



Greater Washington  
Aquatic Plants Association  
[www.gwapa.org](http://www.gwapa.org)

## The Bullet Proof Planted Aquarium

If you've been in the hobby for a number of years, you've probably killed your share of aquarium plants. I know I have. It took me quite a bit of time to learn how to keep aquatic plants alive, and another few months to figure out how to make them thrive. This article is a summary of what I've learnt, and although there are many ways of setting up a planted aquarium, this is one of the simplest ways of creating the lush aquascape you desire.

### Equipment needed:

- ?? 1 20G long aquarium [30"x12"x12"]
- ?? 1 Twin Tube fluorescent fixture 30" long. 2 x 20Watt bulbs
- ?? Hang on back filter
- ?? Seachem Flourite (2 bags)
- ?? Seachem Excel
- ?? Seachem Flourish

Let me explain why I selected the above equipment a little, so that it's easier for you to scale if you want to setup a larger tank (who doesn't right?).

Why a 20G Long? The dimensions are pretty good for basic aquascaping. It's relatively cheap tank. Above all, the height is only 12", which means you don't have to pump in a tremendous amount of light to get results. That in turn, makes it cost effective, since lighting can be a major expense when setting up a planted aquarium.

Why a twin tube florescent? Again, it's cheap. The amount of light that it outputs is perfect for a low maintenance, medium growth rate planted aquarium. If this is your first planted aquarium, you definitely want to stay on the medium growth rate side of things. Since the growth won't be running at full speed, you'll have fewer issues with nutrient deficiencies and algae. If you decide to go for a larger setup, I recommend Compact Fluorescent fixtures from Hellolights.com.

For the filtration you can go with pretty much any of the options that are available. Usually in a planted tank, especially anything larger than a 20G, CO2 needs to be supplemented. Any filter that produced a lot of surface agitation will dissipate the CO2. However, since we're going with Flourish Excel as our carbon source, we don't need to worry about that. Do keep this in mind when selecting a filter if you decide to scale up. I recommend Eheim canister filters for anything larger than a 40 gallon tank.

For the substrate, we've selected Seachem Flourite. Although it's a pain to rinse this out before use, it's a good-looking substrate and provides nutrients for your plants.

## **The setup:**

Rinse out the Fluorite in small batches. Use a colander if you can, it'll make your life easier. Layout the substrate so that you have at least 3" towards the back, sloping down to about 2" towards the front. Two bags of Flourite should be more than enough. If you're using any rocks or driftwood in your setup, this is the time to add them in. Its usually easier to plant rooted plants before you add any water in. Just make sure they don't dry out while you're planting them – a spray bottle with water works just fine. I'm going to recommend a list of easy plants that would work in this setup. There are TONS of other easy plants out there; these are just a few of them.

TIP: Planting is easier with a set of tweezers.

### **Foreground:**

Eleocharis parvula  
Marsilea crenata  
Marsilea drummondii  
Ranalisma rostrata  
Echinodorus tenellus

### **Midground & Background**

Micranthemum micromoides  
Sagittaria subulata  
Cryptocoryne wendtii  
Cryptocoryne lutea  
Cryptocoryne becketii  
Hygrophila polysperma  
Hygrophila difformis  
Rotala rotundifolia  
Lobelia cardinalis 'small form'

### **Epiphytes:**

Anubias barteri var. nana  
Anubias barteri  
Anubias coffeefolia  
Microsorium pteropsis  
(Java fern)  
Vesicularia dubyana  
(Java moss)

Rooted plants go straight into the gravel. If it's a rosette plant (crypts, swords fall into this category), make sure that the crown is above the gravel line. Epiphytes (like java moss, anubias, java fern) can be tied to rocks and driftwood using some fishing line. Once the plants grow and attach, you can cut the fishing line off. For stem plants/bunch plants, which come with little lead strips – cut the bunch about 1/2inch above the lead strip and plant them with tweezers, 2 –3 stems at a time. Next, fill it up with water, set the light on a timer for 10 hours and you're ready to go. You should start dosing with Seachem Excel right from the start but give the setup about 10 days before you start with Seachem Flourish. Simply follow the instructions on the bottle.

It's quite normal to have some form of algae or another, especially during the first few months when the tank is settling in. Algae are usually caused by an excess or deficiency of some nutrient. A few Siamese Algae eaters, Amano shrimp and Ottos will keep most of the algae at bay. More information on this is available on [www.aquaticscape.com/articles/algae.htm](http://www.aquaticscape.com/articles/algae.htm)

If you reside in the DC Metro area, I recommend that you join GWAPA. You'll get good advice from knowledgeable folk, access to healthy plants right out of someone's tank and opportunities to show off your setup by hosting one of the meetings!

## **Vendors & Sponsors:**

### **For your aquarium lighting needs:**

Hello Lights

[www.hellolights.com](http://www.hellolights.com)

Everything from complete lighting systems to kits for you DIYers.

### **Fertilizers and substrate:**

Seachem

[www.seachem.com](http://www.seachem.com)

Seachem has a complete line of aquarium products, great customer services and they stand behind their products. You can get details of the products from their website. A lot of local fish stores and online vendors carry Seachem products.

### **Aquarium plants:**

Aquarium Garden

[www.aquariumgarden.com](http://www.aquariumgarden.com)

A large variety of healthy aquarium plants at very attractive prices. Really good customer service! I HIGHLY recommend getting plants from here.

Charley Sabatino

[beadgc@nyc.rr.com](mailto:beadgc@nyc.rr.com)

Charley imports rare aquarium plants on a weekly basis. Email him for a list of what he's got currently available. If he doesn't have what you're looking for, he can get it in for you! He brings in plants, some of which I haven't even heard of!

### **Aquarium Maintenance:**



[www.wetpetsinc.com](http://www.wetpetsinc.com)

MD (301) 565-FISH (3474)

DC (202) 393-FISH VA (703) 383-FISH

### **Reference links:**

The Aquatic Gardeners Association

[www.aquatic-gardeners.org](http://www.aquatic-gardeners.org)

The Aquatic Gardeners Association, Inc. is an international nonprofit organization of aquatic plant enthusiasts, which appeals to both beginners and experienced hobbyists alike. The AGA produces a quarterly journal called The Aquatic Gardener, the only English language journal devoted primarily to aquarium plants. AGA members receive a subscription to TAG and all special publications. Members also can purchase hard to find aquarium plant books, magazines, and back issues. We now also hold an annual convention and an online aquascaping contest.

### **Other links of interest:**

[www.gwapa.org](http://www.gwapa.org)

[www.pvas.com](http://www.pvas.com)

[www.thekrib.com](http://www.thekrib.com)