

Chapter 24 Notes (Day 4)

Objective: 1. Create a chart that compares characteristics of nonvascular plants and seedless vascular plants. 2. Identify why gymnosperms deserve their name. 3. List the 4 different types of gymnosperm and add a defining characteristic for each.



TYPES OF PLANTS

Chapter 24 Notes (Day 2)

Nonvascular Plants (Mosses)

#1 Lack true roots, stems, and leaves

#2 Small size

#3 The gametophyte is larger than the sporophyte.

The sporophyte grows on top of the female gametophyte

#4 These plants are anchored to the ground by hair-like rhizoids (function like roots).

#5 Reproduction: Requires the gametophytes to be covered by a thin film of water (dew/rain) so that the sperm from the male gametophyte can swim to the female gametophyte.

Examples: Mosses and Liverworts

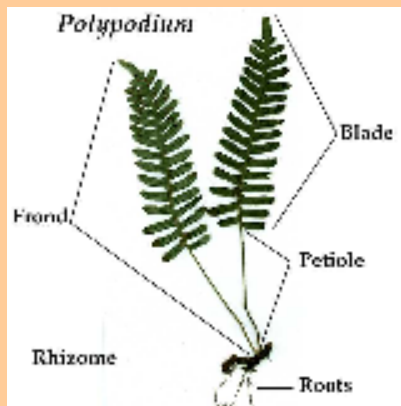


Seedless Vascular Plants (Ferns)

- #1 These plants are vascular.
- #2 They use drought resistant spores instead of seeds for reproduction.
- #3 Larger and more complex than nonvascular plants.
- #4 Possess true roots, stems and leaves.
- #5 The sporophyte is larger than the gametophyte
- #6 Reproduction similar to that found in nonvascular plants.

Examples: Ferns

Ferns: Possess horizontal underground stems called rhizomes and leaves called fronds.



TYPES OF PLANTS CONTINUED

3) Gymnosperms (means "naked seed")

1. Seed plants whose seeds are found in a cone.

2. Gametophytes are very small compared to the sporophyte. The main body of the plant is the sporophyte whereas the gametophytes are the cones.

3. The sperm are enclosed in pollen grains which are carried by wind to the female gametophyte.

4. Examples of Gymnosperms:

1) Conifers: have needle-like or scale-like leaves. Spruces, Pine trees, and junipers are a few.

2) Cycads: Short stems and palm-like leaves. Found in the tropics.



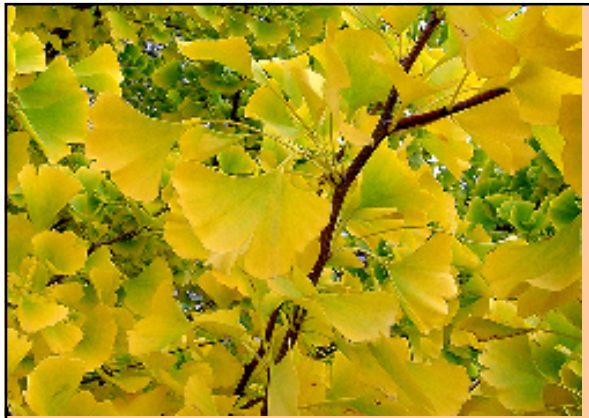
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3) Ginkgo: Male and female gametophytes develop on separate trees.
4) Gnetophytes: the cones resemble flowers.



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