

# CLASSIFICATION OF PLANKTON

**Dr. P. SANTHANAM**

Assistant Professor

Marine Planktonology & Aquaculture Lab.,

Department of Marine Science, School of Marine Sciences

Bharathidasan University, Tiruchirappalli-620 024, Tamil Nadu.

E-mail: [santhanam@bdu.ac.in](mailto:santhanam@bdu.ac.in)

Website: [www.mpalbdu.weebly.com](http://www.mpalbdu.weebly.com)



# CLASSIFICATION OF PLANKTON

## PLANKTON



### PHYTOPLANKTON



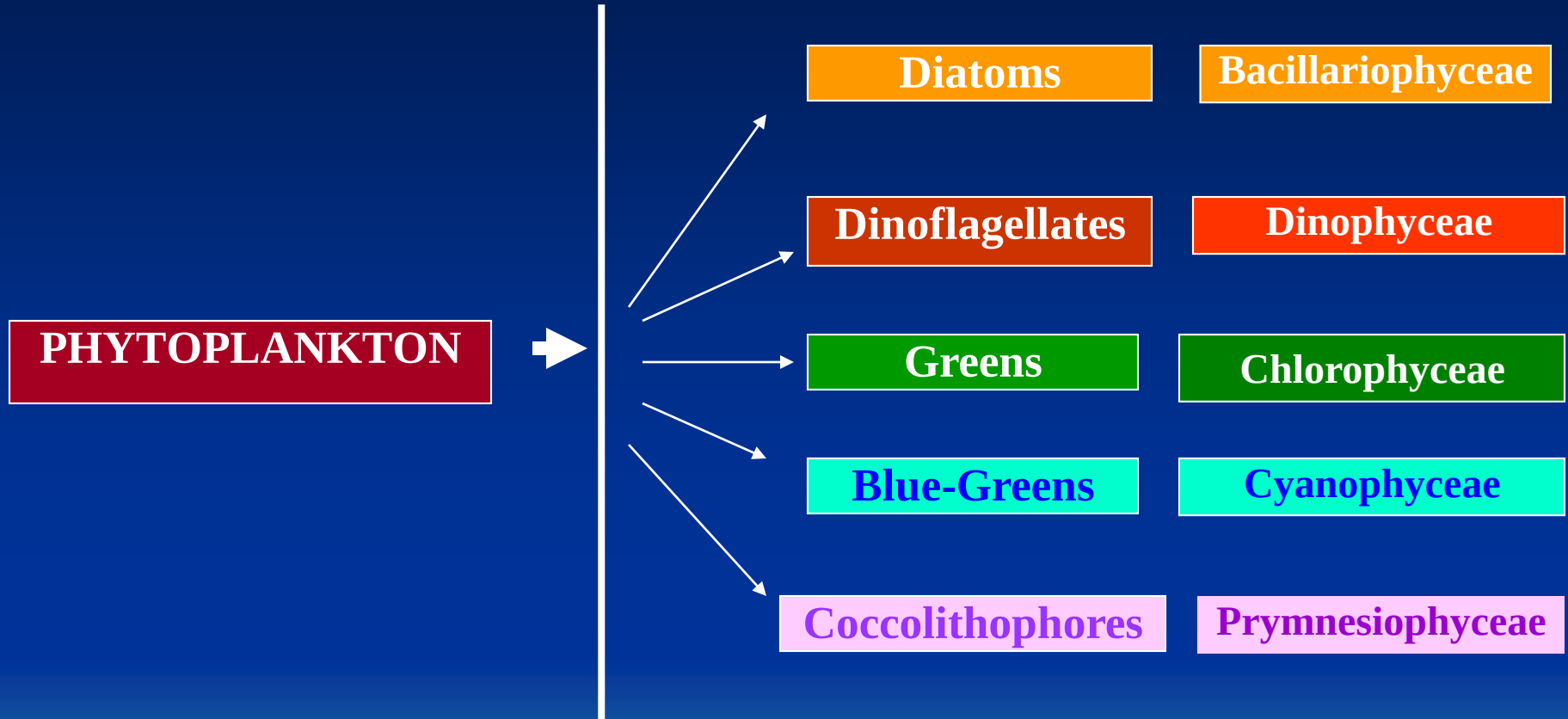
### ZOOPLANKTON



# CLASSIFICATION OF PHYTOPLANKTON



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Bacillariophyceae

**DIATOMS**

**Centric DIATOMS**

Discoïd or  
Cylindrical  
Radial in nature



*Coscinodiscus* sp.

**Pennate DIATOMS**

Elongated and  
Fusiform, oval, sigmoid  
or Circular  
Bilateral in nature



*Pleurosigma* sp.

# CLASSIFICATION OF PHYTOPLANKTON

Dinophyceae

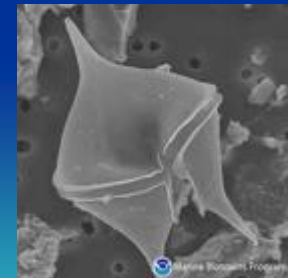
**DINOFLAGELLATES**



Unicellular algae, which has flagella for locomotion. Several of them are luminescent



*Ceratium* sp.  
*Protoperidinium* sp.



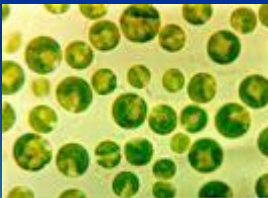
# CLASSIFICATION OF PHYTOPLANKTON

**Chlorophyceae**

**GREENS**



It has chloroplasts. Widely distributed  
in tropical seas  
Size range is 2-3 micron meter



*Chlorella* sp.  
*Tetraselmis* sp.



# CLASSIFICATION OF PHYTOPLANKTON

Cyanophyceae

**BLUE-GREENS**



Unicellular or multicellular organisms  
Which has phycocyanin pigments



*Trichodesmium* sp.  
*Oscillatoria* sp.





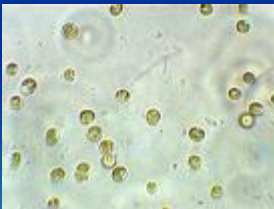
# CLASSIFICATION OF PHYTOPLANKTON

Prymnesiophyceae

**COCCOLITHOPHORES**



Small forms, some have flagella,  
soft body are shielded by tiny,  
calcified plates or shields



*Isochrysis* sp.  
*Coccolithus* sp.



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## ZOOPLANKTON

Pleuston

Living at surface of the sea



Neuston

Living in uppermost few to tens of mm of the surface



Epipelagic plankton

Living at 0-300m



Mesopelagic plankton

Living at 300-1000m



Bathypelagic plankton

Living at 1000-3000m



Abyssopelagic plankton

Living at 3000-4000m

Epibenthic plankton

Living at the bottom



# CLASSIFICATION OF ZOOPLANKTON

## ZOOPLANKTON

Femtoplankton

0.02-0.2 $\mu$ m

Picoplankton

0.2-2.0  $\mu$ m

Nannozooplankton

2-20  $\mu$ m

Microzooplankton

20  $\mu$ m -200  $\mu$ m

Mesozooplankton

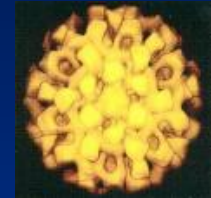
200  $\mu$ m-2mm

Macrozooplankton

2-20mm

Megalozooplankton

> 20mm



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## ZOOPLANKTON

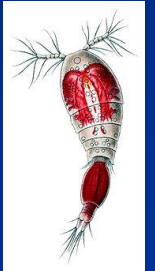
Oceanic plankton

Inhabit beyond the continental shelf



Neritic plankton

Inhabit waters overlying continental shelves



Brackishwater plankton

Inhabiting brackishwater areas such as estuaries, mangroves, etc.,



# CLASSIFICATION OF ZOOPLANKTON

## ZOOPLANKTON



### Hoplankton



The organisms which are planktonic through out their life cycle



### Meroplankton



The organisms which only for a part of their life act as planktonic

