

BRYOPHYTES

TOPIC-CLASSIFICATION OF BRYOPHYTES

HAPPY DAS

SACT

DEPT. OF BOTANY

ACCORDING TO PROSKAUER (1957)
DIVISION BRYOPHYTA IS DIVIDED INTO THREE
CLASSES

- CLASS 1-HEPATICOPSIDA
- IT IS CLASSIFIED INTO 7 ORDERS
- EXAMPLE- *Riccia*

- CLASS 2-ANTHOCEROTOPSIDA
- IT IS CLASSIFIED INTO 1 ORDER
- EXAMPLE- *Anthoceros*
- CLASS 3-BRYOPSIDA
- IT IS CLASSIFIED INTO 5 SUBCLASSES AND 15 ORDERS
- EXAMPLE- *Funaria*

HEPATICOPSIDA (LIVERWORTS)

- 1.PLANT BODY i.e. GAMETOPHYTES ARE THALLOID IN NATURE.
- 2.RHIZOIDS ARE UNICELLULAR AND UNBRANCHED, SCALES ARE MULTICELLULAR.
- 3.CELLS HAVE CHLOROPLASTS WITHOUT PYRENOIDS.
- 4.CAPSULES ARE GLOBOSE OR ELLIPSOID, BROWN OR BLACK IN COLOUR.
- 5.SPOROPHYTE COMPLETELY DEPENDENT UPON GAMETOPHYTE FOR NUTRITION AND SHORT LIVED.

ANTHOCEROTOPSIDA (HORNWORTS)

1. PLANT BODY i.e. GAMETOPHYTES ARE THALLOID AND DORSIVENTRALLY FLATTENED.
2. RHIZOIDS ARE SIMPLE ONE CELLED, UNBRANCHED, VENTRAL SCALES ARE ABSENT.
3. CELLS HAVE CHLOROPLASTS WITH PYRENOIDS.
4. SPOROPHYTE SHOWS A BULBOUS FOOT, A MERISTIMETIC ZONE AND A CAPSULE, SETA IS ABSENT.
5. SPOROPHYTE STRONG AND LONG LIVED.

BRYOPSIDA (MOSS)

1. MATURE GAMETOPHYTES, ORIGINATING FROM UNBRANCHED PROTONEMA
2. RHIZOIDS ARE MULTICELLULAR AND BRANCHED.
3. STOMATA PRESENT IN SPOROPHYTE CAPSULE.
4. SPOROPHYTE IS DIFFERENTIATED INTO FOOT, SETA AND CAPSULE.
5. SPOROPHYTE STRONG AND LONG LIVED, LASTING FOR SEVERAL WEEKS.

THANK YOU