



Algae are single-celled aquatic plants that, in small amounts, add oxygen through photosynthesis and provide a healthy snack for Koi. But too much can wreak havoc on water parameters and the pond's ecosystem. Here are some ways to identify, contain, and treat algae.

Identifying Algae

Planktonic. Also called green water algae, these give the water a “pea soup” coloring. Planktonic algae often grow in new ponds that haven't yet established a strong nitrogen cycle. Overgrowth in an established pond indicates a filtration issue.

Filamentous. These algae grow from the pond's bottom and break into pieces resembling strings that float to form a layer of pond scum. Filamentous algae clog filters and water features and produce blooms that can double their weight in 24 hours. While Koi and Goldfish will naturally control the growth of filamentous algae, overgrowth indicates a filtration problem or bacterial underpopulation.

Preventing Algae

Dig A Little Deeper. The deepest areas of the pond remain the coolest and receive the least sunlight, so adding a few extra feet can create conditions inhospitable to algae growth. Experts recommend a graduated bottom about 40% deep, 30% intermediate, and 30% shallow.

Throw Shade. Sunlight is a crucial ingredient for algal growth, so blocking rays will stifle algae. Floating plants are a great way to add shade to your pond and are available in both real and artificial forms. Pond dyes also can prevent sunlight from seeping through. For fuller shade, you can purchase a shade sail or fish shelters.

Go With the Flow. Algae thrive in stagnant water. Use water features and aeration systems to keep the water moving. Water from the deepest parts of the pond must contact the atmosphere to replenish its oxygen supply.

Save Room for Dessert. Overfeeding leads to a buildup of discarded food and fish waste. These organic compounds can become algae food sources. Feed only as much as your fish will eat in three to five minutes.

Practice Pond Hygiene. Partial water changes reduce the amount of nutrient-rich water already in the pond, helping to starve some of its algae. We recommend replacing 10% to 20% of the pond's water up to once per week.

Treating Algae

Manual Removal. Before applying treatments, the best preliminary step is to scoop, rake, or vacuum the biggest blooms. It won't fix the underlying issue but can help create a more manageable situation that is easier to treat effectively.

UV Clarifiers. Ultraviolet light keeps planktonic algae from spreading by destroying it as it grows (it will not work on filamentous algae). UV clarifiers can attach to your pond pump or filter. You will need to know your pond's size and volume to determine the appropriate wattage.

Barley Straw. This is an ecologically friendly option that works effectively to clear small amounts of algae and is safe for fish. However, it won't control major blooms. Barley extract works faster than barley straw but can be dangerous for your Koi if not dosed precisely.

Algae Eaters. A number of critters exist that will safely cohabitate with Koi and Goldfish while also feasting on excess algae. The Chinese Hi Fin Banded Shark, the Japanese Trapdoor Snail, the Otocinclus Catfish, and Siamese Algae-Eater all provide good cleanup.

Algaecides. Pond algaecides effectively kill algae but lower pond oxygen levels. Use algaecides only as a last resort. Algae D-Solv or other liquid chemicals work well on planktonic algae. Granular forms such as AlgaeOff are most effective with filamentous. Make sure to employ an aerator and check dissolved oxygen levels regularly during treatment.