

Seedless Plant Reproduction

What You'll Learn:

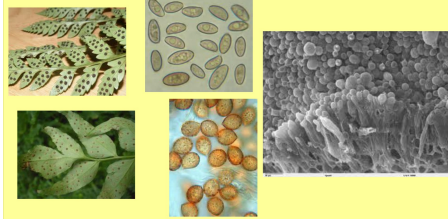
Examine the life cycles of a moss and a fern.

Explain why spores are important to seedless plants.

Identify some special structures used by ferns for reproduction.

The Importance of Spores

*All nonvascular and some vascular plants reproduce using spores.



•Seedless plants include all nonvascular plants and some vascular plants.

•Nonvascular plants do not have structures that transport water and substances throughout the plant.

•Water and substances simply move from cell to cell.

•Vascular plants have tubelike cells that transport water and substances throughout the plant.

Nonvascular Seedless Plants

*Sporophyte stage of nonvascular plants is so small it is often overlooked.



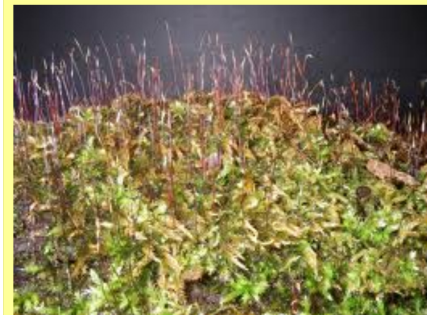
The Moss Life Cycle

*Spores land on the ground and grow into leafy gametophytes, which produce sex cells.

*Sperm swim through water and fertilize the egg, forming a zygote.

*Zygote grows into a spore producing sporophyte.

*Only the gametophyte stage undergoes photosynthesis



Nonvascular Plants and Asexual Reproduction

*Any part of the plant under the right conditions can regrow.



Vascular Seedless Plants

*Fern Life Cycle- spore grows into a very small heart-shape gametophyte.

*The gametophyte produces sex cells that combine to form a zygote.

*The zygote grows into the spore producing sporophyte.

*Both the gametophyte and sporophyte stages undergo photosynthesis.

