

## Low-light Plants for Freshwater Aquariums

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### grow easy-to-care-for plants

A freshwater-planted aquarium fosters a more attractive, natural, and healthier environment for the inhabitants. Unfortunately, many freshwater enthusiasts avoid planted setups because of the perceived additional cost and effort. But there are a number of freshwater plants that have low lighting requirements in order to thrive. You can take advantage of these species to enjoy all the benefits of a freshwater-planted aquarium at a fraction of the cost.

All plants, regardless of their lighting needs, should receive 10-12 hours of full spectrum light per day. "Low lighting" refers only to the wattage necessary to keep the plants healthy, not the amount of time the lighting should be used each day. Low light plants are those that require only 1-2 watts per gallon to survive. Anything requiring 3 watts or more is considered to need moderate lighting, and anything needing 4 watts or more per gallon is usually considered to have a high lighting need. Two plants that have relatively low lighting needs are [Java Fern](#) and [Cryptocoryne](#).

**Java Fern (*Microsorium pteropus*)** is an attractive addition to the freshwater-planted aquarium. They are well-suited for planted aquariums and also cichlid or large South American fish systems. Because it is amphibious, it will grow either partially or fully submersed. Java Ferns will thrive in a low-light aquarium with an alkalinity of 3-4 dKH and a pH of 6.0 to 7.5. They can be planted singly or in groups if there is enough room in the aquarium. Java Ferns will reach a maximum height of around 8 inches tall, with creeping, green rhizomes.



Red Cryptocoryne



Java Fern



Green Cryptocoryne

**Cryptocoryne (*Cryptocoryne wendtii*)**, also known as Wendt's Cryptocoryne, is available commercially in a variety of color forms, including green, olive green, and reddish brown leaves. The leaves differ considerably in size, shape and color; this is heavily dependent on the amount of light they receive. Cryptocoryne requires stable water conditions to prevent rotting of the stems and leaves. Regular pruning and thinning will keep it looking its best. For best results, use Cryptocoryne as a solitary plant. They may also be planted in groups with good results. If planted in thick groups, all variations will grow taller and narrower.



Q How do I calculate light output of a fixture in watts-per-gallon?

A. To calculate the number of watts-per-gallon an aquarium receives from a light fixture, simply divide the total wattage of the light fixture by the number of gallons of the aquarium. For example,

a 55-watt fixture used over a 29-gallon will provide its inhabitants with slightly less than 2 watts of light per gallon.

Both Java Fern and Cryptocoryne respond well to supplementation and fertilized substrate. Enhance both species with [Seachem Flourish](#), a comprehensive plant supplement with essential trace elements, vitamins, and amino acids to stimulate healthy growth of aquarium plants. Plant in a mineral-rich substrate such as [Eco-Complete](#), which includes live, heterotrophic bacteria to convert fish waste into natural food for your plants.

With minimal lighting and proper supplementation, you can enjoy a healthy, planted aquarium without breaking the bank.