

Let "Good" Algae Beat Out the Bad

Drs. Foster & Smith Educational Staff



Cultivate the "Right" Kind of Algae

Algae are photosynthetic life forms lacking specialized cells typical of true plants (i.e. vascular structures, leaves, and roots). Algae can multiply rapidly as long as their basic needs are met. They are highly adaptable and thrive almost anywhere with a light source and an abundant source of nutrients – both present in many marine aquariums. Due to their success, most algae grow to nuisance proportions rapidly, spreading stubbornly as you watch helplessly.

Macro Versus Micro

Many hobbyists are now taking advantage of the efficient nutrient exporting ability of algae and are purposely cultivating certain types of [macroalgae](#) to help improve saltwater quality as well as combat less desirable species of microalgae.

Macroalgae are large beneficial algae that actively utilize harmful ammonia, host beneficial microbes that improve biological filtration, and serve as a food source for fish. Some macroalgae, because of their beauty, also make attractive décor.

Cultivating "Good" Algae

Select species of macroalgae, such as *Chaetomorpha sp.* are grown in specialized areas of the sump or in [refugiums](#). [Refugiums](#) are a great place to establish macroalgae since they are protected from hungry herbivores and are easier to manage. Macroalgae growth is contained in the refugium and excess growth can be easily clipped as necessary. The clippings can be fed to herbivorous fish. This process prevents macroalgae from aggressively spreading in your main display.

Since most sumps or refugiums converted for macroalgae growth (also known as "algae scrubbers") are located underneath the main aquarium, it is important to

provide a separate light source for the macroalgae. A [fluorescent strip light](#) on for 10-14 hours a day provides sufficient light without encouraging over-aggressive growth.

The use of a [timer](#) automates the light schedule to make it easier to regulate the proper photoperiod. If you have plants in your main aquarium, run the lights above the algae scrubber on a reverse schedule of the main aquarium lighting. The staggered lighting schedule provides the added benefit of stabilizing pH and maintaining a higher oxygen level at night.

The careful cultivation of macroalgae harnesses the power of nature to prevent the growth of more noxious forms of algae as well as maintaining a healthy and stable aquarium.

WE RECOMMEND



AquaFuge External
Hang-On Refugium



Aqueon Aquarium
Water Changer



Zoo Med Aquasun
Timer and Dual
Timer



Pinpoint pH
Monitor