

Detail Structure Of Sporophytes Of Funaria.

Sporophyte is differentiated into ③ parts -

1. Foot
2. Seta
- & 3. Capsule.

1. Foot - Small, conical and is embedded in the gametophyte.

2. Seta - is long and slender.

↳ Conducts water and nutrients to the capsule.

3. Capsule - is the most important part of sporophyte.

↳ It is differentiated into apophysis, theca, & operculum.

- Apophysis is the lower sterile part which connects capsule with seta.

- Epidermis contains stomata that help in exchange of gases.

- Cells of apophysis contain chloroplasts i.e. photosynthetic. Thus, sporophyte of Funaria is partially dependent on the gametophyte.

- Theca is the middle part & sterile fertile.

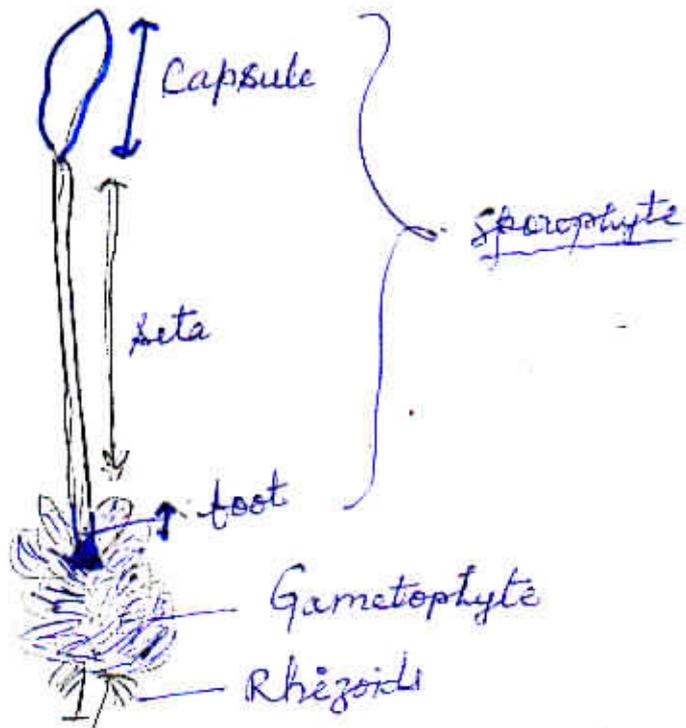
- The central part part of the theca is occupied by columella, which is surrounded by spore sac.

- The spore sac is surrounded by delicate filaments made up of parenchyma cells called trabeculae.

Note - The spore sac contains spore mother cells which undergoes meiotic division to form haploid spores.

- Operculum - is the lid of the capsule.

- Consists peristomes, which are tooth like structure present in two rows. They are hygroscopic in nature & help in spores dispersal.



⇒ Sporophyte develops on the gametophyte
 ⇒ sporophyte is partially depends on the gametophyte because sporophyte is photosynthetic but absorbs water and minerals from gametophyte.

Fig-1

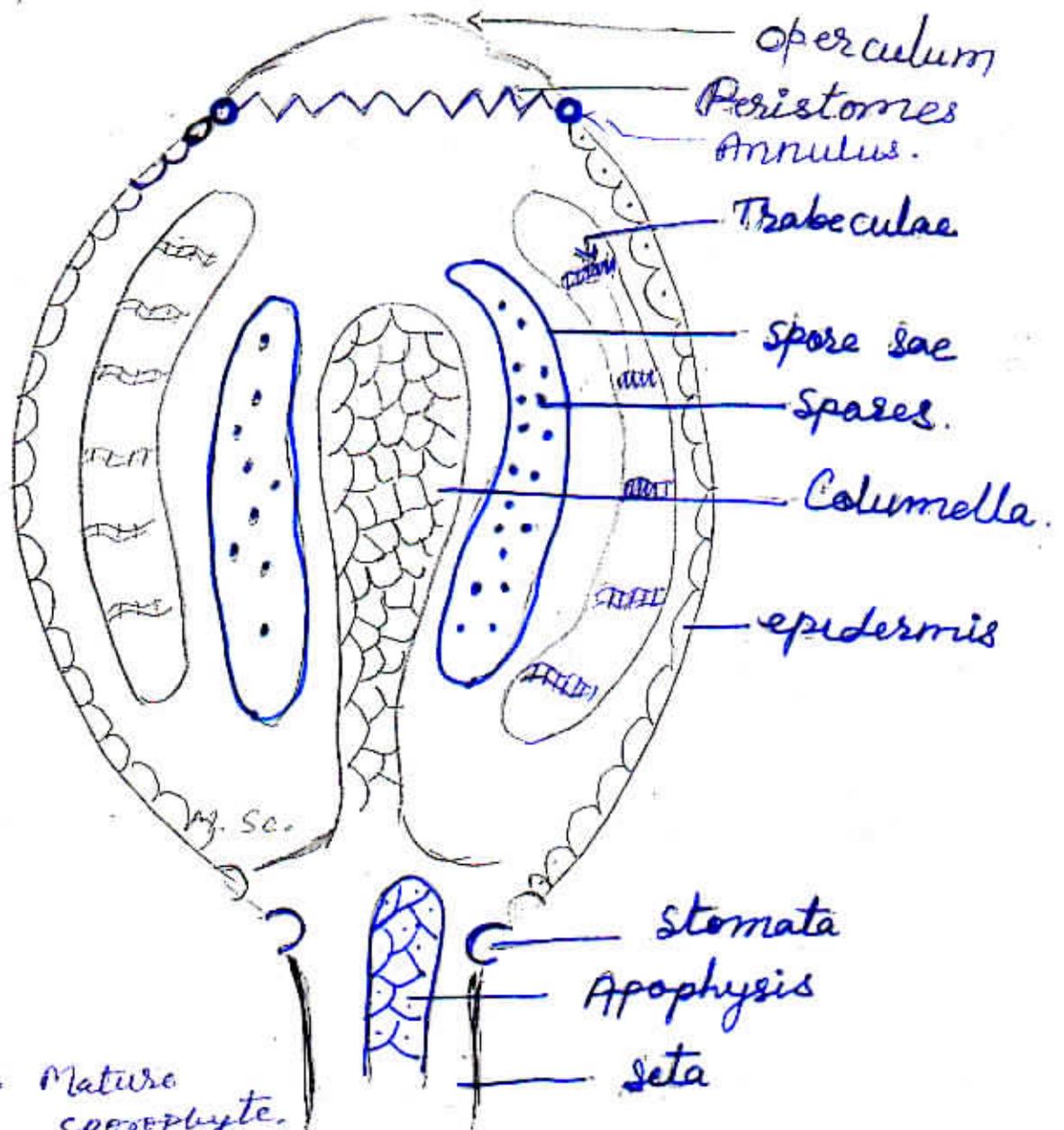


Fig-2: Mature sporophyte.