

Microgreen production at home: Getting the materials

Microgreens are plants that are harvested for consumption during the seedling stage, normally a week or two after a seed has been germinated. They can be one of the most nutritionally dense plant foods out there, given that they contain a lot of the nutrition already present in seeds plus phytonutrients derived from the beginning of the plant growing process (see [here](#)).

For these reasons and the fact that they can be grown in small amounts of space, all year round, I have decided to do a small home microgreen project in order to produce a relatively large amount of microgreens for home consumption. Since I have no experience creating setups of this type – I have worked in hydroponic forage productions but never microgreens for human consumption – I decided to look for the best possible setup and in the end decided to base this project on the setup described in [this youtube video](#), following some of the advice given by this microgreen grower. *Note that I do not know if any of the financial claims in this video are true or even likely to be true, I just liked the growing setup configuration.*



I intend to produce microgreens like these

Using my own experience in hydroponics I then went for the materials that I thought best matched what was given in the video and ended up with the following list:

1. [Styrofoam covers for trays](#) (these you can definitely get cheaper, but these are the best compromise I could find on amazon, they are used in the dark phase of the germination process)
2. [Rack to place the trays in](#) (there might be cheaper ones but I needed something aesthetic as it will be visible in my apartment)
3. [LED lights to use for growing \(2 per rack section\)](#) (cool spectrum to limit etiolation, 2 tubes per rack space)
4. [Trays \(pizza dough box\)](#). (note that this is polypropylene, not fiber glass, 5 trays fit in the rack)
5. [Coco mats](#)
6. [Sprayer](#)
7. [Bamboo sticks used as separators in trays](#)
8. [Broccoli seeds](#) (organic, untreated)

These are all the materials – besides water and hydrogen peroxide – that should be required to reproduce the basic setup I want to recreate. With this setup I will be able to grow 5 18×24” racks at the same time, which is a lot of microgreens for home consumption. My plan is to experiment with broccoli seeds first – which are relatively cheap and easy to germinate – then move onto other plants that might be more expensive and difficult to germinate. Broccoli plants should germinate in 1-2 days and should be completely ready for eating in around 7 days. This can be a big difference compared with something like oregano which might take 6 days to germinate and then an additional 7-10 days to be ready for consumption. You can use a reference graph with the production times of different microgreens [here](#).

I also have significant experience with enhancing germination, so this setup will provide me with the ideal conditions to test different germination treatments on the plants. Hopefully

I will be able to cover those in this blog. This project might also be the perfect opportunity to start a youtube channel so that you guys can experience the entire setup first-hand.