



PHYCOLOGY



AN INTRODUCTION



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PHYCOLOGY

**from Greek,
phykos, "seaweed";
and logia-"study"**

**Study of
algae**

- Chlorophyll bearing, Photosynthetic, non vascular plants
- Plant body simple and not differentiated into roots, stem and leaves



Father of Phycology

F.E. Fritsch

Father of Indian Phycology

M O P Iyengar

**Father of Modern
Phycology**

William Henry Harvey

**An Irish Phycologist-
A Manual of the British**

Algae,

Phycologia Britannica



MAIN FEATURES

- 1. Less evolved thalloid, plant body not differentiated**
- 2. Unicellular or multicellular thallus**
- 3. Cells exhibits three levels of organisation Prokaryotic, mesokaryotic and eukaryotic**
- 4. Cells are covered by rigid cellulose cell wall**
- 5. Absence of vascular and mechanical tissues**

7. Cells contain plastids

8. Three classes of pigments were common

a. Chlorophylls-a,b,c,d,e

b. Carotenoids-

$\alpha, \beta, \gamma, \epsilon$ -carotenes,

lycopene, leutin,

flavicine, fucoxanthin,

violaxanthin,

astaxanthin, zeaxanthin,

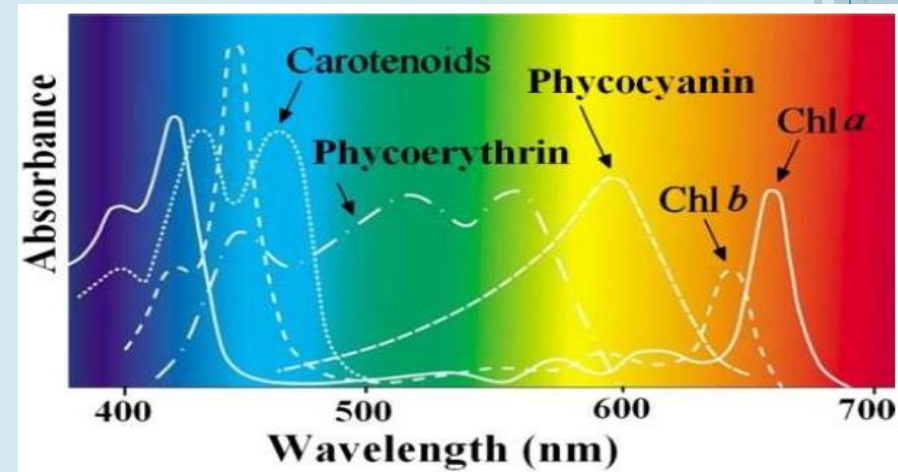
myxoxanthin

c. Phycobilins/biloproteins-

Phycocyanin,

Phycoerythrin,

allophycocyanin



9. Reserve food- mostly starch and oils



○10.Reproduction

- Sex organs are usually unicellular and non-jacketed
- Vegetative, asexual and sexual methods
- Vegetative-fragmentation, hormogonia, akinetes
- Asexual - Zoospores(motile) aplanospores, autospores, hypnospores, exospores, endospores, carpospores
- Sexual - isogamous, anisogamous, oogamous
- No embryo formation after gametic fusion



THANK YOU

This class prepared for
Third Semester BSc Botany Students
Little Flower College, Guruvayur
Affiliated to University of Calicut

Next Class

Thallus organisation of
algae

