DIY Hydroponics Deep Water Culture (DWC)

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Materials Needed

1. Black Plastic tub. \$8.99 at target.

I don't know how many gallons but its measurements are 18" x 14" and 11" tall. You can use a 5 gallon bucket. I have kind of a height restriction in my cabinet so I needed to keep the reservoir as low as possible. After you modify a 5 gallon bucket to DWC, it really only holds 3.5 - 4 gallons of your solution. This holds 6 gallons. It doesn't seem like that much of a difference now but when the plant gets big it will drink a ton. This just makes maintaining the reservoir easier.



2. Aquarium air pump - double outlet. \$10 at wal-mart.



3. 4' Standard aquarium air line, 2 airstones, 2 .Plastic T-valves, 1 airline suction cup. \$5 total also at wal-mart.



4. Net cup. 10 for \$5.



5. Exacto knife & lighter (I'm sure you have one of these)



6. Power drill & 17/64 drill bit.



Construction Instructions

The first thing that you want to do is trace a circle, in the center of the lid, using the bottom of the net cup as a guide.

Next heat the tip of the exacto knife for a minute or two.

Very carefully cut the hole in the lid. You might have to heat the knife a few times. Remember you can always come back make the hole bigger, but if you make it too big, you're fucked. So take your time and make sure you stay within the lines.



Drill 1 hole in the side of the tub about an inch from the top. This is for the airline. Do not drill the hole in the lid because you will be taking the lid off to maintain the proper nutrient level & it will be a pain in the ass each time.

Cut 2 pieces of the airline about 4" long each and connect them from the air pump outlets to the t-valve.



Cut another 2 pieces of airline, these about 2-3' long and connect the air stones to the t-valve. Then connect a 2' long piece of airline to the t-valve.







Run the line through the hole you drilled and connect it to the air pump.



The last thing to do is fill the net cup about a third of the way up with grow rocks, lava rocks or any similar medium. Place a cutting of your favorite stain on the rocks, then fill the rest of the cup with your medium.



The nutrient level in your tub should be at the bottom of the net cup. You might have to pour some of the solution through the top for the first few days until the roots grow out. Once they do let, them grow into the water. The air stones will provide enough oxygen. When the plant takes off she will drink a lot of water, so make sure you top the reservoir daily if you have to. If the level goes down too low you will have ph and over fertilize issues. Make sure you change the reservoir out every 2 weeks or when you have added the same amount of water back that the reservoir holds. Air stones are cheap so replace them every reservoir change for better results. I made this for one plant. If you use a bigger reservoir, you can add more net pots. Just cut more holes and add another or a bigger air pump. I wouldn't put more than six plants per tub.

The growth rate is amazing! These pics are of a 5 week old mother plant. The last is of the stem after I took over 40 clones.



