Allomyces

*aquatic fungus
*strictly aerobic
*spores can swim using flagellae
*decomposes dead plants & animals

Anabaena

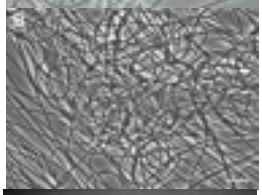
*blue-green algae (cyanobacteria; phototrophic)
*large cells process nitrogen, and small cells do photosynthesis
*can form a mutualism with mosquito fern
*strict aerobe, phototroph

Beggiatoa

*a microaerophile bacterium found in sulfur-rich environments
*can detoxify hydrogen sulfide in soil
*oxidizes sulfur
*can form large mats
*chemoorganotroph or chemoheterotroph

Caldilinea

*green non-sulfur bacteria (phototrophic)
*facultative anaerobe
*found in hot springs and other high-temperature environments
*non-motile

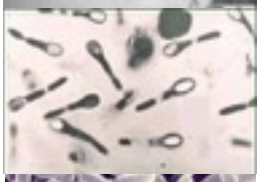


Chthoniobacter

*green non-sulfur bacteria (phototrophic)
*yellow color
*strict aerobe involved in soil decomposition
*can use methane as fuel

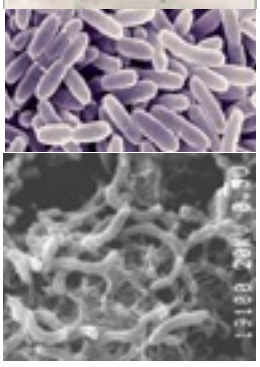
Clostridium

*strict anaerobe bacteria
*decomposer
*forms long-lasting, heat-resistant spores
*some species produce toxins to cause botulism or tetanus



Dechloromonas

*can decompose chlorine-containing pollution
*can decompose organic pollutants (benzene, toluene) found in oil & paint
*strict aerobe bacteria, can swim



Desulfobacter

*strict aerobe decomposer (bacteria)
*high sulfur environments
*reduces sulfate, producing black precipitate hydrogen sulfide
*motile, curved rods

Flavobacterium

*strict aerobe, decomposer, non-motile bacteria
*can cause fish diseases / decompose pollution from nylon manufacture

Fusibacter

*strict anaerobe bacteria
*can tolerate high-salt environments
*can produce acetate (found in nail polish remover)

Geobacter

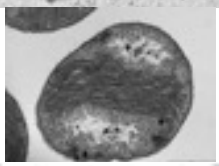
*electrogenic bacteria (may power your Mudwatt!)
*can reduce sulfur compounds
*strict anaerobe
*motile

Luteimonas

*****one of the green non-sulfur bacteria
*yellow color, non-motile
*facultative anaerobe
*often found in tidal flats

Nitrosococcus

*purple sulfur bacteria
*aerobic
*can oxidize ammonia
*swims



Parabacteroides

*****strictly anaerobic bacteria
*****can decompose chlorine-containing pollution
*non-motile

Phormidium

*blue-green algae (cyanobacteria)
*phototroph
*strict aerobe

Rhodobacter

*****purple bacteria (phototrophy)
*can switch between phototrophy (in light) and chemoheterotrophy (in darkness)
*can fix nitrogen, making nitrogen available to other organisms
*facultative anaerobe

Thiobacillus

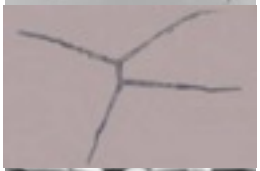
*aerobic bacteria
*grow using sulfur as an energy source (chemoautotrophy)
*colorless

Treponema

*microaerophile bacteria
*some species cause disease but the aquatic species are decomposers of plant matter
*distinctive spiral shape
*swims with a corkscrew motion

Tricladium

*aquatic fungus (non-motile)
*decomposes dead plant matter (heterotroph)
*spores float but do not actively swim
*strict aerobe



Trichococcus

*can grow at very low temperatures (same as in refrigerator)
*decomposer bacteria (heterotroph, facultative anaerobe)
*can form long chains and “flocs” or clumps in wastewater