



#### Department of biology

((Plant groups))

Stage 2
Second lecture

Cyanobacteria(blue-green algae) part1

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# Algology

Definition of algae: They are simple nonflowering plants (Thallophytes) that do not form flowers (non-vascular) and do not have vessels of wood and bark (they also lack roots, stems and leaves). They perform photosynthesis (autotrophic) because they contain the pigment chlorophyll (a). It also have simple reproductive organs.



## **Environment and presence**

- 1- Some species are found in marine waters either suspended or attached.
- 2-Some species can live in polar environments, such as the genus Phormidium.
- 3-Some species spread on land, attached to soil, rocks, and damp walls.
- 4-Some species can live in polluted water and soil.



### General characteristics of algae

- 1- All algae are eukaryotic except for algae Blue-green.
- 2- Contains chlorophyll pigment, so it is autotrophic.
- 3- Algae are devoid of vessels and flowers.
- 4- Algae live in different structures, they may live in salt or fresh water, or on the surface of the soil.
- 5- Regarding movement, some types of algae move automatically and others do not move.

### Algae divisions

Blue-green algae

**Division: Cyanophyta** 

Green algae

**Division: Chlorophyta** 

**Brown algae** 

**Division: Phaeophyta** 

**Red algae** 

**Division: Rhodophyta** 

Golden algae

**Division: Chriysophyta** 

Pyrophyll algae

**Division: Pyrrophyta** 

Euglena algae

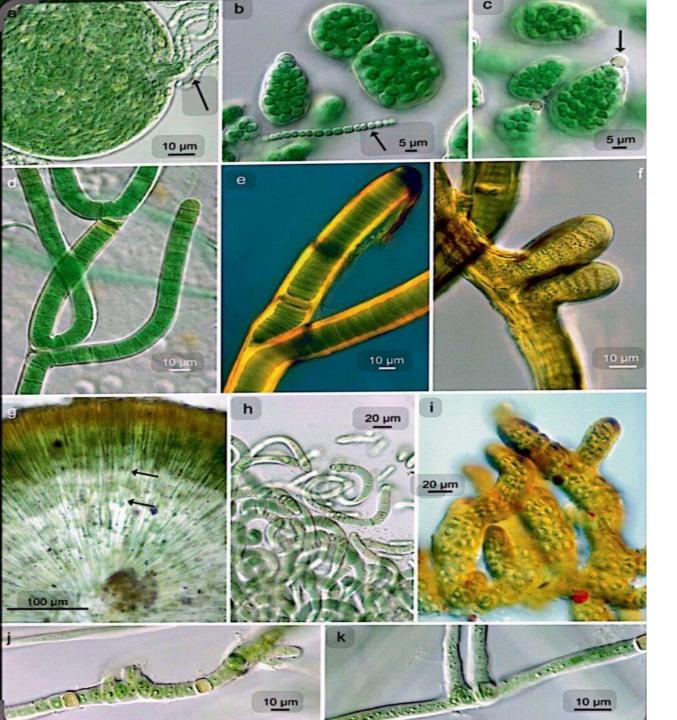
**Division: Euglenophyta** 

Karite algae

**Division: Charophyta** 

## Cyanobacteria (Blue-green algae)

- Blue-Green Algae are a type of photosynthetic bacteria consisting either of single cells or colonies which is also known as the Cyanobacteria.
- Cyanobacteria contain only one type of chlorophyll, Chlorophyll a, a green pigment. In addition, they also contain pigments such as carotenoids, phycobilin.



### Shape Cyanobacteria

## **Environment and presence**

- Some species are found in marine waters either suspended or attached.
- Some species can live in polar environments.
- Some species can live in polluted water and soil.
- Some of its species are spread on land, attached to soil, rocks and wet walls.

