



Priya's Learning Centre

Plantae



Plants are grouped on the basis of plant body components, presence of specialised tissues, ability to bear seeds, etc. Based on these factors, plants are classified as:

1. Thallophyta
2. Bryophyta
3. Pteridophyta
4. Gymnosperms
5. Angiosperms

Thallophyta:

- They do not have well-differentiated body design.
- They are predominantly aquatic.
- The plants of this group are commonly known as “Algae”.
- Eg: Ulothrix, Chara

Bryophyta:

- The plant body is differentiated to form stem and leaf-like structures.
- Specialised tissue for conduction of water is absent.
- These plants are known as “Amphibians” of plant kingdom, because even though they live on land, they need water for reproduction.
- Eg: Moss, Marchantia

Pteridophyta:

- Their body is differentiated into roots, stem and leaves.
- They have specialised tissues to conduct water and other substances from one plant part to another.
- Eg: Marsilea, Ferns

The thallophytes, bryophytes and pteridophytes are called “Cryptogamae” or “Those with hidden reproductive organs”, because their reproductive parts are hidden.

The gymnosperms and angiosperms are called “Phanerogams” because they have well-differentiated reproductive tissues. Let’s learn more about these two groups:

Gymnosperms:

- This term is made up of two Greek words, Gymno means “naked” and Sperma means “seed”.
- They bear naked seeds.

- These plants are usually perennial, evergreen and woody.
- Eg: Pines, Deodar

Angiosperms:

- This term is made up of two Greek words, Angio means “covered” and Sperma means “seeds”.
- These are also called “flowering plants” as the seeds eventually develop into fruits.
- Cotyledons are present in the seeds.
- Plants with seeds having a single cotyledon are called “Monocots” or “Monocotyledonous”.
- Eg: Orchids, Bamboo
- Plants with seeds having two cotyledons are called “Dicots” or “Dicotyledons”.
- Eg: Castor, China Rose