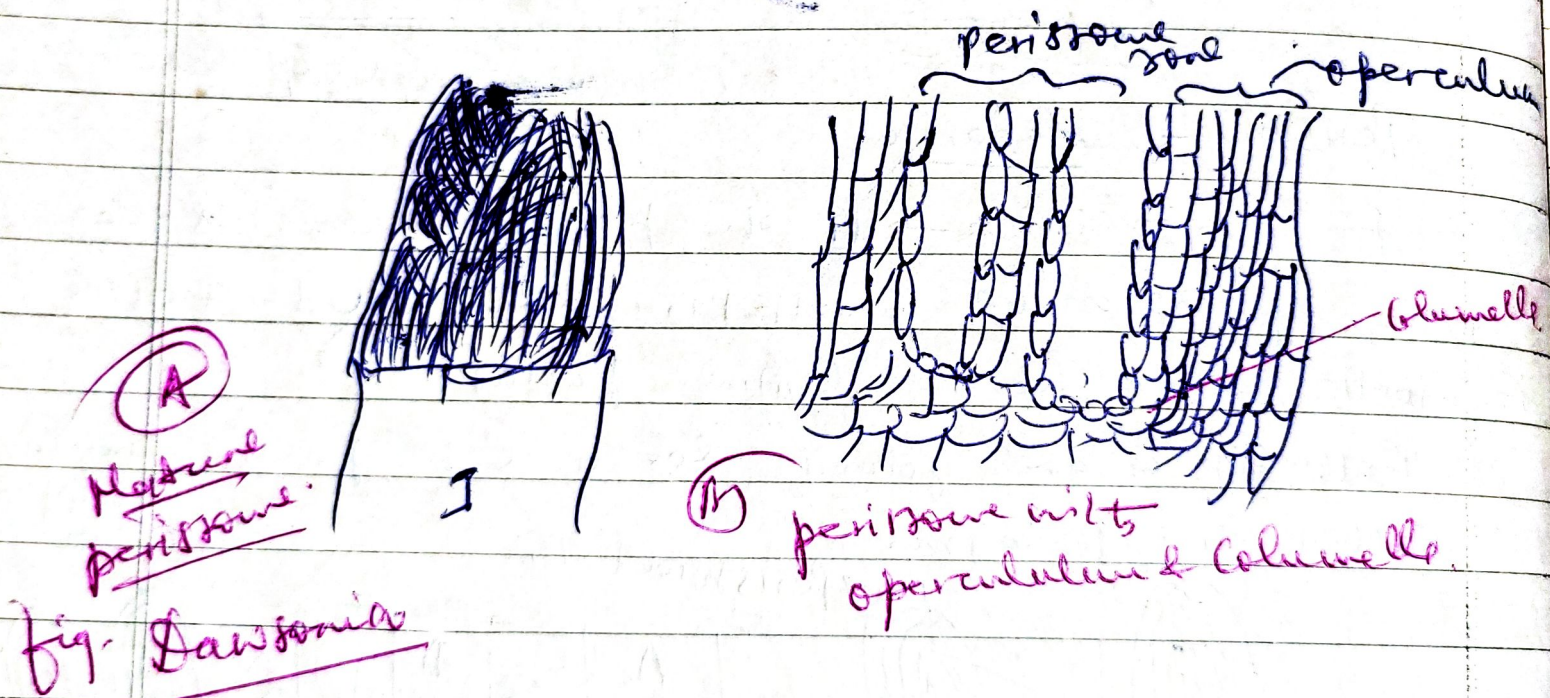


In Dawsoniales → a) In this the peristome opening zone is broad.

b) Peristome consists of numerous much elongated filaments.

c) Cross section of the opercular region shows that these filaments form several concentric circles instead of a single one.

d) The long filamentous teeth are simple and continuous.



In Bryobanuales →

a) Peristome is double, i.e. differentiated into two an inner and outer peristome.

b) Inner peristome is more regular and more distinctive.

- c) Outer peristome consists of one or more concentric series. Teeth thread like.
- d) Outer peristome is rudimentary or absent.

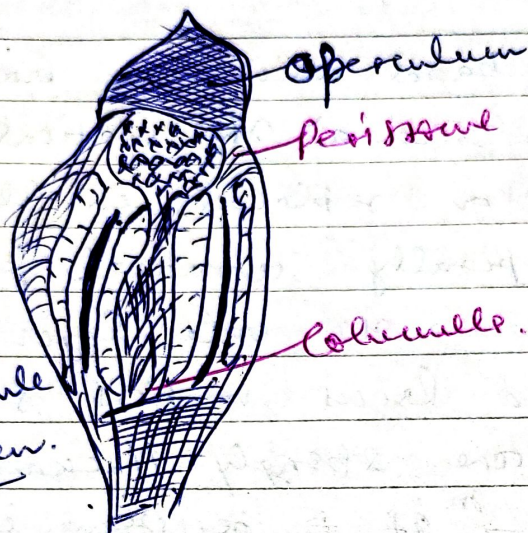


Fig - L.S. of Capsule of Pogonatum.

- 2) **Arthrodonous peristome**  $\Rightarrow$  a) It originates from two or three layers of cells of amphithecium.
- b) The peristome teeth are thin membranous and articulated.
- c) The peristome forming zone consists either of two or three layers of cells of the amphithecium.

It has been divided into three -

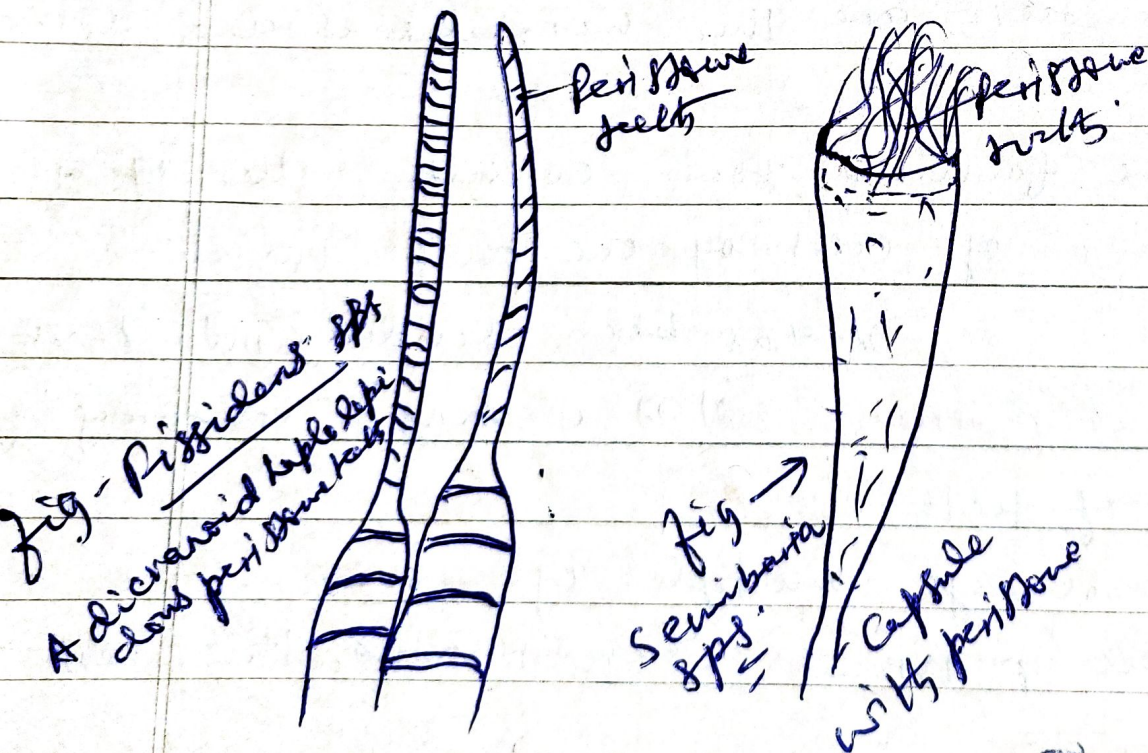
- (A) **Haplolepidous peristome**  $\rightarrow$  a) It is single consisting of single series of teeth.
- b) No. of teeth always multiple of four.
- c) Haplolepidous peristome has relative thickness of

two layers of plate composing each tooth.  
 In Dicranales → 1) The best characterised type of peristome is found in the genus Dicranum therefore commonly called dicranoid type.

2) There is no basal membrane and properistome  
 In Fissidentales → a) The vertical striae tend to be indistinct or replaced in the lobes of the tooth by spirally arranged papillae.

In Crumediales → the outer layer of tooth is thickened and lacks vertical striae, but the articulations are strongly thickened.

In Pottiales → In it peristome is single of sixteen straight twisted teeth. Basal membrane may be present or absent.



⑧ Diplolepidous peristome  $\Rightarrow$  It is usually double.

② In typical diplolepidous peristome the thickened cell walls that contribute to the formation of the entire peristome belong to the innermost centric cell layers of the amphithecium in the opercular region.

③ The endostome and exostome of diplolepidous peristome exhibit much variation in their degree of development in different orders.

① In Orthotrichales  $\rightarrow$  1) Peristome usually double.

2) Outer peristome consists 16 teeth.

②  $\rightarrow$  In Funariales, - also sixteen teeth of exostome are often grouped in pairs.

③  $\rightarrow$  In Eubryales  $\rightarrow$  Exostome consists 16 long undivided teeth which are closely articulated. The lower part of endostome is formed of a plicate basal membrane.

④  $\rightarrow$  In Hookeriales the peristome is double but the inner peristome usually lacks cilia.

⑤  $\rightarrow$  In Isobryales the peristome is double or single the peristome cilia are free or completely united.

⑥  $\rightarrow$  In Hypobryales the peristome is usually double the plates of outer layer of the exostome are

Have horizontal striae.

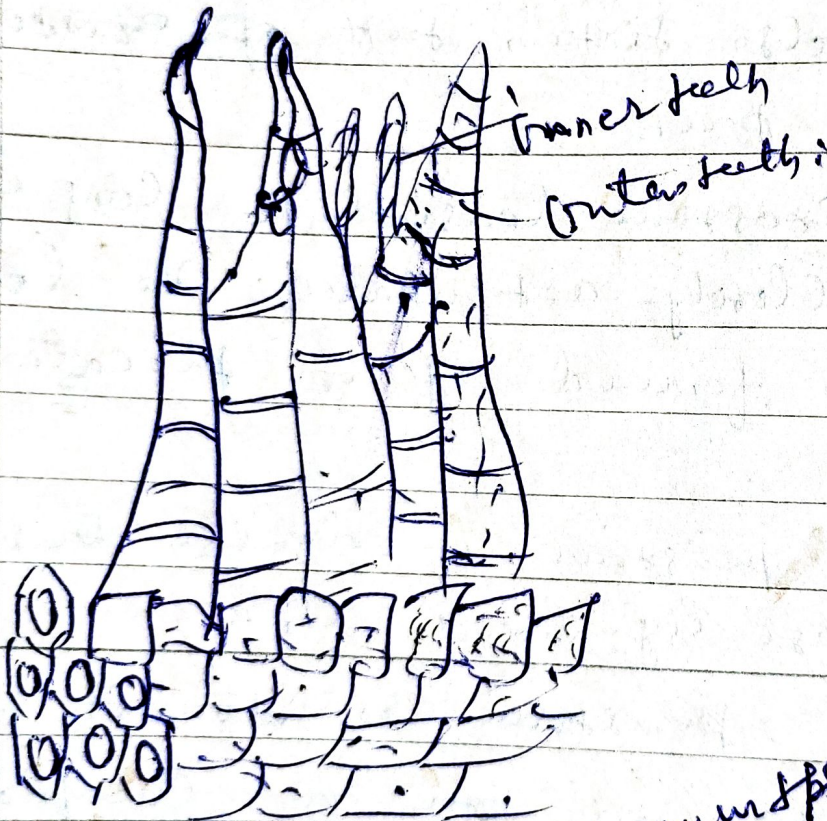
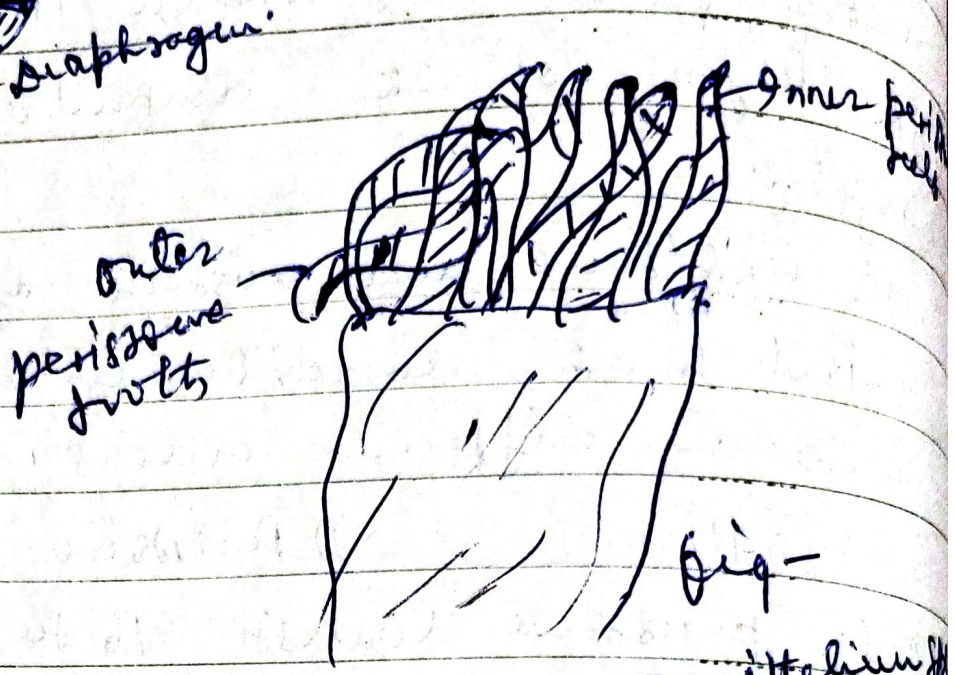
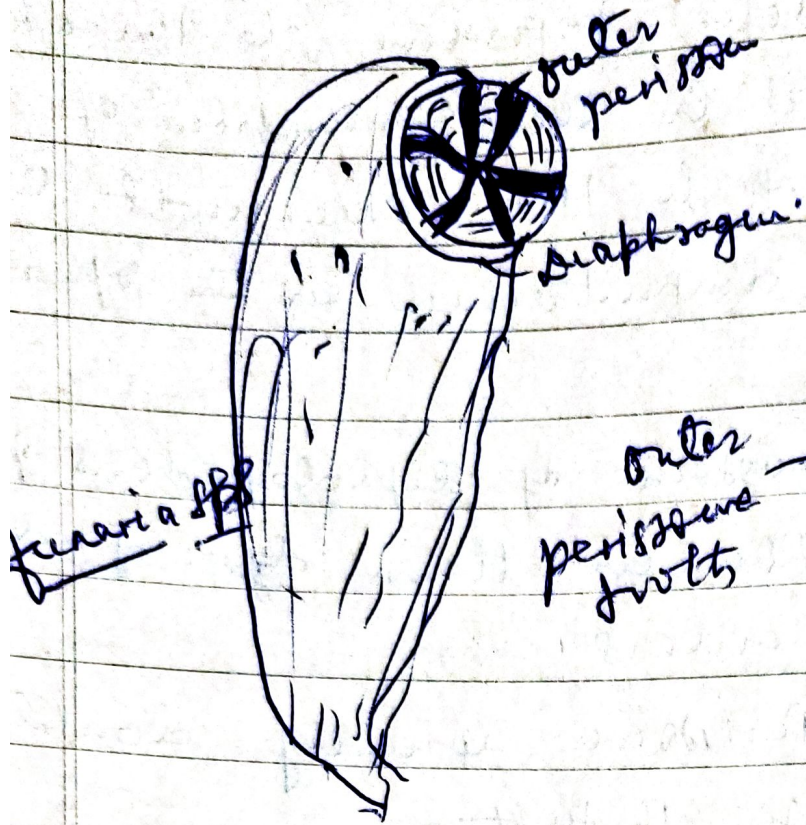


fig - Bryonia spp.

Conclusion -> Thus it can be said that there is great difference in different types of perisperm which help in classification.