OVULE OF GNETUM

A female strobilus is not well organised The ovules are found arranged in ring on the collars. There are 4 to 10 ovules in each collar but only one ovule grows to maturity. The ovule of Gnetum shows following structures.

1. NUCELLUS → It is the central mass of cellular tissue.

2. INTEGUMENT → The nucellus remain covered with integument. There are 3 envelope. The outer most is called perianth. Where as the middle is designated as the outer integument. The inner most is known as the inner integument.

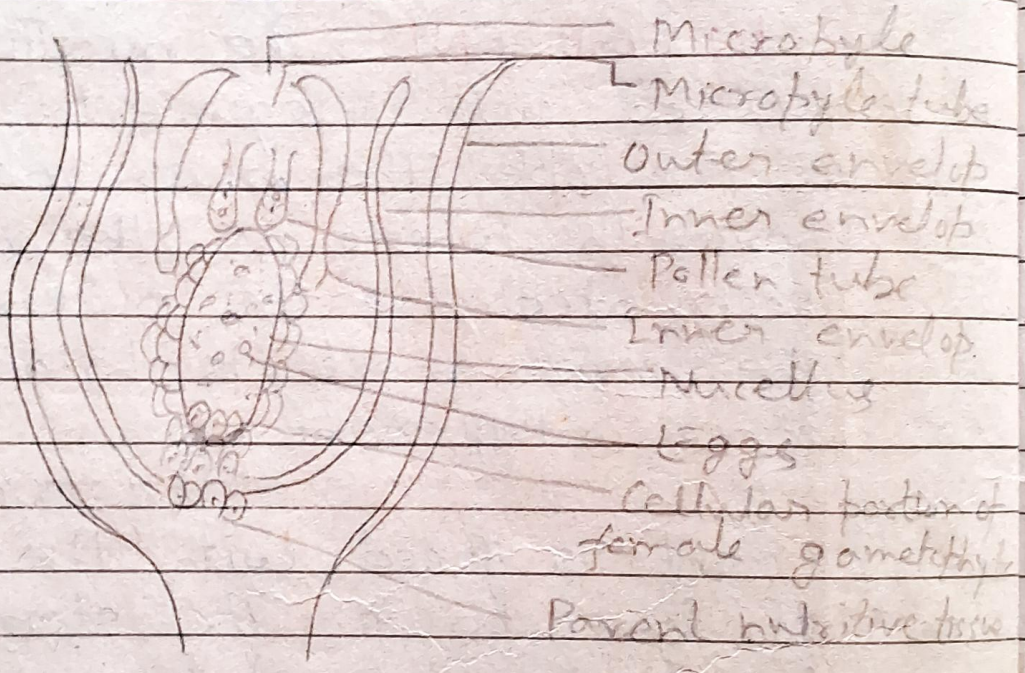
The inner integu-ment is fused with the nucellus, in its lower parts. The stomata are found in the epidermal layer of outer ~~to~~ envelope only. The scalerids and laticiferous ducts are also present in the envelops.

3. MICROPYLAR CANAL AND POLLEN CHAMBER → The inner ~~layer~~ envelope elongates to form a long micropylar canal. The base of this canal forms a flask like pollen chamber.

4. RIM → There is formed a circular

rim from the outer epidermis of the inner integument. Its some times grows massive and covers the tip of the middle envelope.

5. FEMALE GAMETOPHYTE → It is tetra-sporic in development. The nuclei at micropylar region remain free ~~from~~ of which some nuclei form the egg without archegonia. Some cellular mass is formed at the chalazal end.



L.S of Ovule of Linum