

Tang Fish and Algae

Information on tang fish and which tangs eat algae in the aquarium?

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There are 72 different species of tangs, or surgeonfishes, and these can be classified into several distinct feeding guilds. That is, the fish are categorized according to type of feeding behavior. These guilds are: the zooplanktivores, browsers on macroalgae, browsers on microalgae and grazers on microalgae and detritus.

The tang fish you need to obtain to help control filamentous algae are the species that browse on microalgae. For example, the yellow tang (*Zebrasoma flavescens*) feeds primarily on filamentous algae in the wild. It will also feed on some of these microalgae in the aquarium. Although you may consider it to be run of the mill, the yellow tang fish is one of the best fish for helping to control hair algae in the aquarium.

This does not mean one yellow tang fish can eliminate all the filamentous algae in a 50-gallon tank, especially if the rocks are already coated in the green stuff. But this fish will assist you in your efforts to keep it under control.

The purple tang fish (*Zebrasoma xanthurum*) also consumes filamentous micro- and blue-green algae, as well as some macroalgae. Although pricey, it too is a good aquarium fish. The only drawback to this species is that it can be aggressive toward closely related fish or similarly shaped species introduced into the tank after it has become established in the aquarium. It's also susceptible to parasitic infections. However, it is not nearly as aggressive as two other species you mentioned, the powder blue surgeonfish (*Acanthurus leucosternon*) and the sohal surgeonfish (*Acanthurus sohal*).

In the wild, the sohal surgeonfish patrols territories on the reef flat and reef crest and excludes all other herbivores from its domain. The modified spine on the caudal peduncle is larger in this species than in most other surgeonfishes, and it is used effectively to drive off intruders. In the aquarium it is often difficult for the sohal's enemies to avoid its wrath, and they may end up dying as a result of wounds inflicted by the caudal spine!

Because this fish gets large (up to 16 inches in total length), and because it is extremely active, it should be kept in a big aquarium. I would recommend a tank no smaller than 135 gallons — a 50-gallon tank is definitely too small. This species also feeds on microalgae, but filamentous green algae is not preferred fare.

The powder blue is also a hellion that will attack closely related species or any fish that looks or acts like it (e.g., omnivores and herbivores). It only gets to be 9 inches in total length, and I would recommend you house it in a 75-gallon tank or larger. I have never had a problem getting a powder blue surgeonfish to eat, but they often come down with external parasites, such as ich (*Cryptocaryon irritans*). In fact, I affectionately refer to most surgeonfishes as ich magnets!

As far as controlling green hair algae growth, the powder blue is not the best candidate for the job. It prefers filamentous red, filamentous blue-green and fleshy red algae.

One thing you should be aware of when keeping surgeonfishes is that if they are fed frequently their search image may change from their natural food to the introduced fare. If this occurs the individual may eat little or no algae and instead wait for aquarist handouts. This is especially problematic in a tank like yours in which you have other fish in the tank that have to be fed at least twice a day to ensure they remain healthy.

There are also invertebrates that can be used to reduce algae growth. For example, *Astraea* and turbo snails are popular choices for controlling some algae species. For a 50-gallon tank I would introduce 20 *Astraea* snails and five turbo snails and see what happens. Be aware that if algae supplies run short, some of the snails may die of starvation. There are also small, herbivorous hermit crabs that will crop filamentous algae.

In some cases it will be necessary for the aquarist to assist in the role of primary consumer (e.g., herbivore) by plucking the algae off the rocks and out of the tank with his or her fingers, tweezers, a toothbrush or a siphon hose. This is especially true if the algae crop gets way ahead of the herbivores or if an algae species grows in your aquarium that is ignored by your herbivores.