

ACTIVITY 10

GYMNOSPERMS

STUDY OF *PINUS*

Male Cone (Staminate Cone) of *Pinus* (Specimen or Slide)

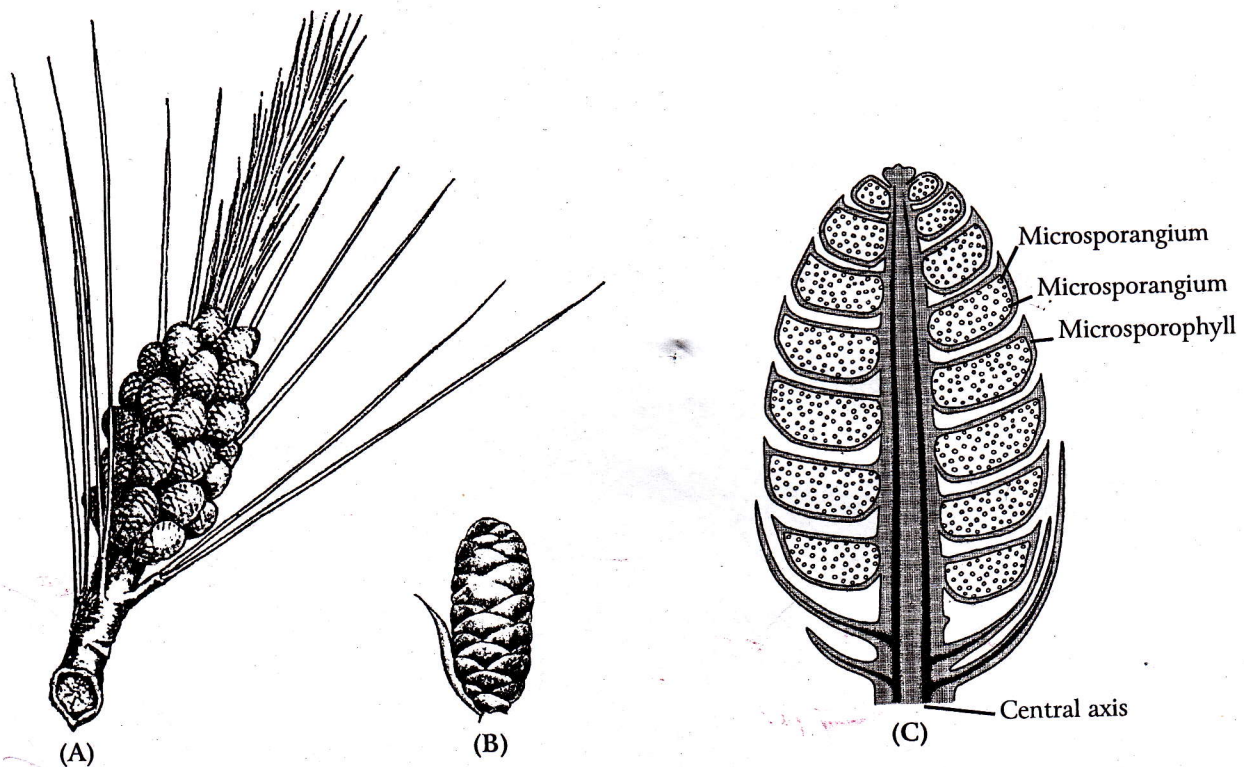


Fig. 27: (A) Staminate Cones of *Pinus*; (B) One Cone of *Pinus*;
(C) L.S. of Staminate Cone of *Pinus*

1. Male cone of *Pinus* is a small conical structure. Its size is about 2 inches.
2. Each male cone consists of a central axis.
3. From the central axis many hard bracts or special leaves are produced, which are spirally arranged. These leaves are called microsporophylls.
4. On the inner side of each microsporophyll two microsporangia are borne.
5. The microsporangium consists of two layers, outer layer is epidermis and inner layer is tapetum.
6. In the microsporangium numerous microspores are produced.