

POLLEN PISTIL INTERACTION.

Right type / compatible:

- ★ Pollen fall on stigma (same species).
- ★ So pollen will germinate.
- ★ Pollen tube formed.

Wrong type / Incompatible:

- ★ Different species.
- ★ No pollen germination.

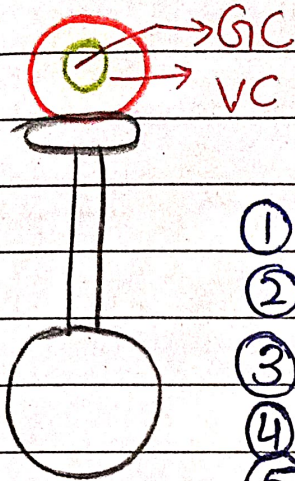
Note: Pollen of same species if there is self incompatibility, consider as incompatible / wrong type.

Note: Pollen doesn't guarantee whether right type of pollen or wrong type fall on stigma.

- ★ It is chemical mediated process.
- ★ Pollen & pistil secrete chemicals which helps in recognition.
- ★ Dynamic process.

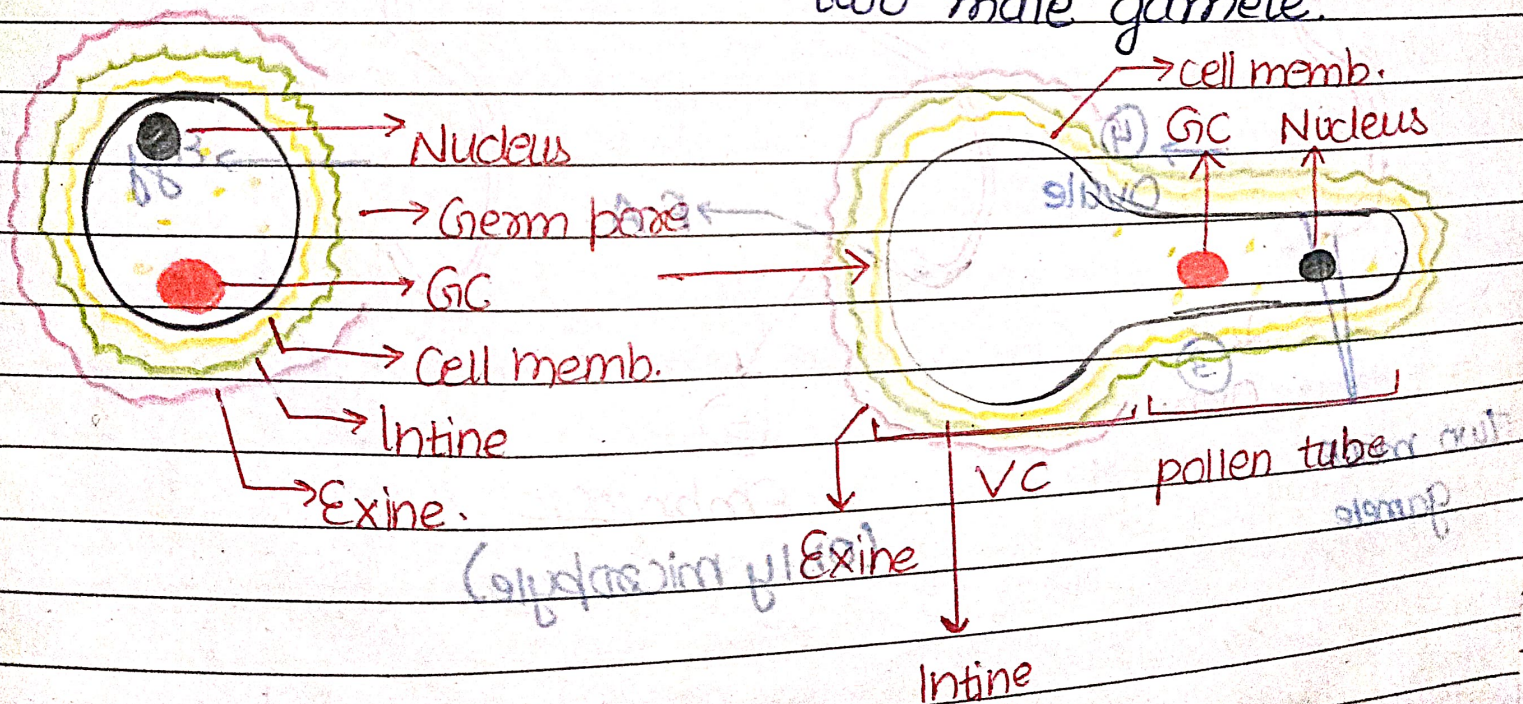
60% Plant

★ Pollⁿ : 2 cell stage

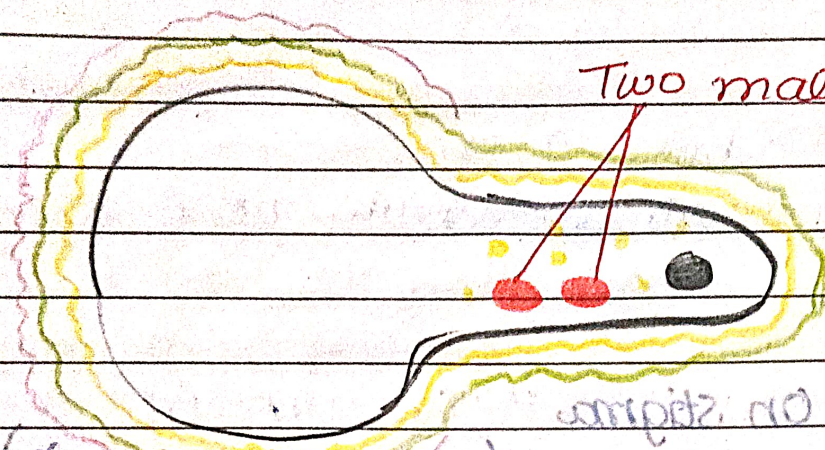


- ① Pollen on stigma
- ② Pollen germination (pollen tube formⁿ)
- ③ Pollen tube arise from pollen on stigma
- ④ Pollen tube enter into style.
- ⑤ Pollen tube enter into ovary.
- ⑥ Ovule : micropyle (common), chalaza, integument
- ⑦ Embryosac : through micropyle

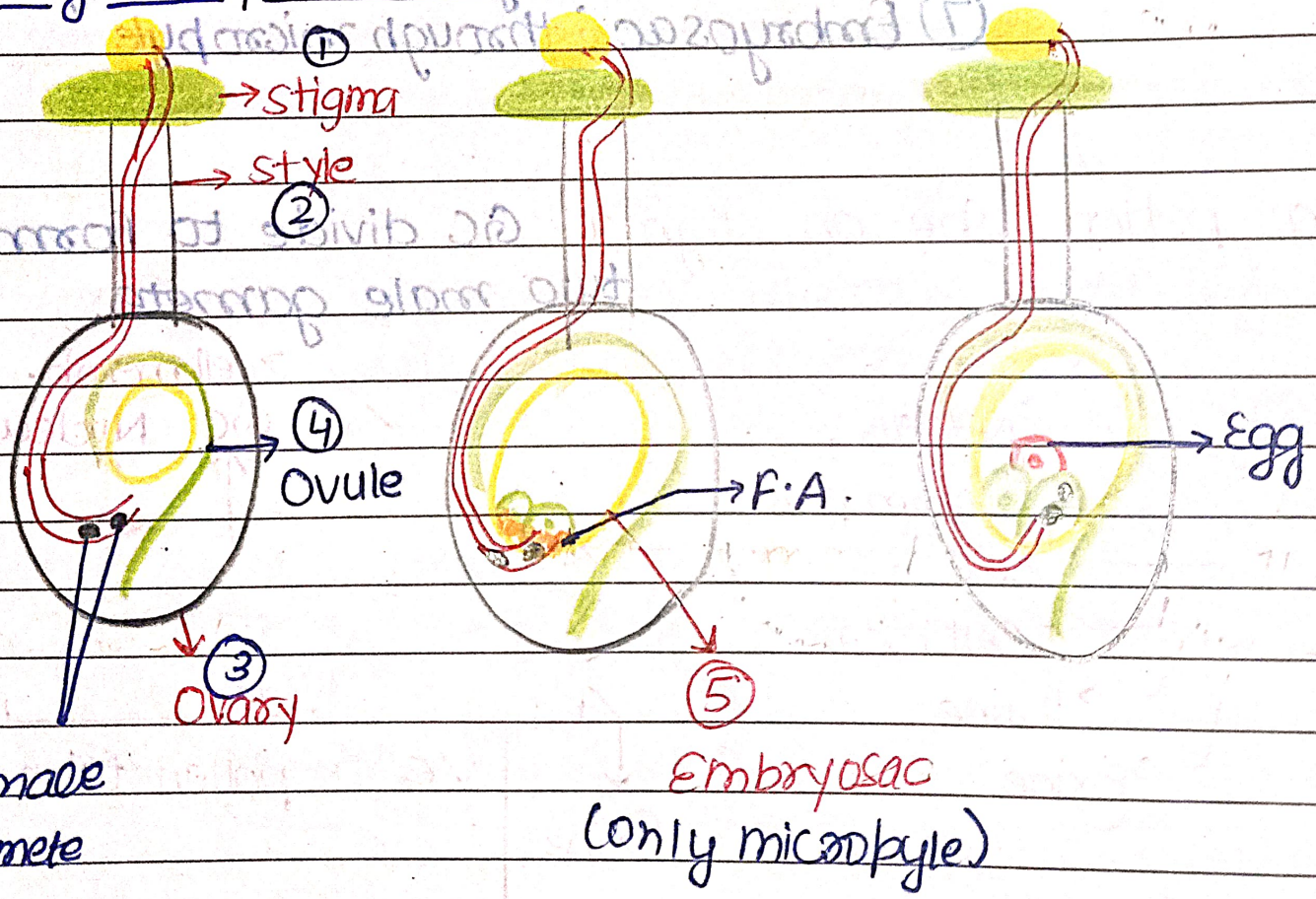
When pollen tube on stigma: GIC divide to form two male gamete.



↓
GC divide and form 2 male gamete



Pathway of pollen tube



Sr. No. _____

Date: _____

⇒ pollen tube release their content (2 male gamete) into cytoplasm of one synergid.

⇒ One male gamete moves to egg.

⇒ One male gamete moves to central cell.