



Department of biology

((Plant groups))

Stage 2

First lecture

Introduction to plant groups

By

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Introduction to Plant groups

- Plants are multicellular Eukaryotes that consider primary producers in the food chain. All the members of the plant kingdom can make their own food by utilizing sunlight, carbon dioxide, and water. They have photosynthetic pigments such as chlorophyll a, b, and carotenoid pigments. This process is known as photosynthesis. Only plants can make their food. All other living organisms are dependent on plants to derive food and energy. All the members of the plant kingdom can make their own food by utilizing sunlight, carbon dioxide, and water. They have photosynthetic pigments such as chlorophyll a, b, and carotenoid pigments. This process is known as photosynthesis. Only plants can make their food. All other living organisms are dependent on plants to derive food and energy.
- Kingdom Plantae was first separated from heterotrophic fungi and unicellular prokaryotic cyanobacteria by Whittaker in 1969 while proposing a five-kingdom classification system. According to this classification, all the known living organisms on the earth were divided into five categories:

Kingdom Monera

Kingdom Protista

Kingdom Fungi

Kingdom Plantae

Kingdom Animalia

Classification of Kingdom Plantae

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graph TD; A[Classification of Kingdom Plantae] --> B[Vascular Plant]; A --> C[Non-Vascular Plant]; B --> D[Seedling]; B --> E[Seedless]; D --> F[Gymnosperms]; D --> G[Angiosperms];
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Vascular Plant

Non-Vascular Plant

Seedling

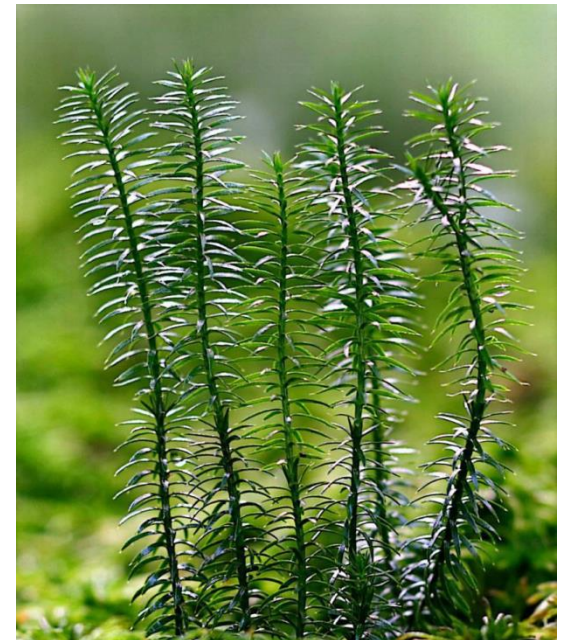
Seedless

Gymnosperms

Angiosperms

Non-Vascular Plant

- These plants lack composed vascular tissue, which is one of their characteristics. The root, stem, and leaves, as well as from wood and bark, and reproduces by spores.
- a. Thallophyta
- b. Bryophyta (Mosses)



Bryophyta (Mosses)

Includes nonvascular plants such as mosses, which are small plants that grow in moist environments and reproduce by spores.

(Thallophyta)

Includes simple plants that do not have true roots, stems, or leaves, such as algae and fungi. They often live in aquatic or moist environments

Vascular Plant

- These plants have actual vascular tissue made of Xylem and phloem as one of their distinguishing characteristics. They also have leaves, roots, and stems that reproduce by seeds and spores.
- The vascular plants are divided into two groups :
- a) Seedless b) Seedling

A large, irregular splash of teal and blue watercolor paint serves as the background for the text. The colors vary in intensity, with darker blues in the center and lighter teals towards the edges, creating a soft, painterly effect.

Thank You