Division: Cyanophyta (Blue green algae)

Class: Cyanophyceae

Order 2: Oscillatoriales

Family 1 : Oscillatoriaceae

Genus 1: Oscillatoria

Genus 2: Lyngbya

Family 2: Phormidiaceae

Genus 1: Phormedium

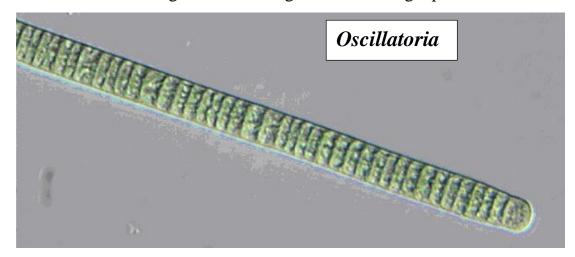
Genus 2: Spirulina

This order having **un-branched** filaments, **lacking** <u>heterocysts</u> and <u>akinetes</u>. Reproduction is by **break** of trichomes into few cell segments, **Hormogonia**.

1- Family: Oscillatoriaceae

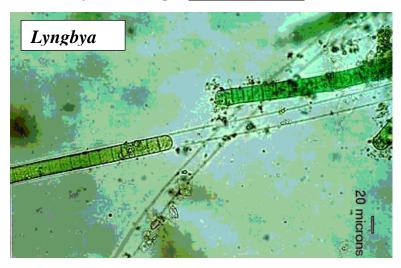
Genus 1: Oscillatoria

Trichomes **lack a sheath**, may be straight or bent, single or in groups, free floating or attached. Cells **wide** longer than its long. Sheath lacking, apical cell rounded.



Genus 2: Lyngbya

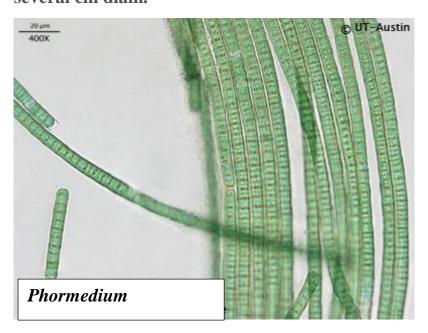
The filaments occur singly or in free floating, this genus is differing from *Oscillatoria* only in having a <u>distinct sheath</u>. Sheath is firm and thin.



Family 2: Phormidiaceae

Genus 1: Phormedium

Filamentous; filaments unbranched, rarely solitary, usually in fine, smooth, layered to leathery strata (mats), microscopic and later macroscopic to several cm diam.



Genus 2: Spirulina

Trichomes **without sheath**. The trichome regularly twisted into narrow spirals. Grows in both **fresh** and **salt** water.

