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Department of Botany
Class : Deg. I (Hons.)
Paper : I (Algal)
Topic : Polysiphonia (Continued)
Lecture No.- 128
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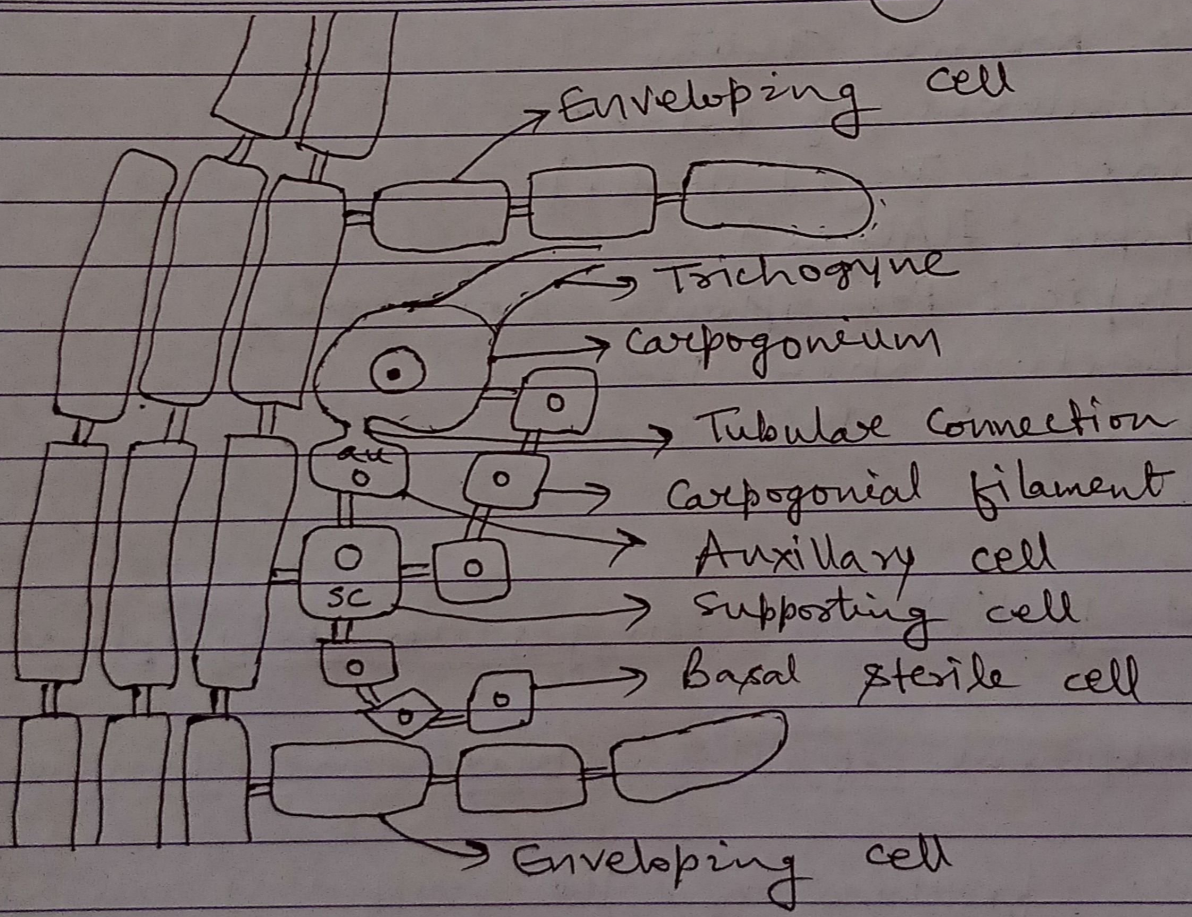
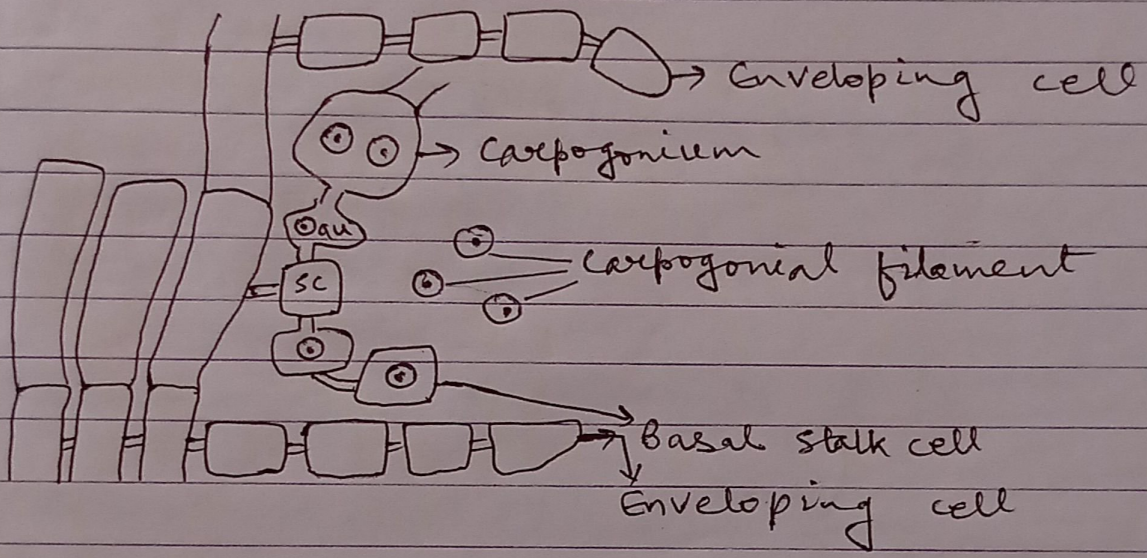
- **Post-fertilization changes in Polysiphonia**
  or
- **Development of the cystocarp in Polysiphonia :**

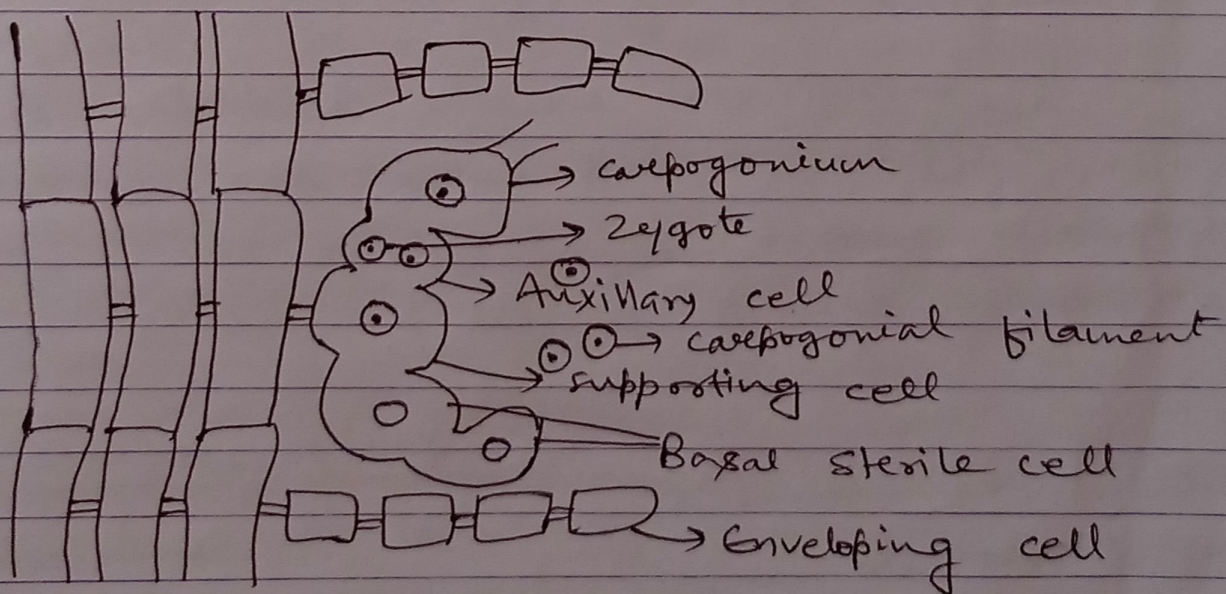
After fertilization, the supporting cell cuts off an auxillary cell at its upper end. It lies below the carpogonium and has a haploid nucleus. A tubular connection established with carpogonium and auxillary cell.
Later, the diploid nucleus mitotically divides into two daughter nuclei. One of these migrates into the auxillary cell through the tubular connection.
After migration, carpogonium gradually shrivels and finally disappears. The haploid ~~number~~ nucleus of the auxillary cell degenerates at this stage. It comes to posses only the migrated diploid nucleus.



(Fig: Post-Fertilisation change in Polysiphonia)



(The zygote nucleus has divided, the tricogyne and cells of the carpogonial filaments are degenerating)



(Fig: Migration of one of the two diploid zygote daughter nuclei into the auxillary cell through a tubular connection)

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