

ALGAE in Freshwater Aquariums

Contrary to popular belief, algae is a sign of a healthy aquarium. The presence of algae indicates that the tank is capable of supporting life and serves an important role in consuming excess nutrients in the tank and in providing food for many fish.

While some algae is normal and healthy, excess algae growth can be unsightly and unhealthy to fish and plants. Controlling for good and bad algae is important. Like all plant life, algae require water, light and nutrients. Any excess of light or nutrients can cause excessive algae growth.



KNOW YOUR ALGAE

Various algae are good vs bad and have different causes and cures:

- **BROWN** – Common in new tanks, forms in soft brown clumpy patches. Is easily wiped off or siphon vacuumed away. Is usually harmless and will eventually go away as the tank matures.
- **GREEN** – Also known as Hair, Thread or Spot algae – Grows in circular bright green spots on the tank, ornaments, gravel and plants. This is a normal, healthy algae that some aquarists encourage for a natural fish supplement and can be controlled by algae eaters. Excess algae can be removed mechanically with gentle scouring/scraping.
- **BLUE-GREEN or SLIME** – Rapidly growing blue-green slimy sheets caused by excess nitrates or phosphates. Is not a true algae but a *Cyanobacteria*. Most common in overstocked tanks with inadequate circulation and insufficient water changes. Blue-green algae isn't eaten by most fish, but some do, such as *Ameca splendens* (Butterfly Splitfin) and some snails. The best way to combat blue-green algae is to remove the conditions it likes: stop direct sunlight, provide good water movement and reduce nitrate/phosphate concentration. Erythromycin is also effective.
- **GREEN WATER** – “Algae Bloom” – Is caused by too much light. Actually a sign of good environmental conditions, green algae is rarely a pest because many fish and invertebrates happily eat it. Planktonic green algae bloom turns the water green, is common in fish ponds and is helpful in raising daphnia and brine shrimp. Micron cartridges, diatom filters and UV sterilizers can help control and prevent “algae bloom”.
- **RED/BEARD/BRUSH** – This thick, dirty green algae tends to appear on the edges of plant leaves and other solid objects. Does not actually indicate bad water quality but grows very fast, making it a “bad” algae. Various algae-control chemicals are available to dip the objects in.

CONTROL ALGAE GROWTH

- **ALGAE EATING FISH** – Plecostomus, Black Mollies, Siamese Algae Eaters, Farlowella and many catfish and shrimp are recommended over any chemical to control your algae problems.
- **REDUCE LIGHTING** - Reducing the number of hours of light by 1-2 hours can make a big difference. Limit lighting to no more than 10-12 hours per day (14 hours if you have live plants). Don't position the aquarium in front of a window.
- **KEEP LIVE PLANTS** – A heavily planted tank with several different species will out-compete the algae for nutrients, creating a natural healthy biosphere.
- **REGULAR MAINTENANCE** – Keep nutrients under control with weekly 10-15% water changes. Test your water source for nitrates and phosphates and use water conditioners if needed. Vacuum the gravel and scrape/scrub signs of algae to help remove it.
- **DON'T OVER FEED** – Many owners overfeed their fish, increasing phosphate levels. Feed small amounts and watch your fish eat. All food should be eaten within 2 to 5 minutes.
- **DON'T OVER POPULATE** – Too many fish will increase waste and nutrient levels, resulting in poorer fish health, algae growth and increased maintenance.
- **INCREASE CARBON** - Extra carbon in your filtration draws extra algae-growing nutrients from the water. Change the carbon every 30 to 60 days; carbon becomes saturated and ineffective.
- **INCREASE WATER FLOW** - Algae love still water. Adding another filter, a bigger filter or a power head to your aquarium will increase water movement, making it harder for algae to grow.
- **ALGAECIDES AND ANTIBIOTICS** - Commercial algaecides and antibiotics can be very effective but must be used with caution. As the algae decays, water quality declines and oxygen is consumed, compromising fish health. Factors that caused the algae problem must also be corrected or the algae will quickly return.