

PLANT KINGDOM

Points To Remember :

CLASSIFICATION :

Artificial System of Classification :

- Used superficial morphological characters.
- Based on a few characteristics like habit, colors, number and shape of leaf.
- Mainly based on vegetative characters.
- Such system developed by Linnaeus.

Natural System of Classification :

- Based on natural affinities among organisms
- Included external as well as internal features like anatomy, embryology and phytochemistry.
- Developed by George Bentham and J. D. Hooker

Phylogenetic System of Classification :

- Based on evolutionary relationships between the various organisms.
- Organism belongs to same taxa have a common ancestor.
- Developed by Hutchinson.

Numerical Taxonomy :

- Carried out using computer.
- Based on all observable characteristics
- Data processed after assigning number and codes to all the characters.

Cytotaxonomy :

- Based on cytological information.
- Gives importance to chromosome number, structure and behaviour.

Chemotaxonomy :

- Based on chemical constituents of the plants.

ALGAE :

- Chlorophyll bearing, simple, thalloid, autotrophic and mostly aquatic organisms. Moist stone, soils and wood are the other habitat.
- The size ranges from microscopic unicellular forms like *Chlamydomonas*, to colonial forms like *Volvox* and to filamentous forms like *Ulothrix* and *Spirogyra*. A few marine forms such as kelps, form massive plant bodies.