

On Line Study Material (e-content)

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- College - S.S. College, Jehanabad
- Department - Botany
- Subject - Bryophyta
- Topic - ~~General~~ Economic Importance of Bryophytes
- Medium of Teaching - Whatsapp & College Website
- Date - 16.05.2026
- Time - 10.30 - 11.30
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- Class - B.Sc. Botany - PI & Biotech B - PI

ECONOMIC IMPORTANCE OF BRYOPHYTES.

Bryophytes have great economic importance which are as follows :-

1. They play important role in soil formation and soil conservation including rock building. They colonize the barren rocks and exposed areas of hills and make them suitable for angiosperms & other plants.
2. They are the main constituent of the food chain and ecological succession.
3. Sphagnum and others are the chief constituent of peat - hence called "peat moss".
- *Packing Material 4. They are used as ^(most of the mosses) packing material for transporting live plants, cut flowers, vegetables due to ~~it~~ their water absorbing capacity. Especially the dried peat-moss are used to pack bulbs, cuttings and seedlings for shipment.
- * Absorbent bandages → 5. Due to their ~~low~~ antiseptic properties they are used in surgical dressings. Dried, cleaned and sterilised sphagnum

is recommended for Sphagnum dressing (02)
which is cooler, softer and less irritating
as compared to cotton dressing.

6) Medicinal Use:-

- Marchantia polymorpha is used in pulmonary tuberculosis and liver diseases.
- The decoction prepared by boiling dried Sphagnum ^{in water} is used in the treatment of haemorrhage and diseases of eye.

- Sphagnum is used in the treatment

of skin diseases.

- Tea prepared from Polytrichum commune is used to dissolve kidney and gall bladder stones.

7) As Food:-

- Sphagnum is the famine food in China.

- Capsule of Boerhaavia ^(Moss) and Polytrichum is used as food in Norway.

- Polytrichum is the best food of Reindeer in Alaska.

8) Mosses can be used as an indicator of calcium and nutrient content in water.

9) They usually grow densely and hence act as soil binders. Such vegetation also checks soil erosion by reducing the

(18)

Impact of rain drops and wind.

10) Liverworts and mosses, growing on rocks, add organic matter to the substratum after their death.

11) Ecological Importance — The liverworts, mosses and lichens are supposed to be the pioneer in establishing vegetation where other vegetation seems to be practically impossible.

12) Use in Seed beds! —

Since the peat-moss has remarkable power to absorb and hold water like a sponge, they are extensively used in seed beds and green houses for root cutting.

13) As a Source of fuel! —

Dried peat ~~is~~^{is} used as fuel in Ireland, Scotland and other European countries. In colder regions the lower part of the peat becomes carbonized and after a long time used as coal.

14) Water retention! — Sphagnum retains 18-26 times

more water than its weight. Therefore, most sphagnum is used by gardeners and horticulturists to prevent desiccation of seedlings, cut plants, vegetables, fruits, bulbs, tubers, & during transport and keeping for propagation.