

Dr. Rachana Shalini

Dept. of Botany

Class : Deg. I (Subs.)

Topic : General characters of Lichen

Lecture No. - 66

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Lichens : General account :

- The term lichen was first used by Theophrastus.
- The lichens represent the type of thalli having intimate association of fungi and algae.
- The fungal component of a lichen thallus is called mycobiont and the algal one as Phycobiont.
- The association is of a perfect symbiotic type, in which alga supplies synthesized food to the fungus and the fungus gives protection to the alga.
- The algal partner may be a blue-green algae (e.g., Nostoc, Rivularia etc.) or green algae.
- The fungal partner is generally an Ascomycete (sometimes a Basidiomycete or a Deuteromycete).

• Classification:

The lichens have been divided into different types as given below:

(1). On the basis of fungal partners:

- (a) Ascolichens: The fungal partner is an ascomycete.
- (b) Basidiolichens: The fungal partner is a basidiomycete.
- (c) Deuterolichens: The fungal partner is a deuteromycete.

(2). On the basis of algal partners:

- (a). Chlorophycophilous: Partner green algae.
- (b). Cyanophycophilous: Algal partner is blue-green algae.
- (c). Diphycophilous: Partners both green and blue-green algae.

(3). On the basis of habitats:

- (a). Corticulous: Growing on old walls and tree trunks.
- (b). Terricolous: Growing on soil surfaces.
- (c). Saxicolous: Growing on surfaces of rocks.

(4). On the basis of thalli:

- (a). Crustose lichens: Flat, thin or crust like without lobes and closely attached to the substratum, e.g., Graphis, Haematomma etc.

(b). Foliose lichens : Flat, much lobed, thalli (like liverworts), attached to the substratum by rhizoid like outgrowths, known as rhizines, e.g., *Parmelia*, *Peltigera* etc.

(c). Fruticose lichens: Erect, thallus bush like or pendant, e.g., *Cladonia*, *Usnea* etc.,

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