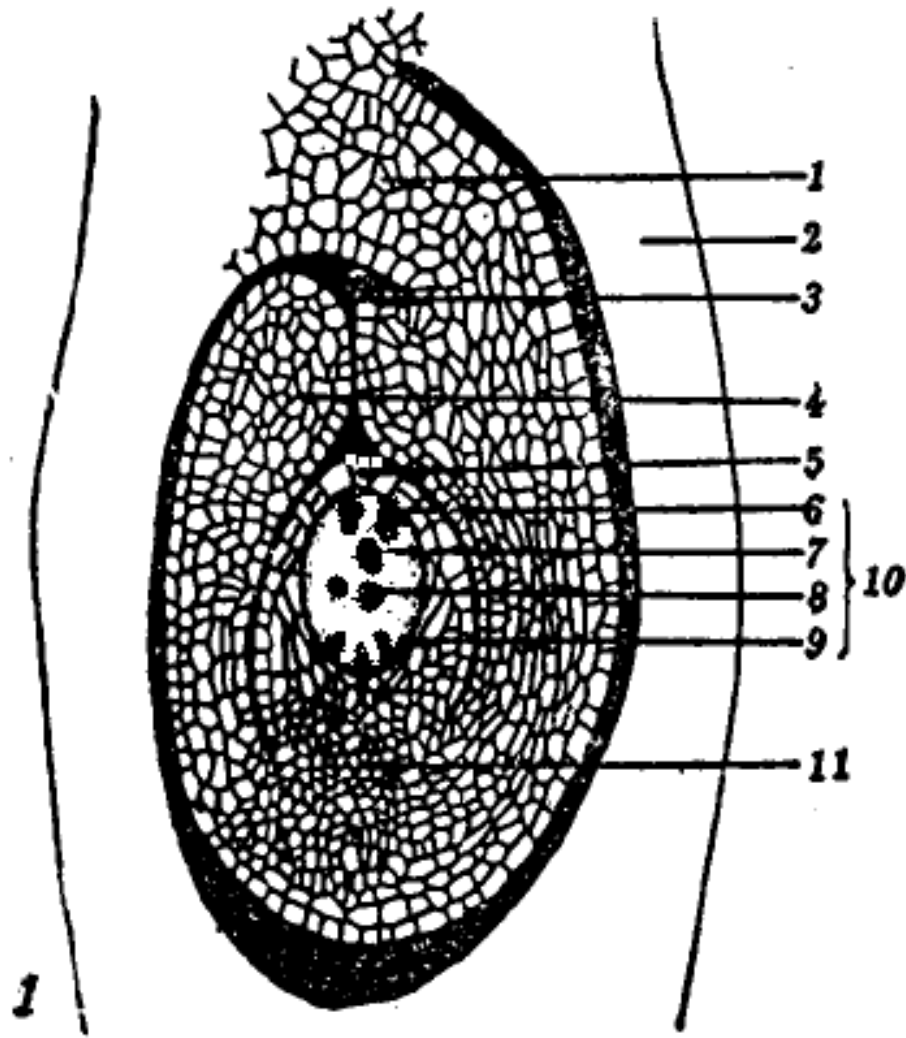
(引自 W. Verkerke, Amsterdam)



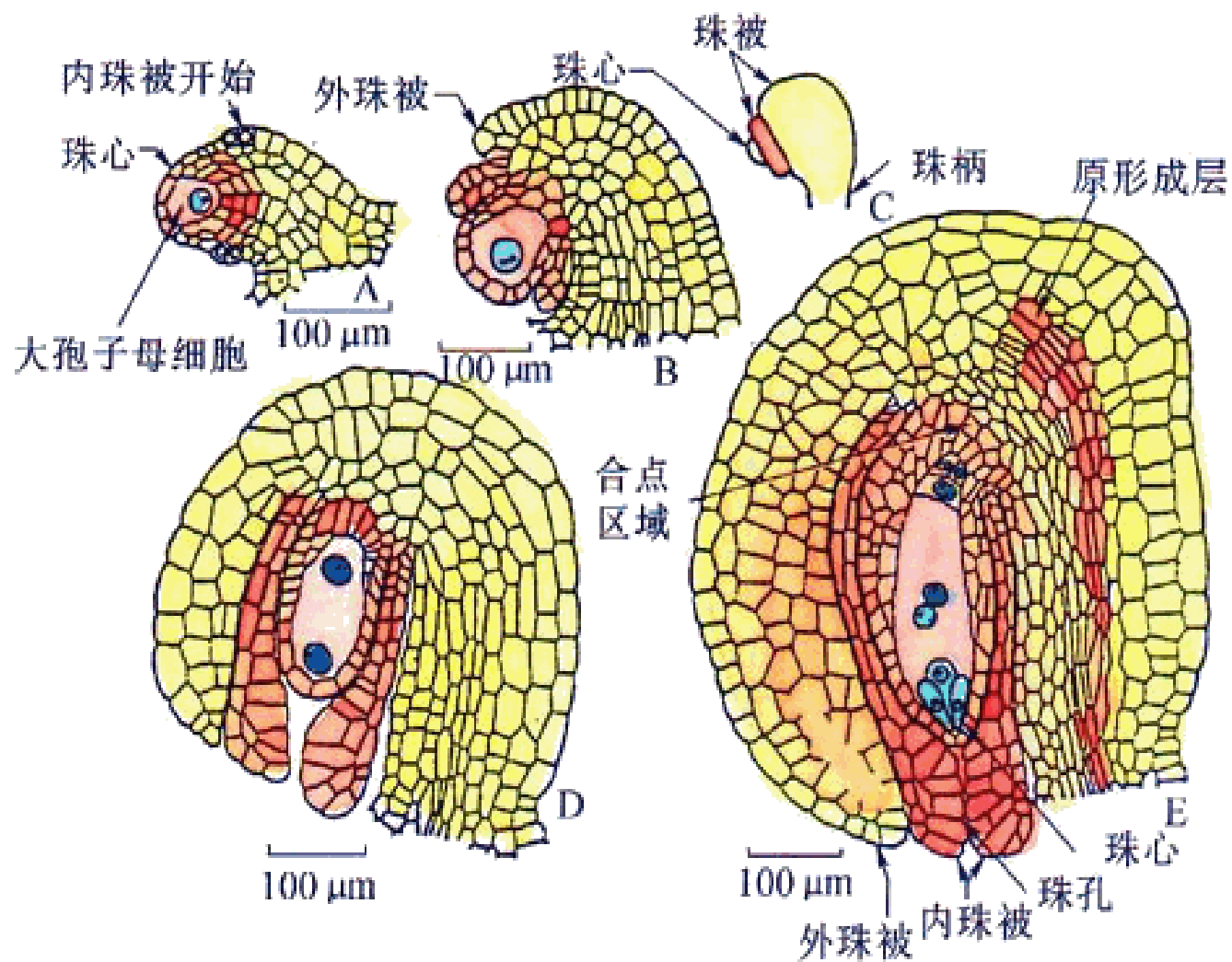
胚珠和胚囊发育过程模式图



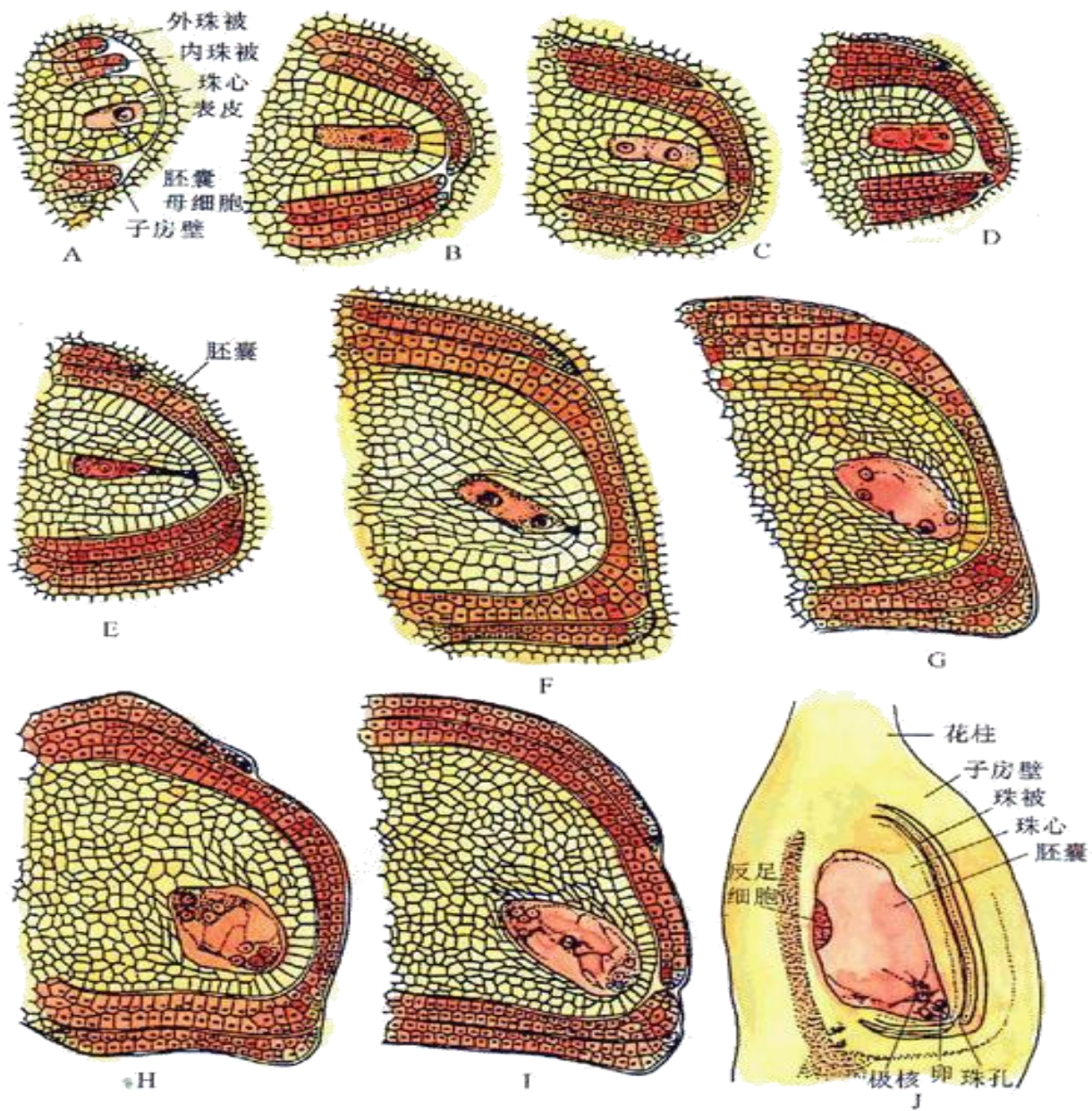
- 银莲花胚珠的发生(至四胞期)



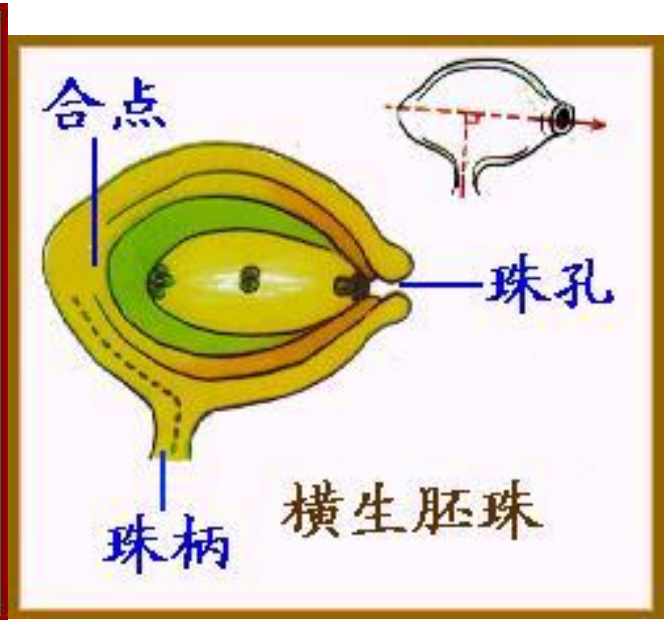
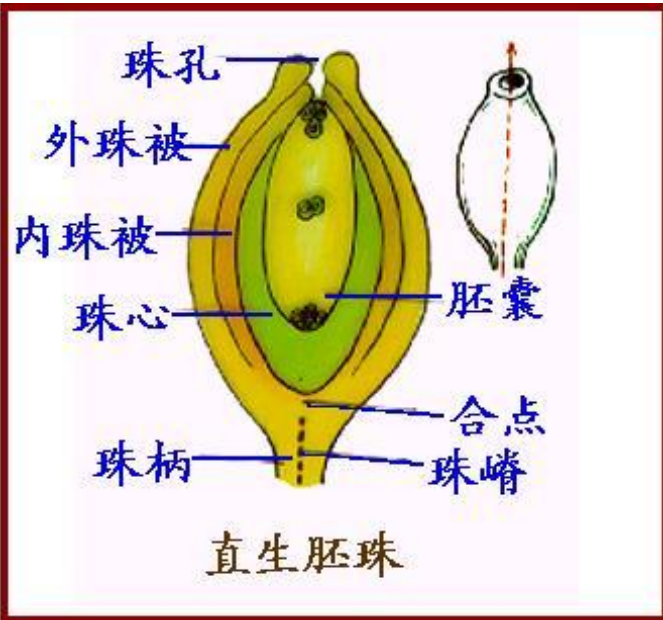
- 银莲花胚珠的发生(成熟胚囊)



百合胚珠的发育

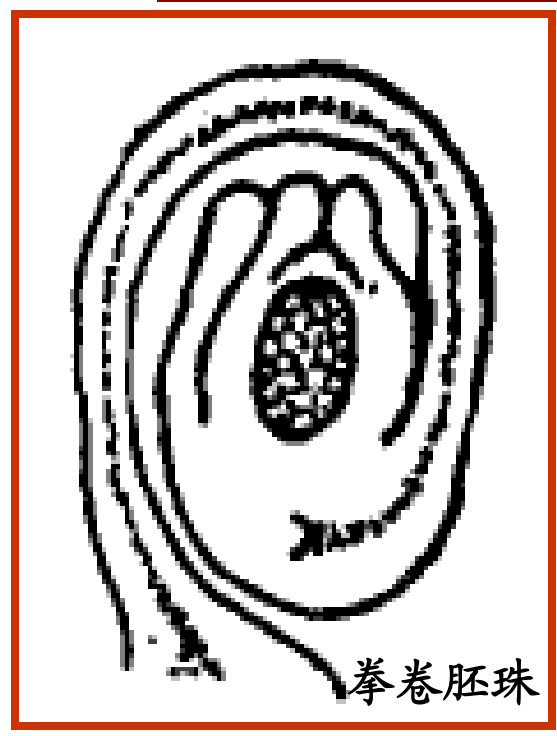


• 水稻胚珠和胚囊的发育

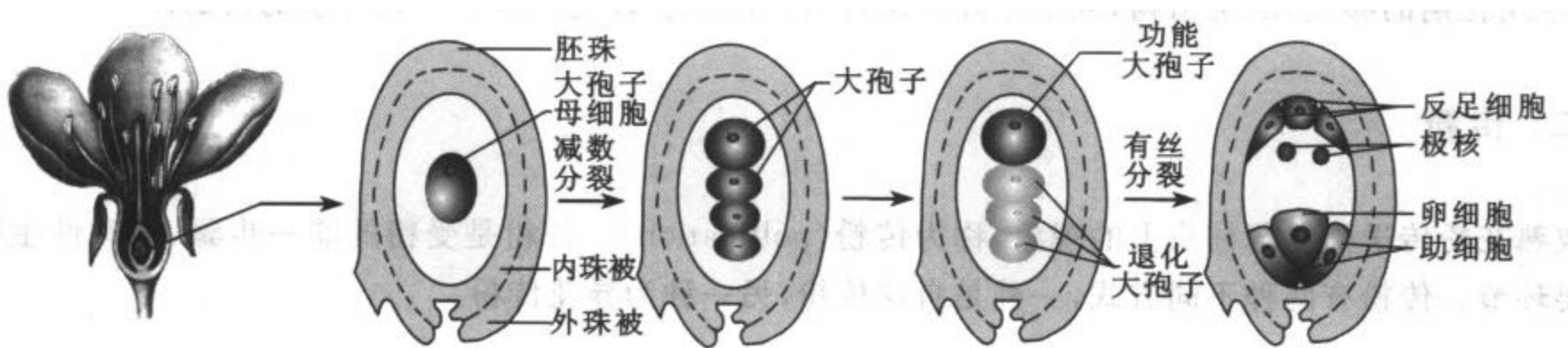


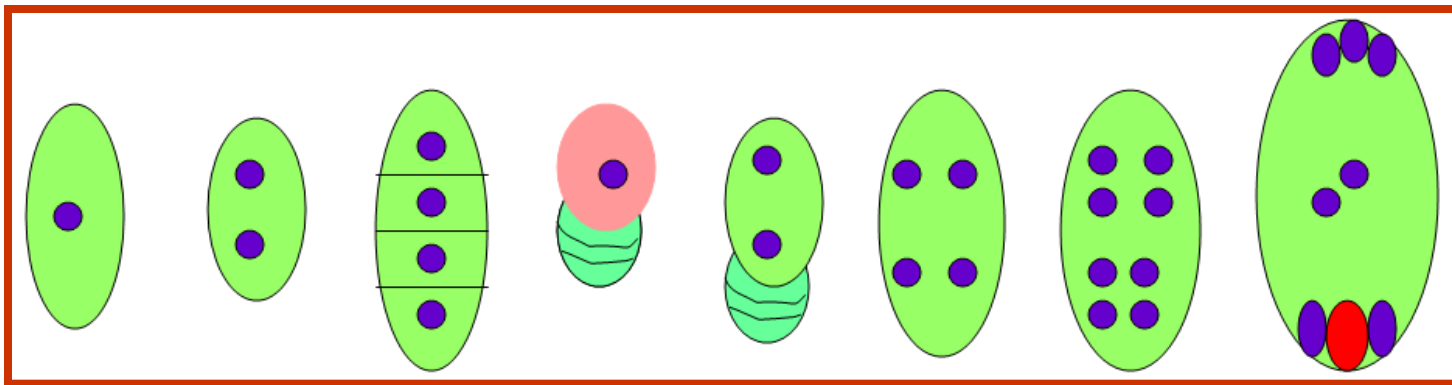
胚珠的类型

生长速度
珠柄
其他



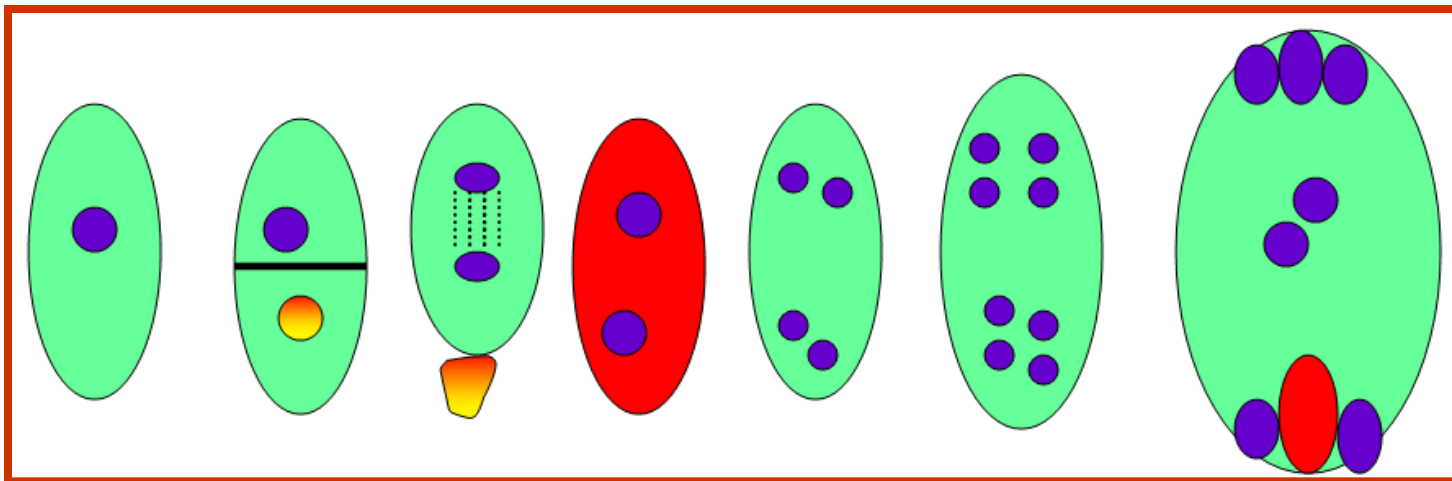
大孢子的发生



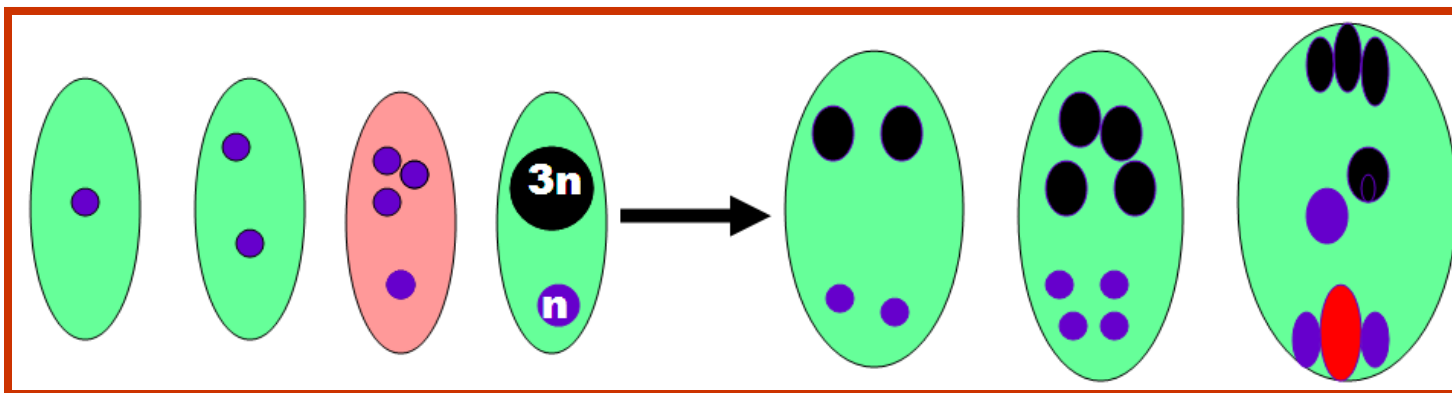


单胞型胚囊

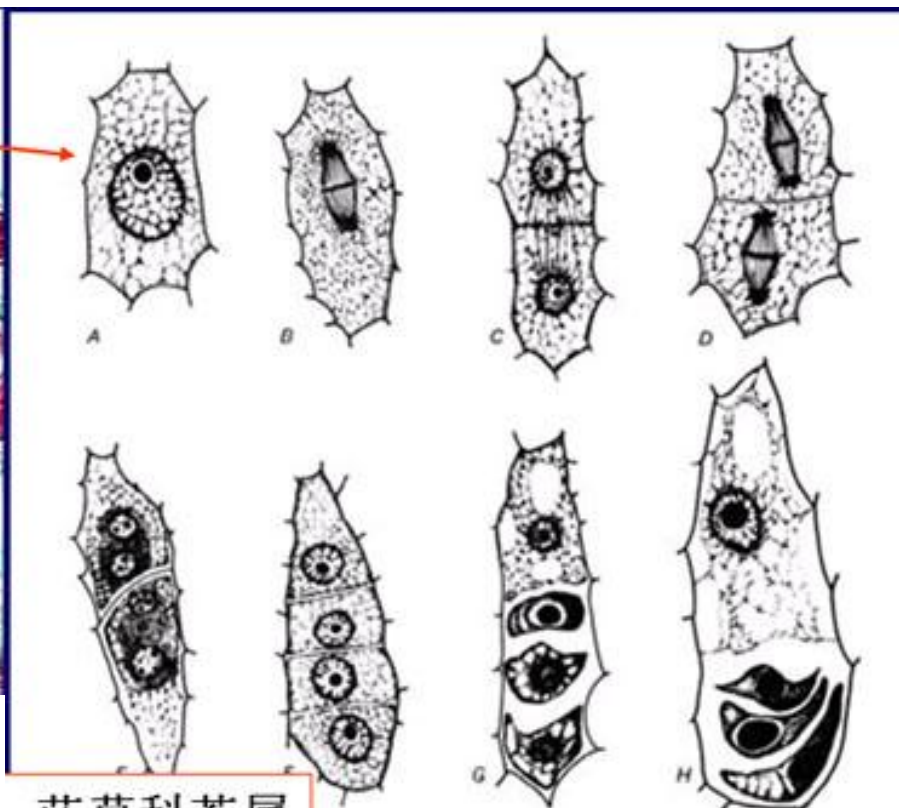
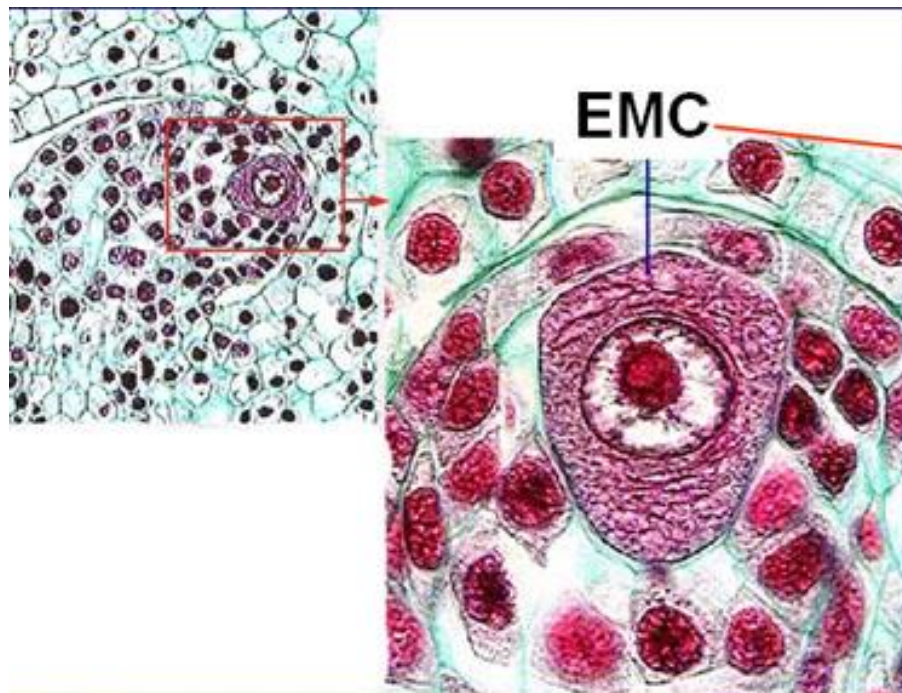
70%



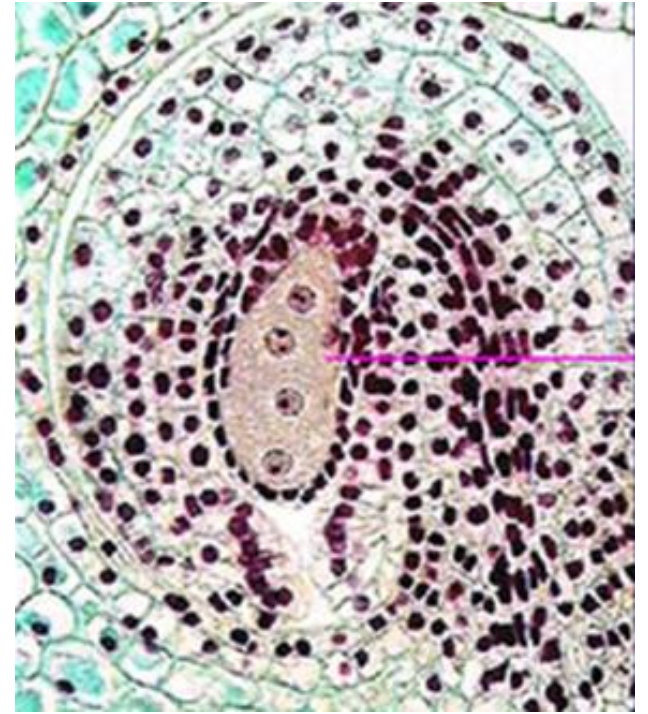
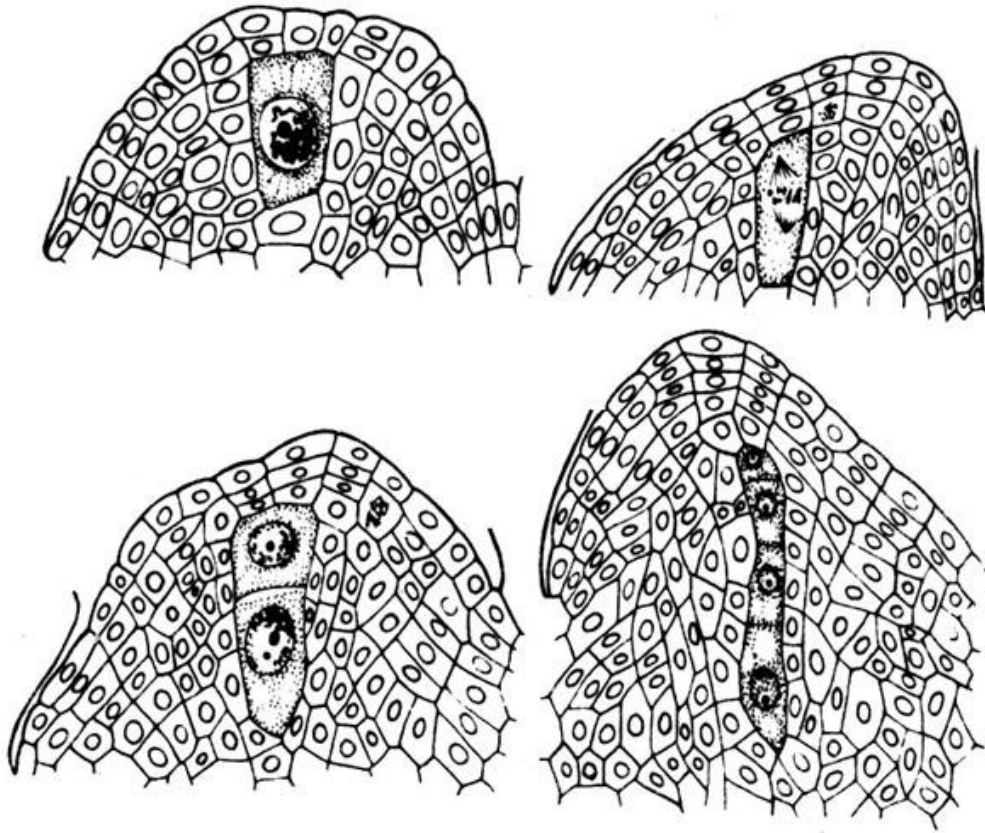
双胞型胚囊



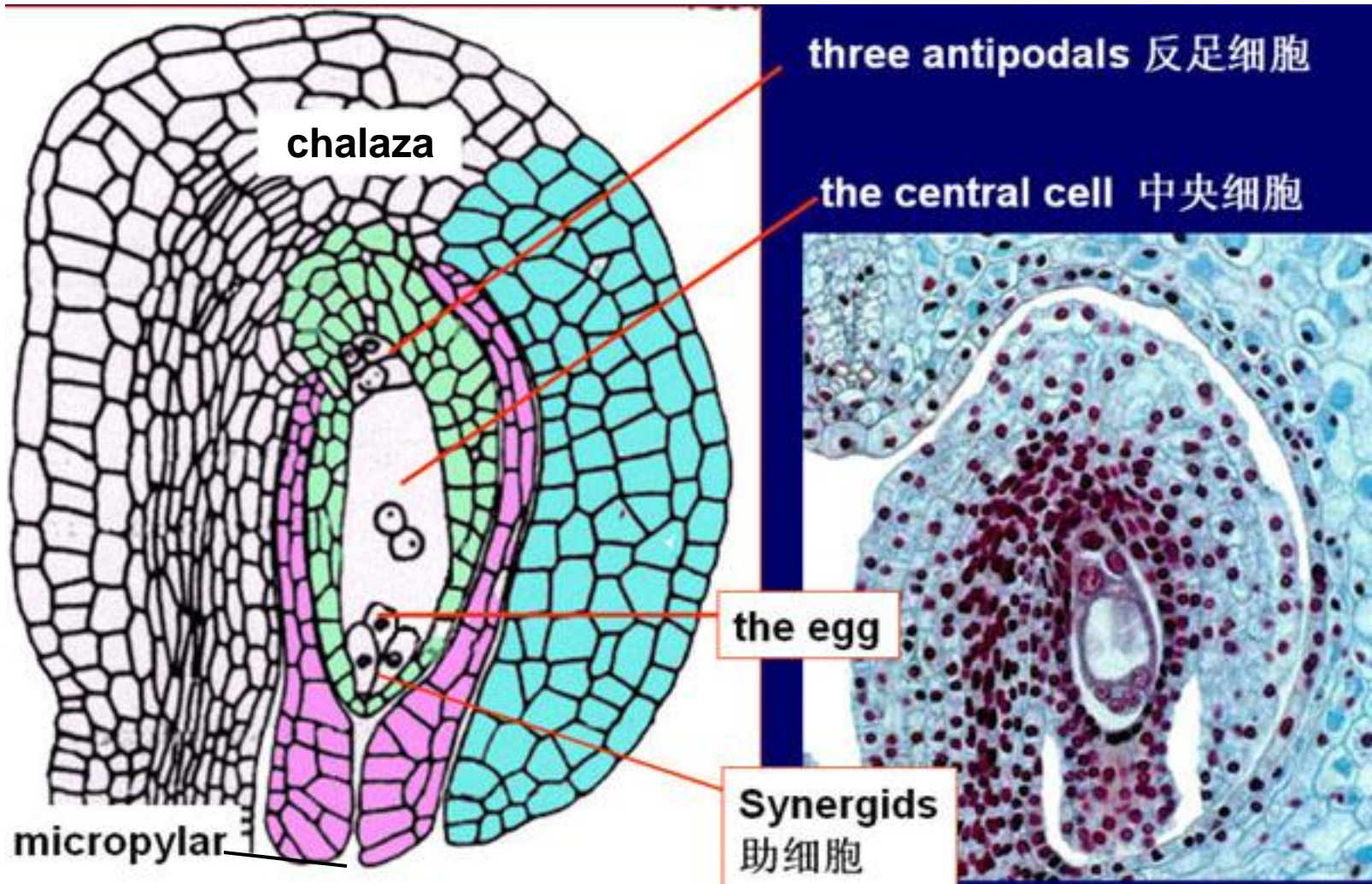
四胞型胚囊



莎草科苔属



胚囊的形成



Structure of mature embryo sac

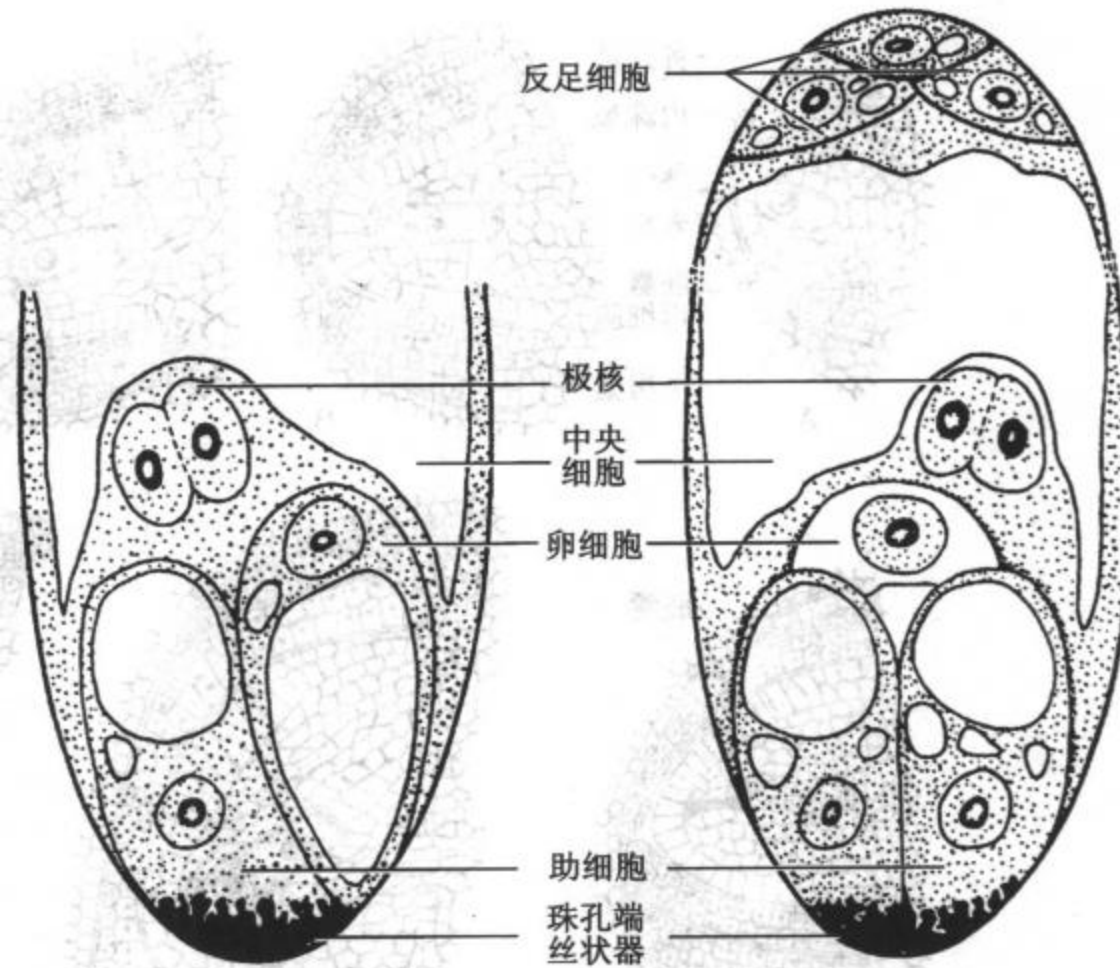
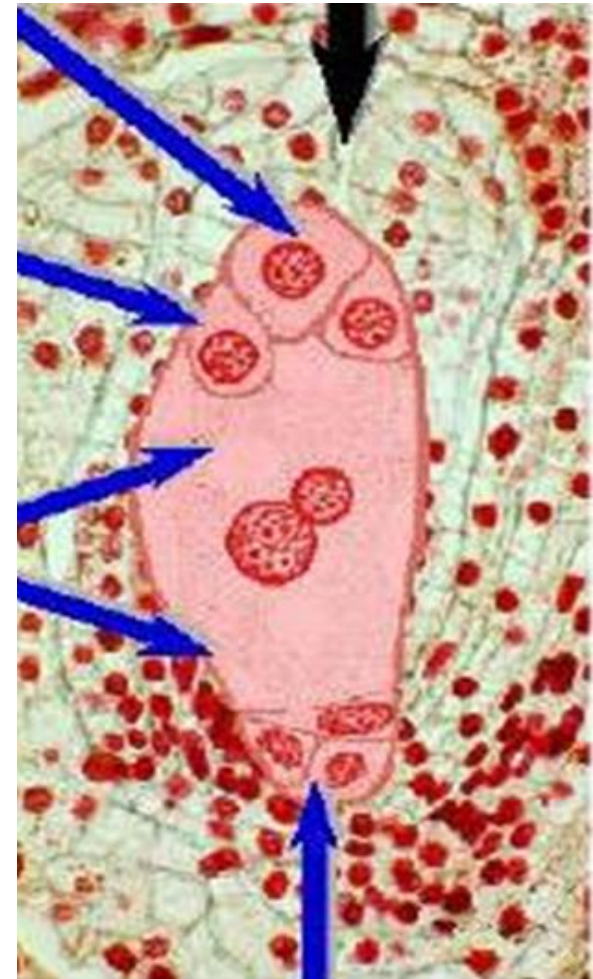


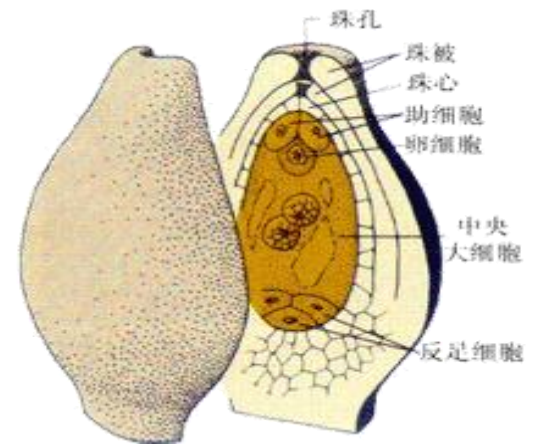
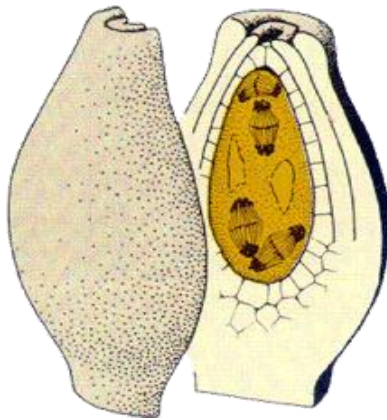
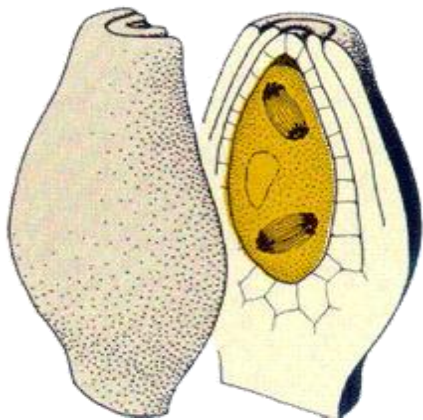
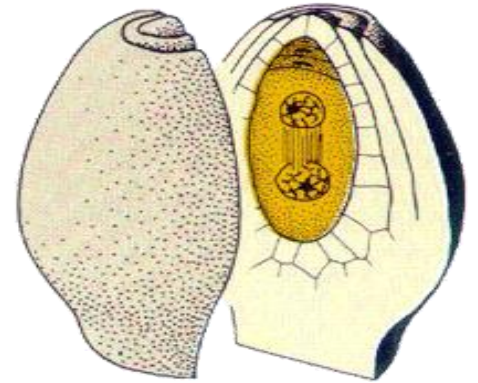
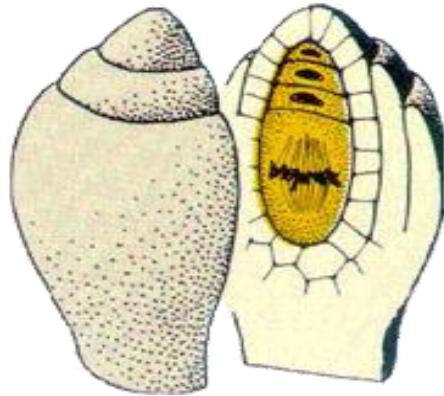
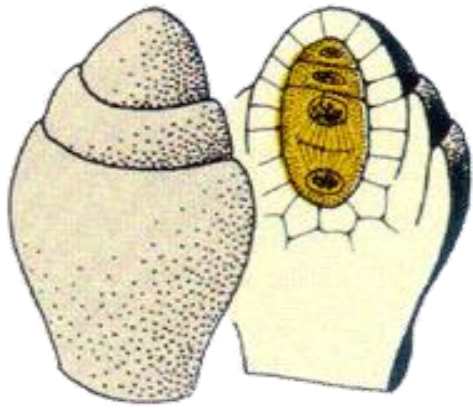
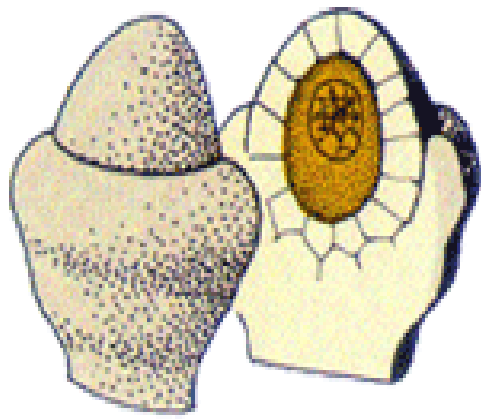
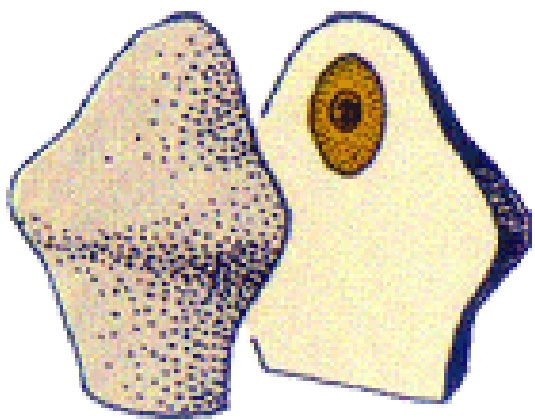
图 8-22 成熟胚囊模式图



7胞8核胚囊模式图

关键词:

诱导 溶解 吸收 运转



复习小结（5）

花药的发育

小孢子的形成

花粉粒的发育

胚珠的发育

胚囊的发育和结构