

* General characteristics of Cyanophyta / Blue-green algae / Prokaryotic algal cells.

⇒ The general characteristics of blue-green algae are as follows —

- 1) Lacks true nucleus.
- 2) Lacks membrane bound cellular organelles such as mitochondria, golgi bodies, endoplasmic reticulum etc.
- 3) Complete absence of flagella.
- 4) Movement of the thallus is by the characteristic of gliding motion.
- 5) Presence of phycobilin pigments, a blue pigment (C-phycoerythrin) and a red pigment (C-phycoerythrin) is unique to this class.
- 6) Chl-a, β -carotene and unique xanthophylls, namely, myxoxanthin and myxoxanthophyll are also present in addition to phycobilin pigments.
- 7) The unique food reserves compounds are the cyanophycean starch or myxophycean starch and cyanophycin, a proteinaceous material.

8) Glycogen and oil is also found as reserve ² food.

9) Pyrenoids are absent.

10) Protoplast of the cell is divisible into a peripheral pigmented region, the chromoplasm and a central colourless region, the centroplasm.

11) In some species, pseudovacuoles are found in the peripheral cytoplasm of the cells.

12) Cells are surrounded by a mucilaginous sheath.

13) A filamentous specialised cells, heterocyst is present.

14) Sexual reproduction is completely absent. Reproduce by asexual and vegetative means.