# PHYCOLOGY

## **TOPIC-CLASSIFICATION OF ALGAE**

HAPPY DAS SACT DEPT. OF BOATANY

#### **CRITERIA FOR ALGAL CLASSIFICATION**

THE PRIMARY CLASSIFICATION OF ALGAE BASED ON FOLLOWING CHARACTERS1.PIGMENT CONSTITUENT/COMPOSITION OF CELL.
2.CHEMICAL NATURE OF STORED FOOD MATERIAL.
3.KIND,NUMBER,POINT OF INSERTION & RELATIVE LENGTH OF THE FLAGELLA ON THE MOTILE CELL.
4.CHEMICAL COMPOSITION OF THE CELL WALL.

5.PRESENCE OR ABSENCE OF DEFINITELY ORGANISED NUCLEUS IN THE CELL OR ANY OTHER SIGNIFICANT DETAIL OF CELL STRUCTURE.

### **CLASSIFICATION OF R.E.LEE (1989)**

- PUBLISHED IN PHYCOLOGY BY LEE,1989,2<sup>ND</sup> EDITION.
- LEE CLASSIFIED ALGAE INTO 4 EVOLUTIONARY GROUPS,UNDER 4 GROUPS THERE ARE 15DIVISONS ,UNDER DIVISONS 17CLASSES WHICH CONTAIN 24 ORDERS.

### **GROUP-1 (PROKARYOTIC ALGAE)**

#### • DIVISON-1-CYANOPHYTA

• DIVISON-2-PROCHLOROPHYTA

#### GROUP-2 (EUKARYOTIC ALGAE WITH CHLOROPLAST SURROUNDED BY 2 MEMBRANES OF CHLOROPLAST ENVELOPE)

- DIVISON-1-GLAUCOPHYTA
- DIVISON-2-RHODOPHYTA
- DIVISON-3-CHLOROPHYTA

GROUP-3 (EUKARYOTIC ALGAE WITH CHLOROPLAST SURROUNDED BY 1 MEMBRANE OF CHLOROPLAST ER)

- DIVISON-1-EUGLENOPHYTA
- DIVISON-2-DINOPHYTA

#### GROUP-4 (EUKARYOTIC ALGAE WITH CHLOROPLAST SURROUNDED BY 2 MEMBRANES OF CHLOROPLAST ER)

- DIVISON-1CRYPTOPHYTA
- DIVISON-2-CRYSOPHYTA
- **DIVISON-3-PRYMNESIOPHYTA**
- DIVISON-4-BACILLARIOPHYTA
- DIVISON-5-XANTHOPHYTA
- DIVISON-6 EUSTIGMATOPHYTA
- DIVISON-7-RAPHIDOPHYTA
- DIVISON-8-PHAEOPHYTA

# THANK YOU