

Marijuana Aquaponics



Marijuana Aquaponics Guide

Marijuana aquaponic systems make use of fish waste in a unique way that feeds plants what they need within a system that is similar to hydroponic growing. Aquaponic gardening produces a thriving ecosystem that grows plants very rapidly and healthy. This gardening method is gaining interest among the home gardeners, urban farms, and larger commercial farms.

Smart growers are asking themselves, exactly how practical and efficient aquaponic systems are for medical marijuana cultivation? Can a medical marijuana grower attain the same high-grade product using an aquaponic system?

The answer to this is mixed.

To start, aquaponic systems are different than hydroponics in many ways, however when it comes to plant growth and production, there is one big difference.

Using a hydroponic system, you are able to give your medical marijuana plants the exact amount of nutrients that you want to give them and the plants will be able to assimilate for growth. With aquaponics using fish in the system to provide plants with their “food,” this makes supplementation of synthetic plant fertilizers not an option, as these salt compounds can be very toxic to the fish.



Aquaponics systems that are maintained and kept healthy become much more productive and flourish. Another way to think of how an aquaponic system ages is much like an aging bottle of wine, and it gets better with time for its flavors to mature.

Aquaponics start slower than hydroponic systems do, since aquaponic systems must develop beneficial bacteria cultures in the system so it is able to convert the fish waste into nutrient rich plant food.

One study was completed by Dr. Savidov (<http://hydroponics.com.au/issue-101-aquaponics-revisited/>) the Greenhouse Team Leader of the Crops Diversification Research Centre in Alberta, Canada.

He said “in year one, aquaponic systems produces 70% of the yield of a conventional hydroponic system, while year two yields may be as much as 30-40% higher than those obtained through using hydroponics.”

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The reason for this, he stated, “is that the micro-organisms within the system can take a year to develop the right balance.”

Micro-organisms need time for their “living culture” to be matured in the system and over this period of time there is more nutrient-rich fish waste that constantly supplies plants with the “food” they need.

Many people have argued that growing medical marijuana in aquaponics does not produce as high quality (or yield) as hydroponic systems (where growers can load up more nutrients than the plant can use). This is the argument, they point that the Phosphorus and Potassium levels are not high enough for high quality medical marijuana production during the flowering period.



If you take this into account, aquaponic systems work extremely well for medical marijuana’s vegetative growth stage. In vegetative growth, the plants require a large amount of nitrogen for fast and healthy growth and nitrogen is prevalent in the fish waste in an aquaponic system.

Plants growing in these aquaponic systems develop strong root systems, lush foliage, and sturdy plant structure, which is essential for the vegetative growth stage. The bloom stage in aquaponics works similar to the vegetative growth stage, but medical marijuana require more Phosphorus and Potassium (not Nitrogen) to produce a large yield when blooming.



In some cases, aquaponic systems do not supply enough of these nutrients (Phosphorus and Potassium) compared to hydroponic systems, where you can add more liquid bloom formulas to increase the Phosphorus and Potassium levels.

Fortunately, there are some options to make an aquaponic system have plenty of these nutrients during the flowering stage that will increase the yield.

Since many medical marijuana growers want good and fast production in aquaponic systems, it is best to remember: “All good things come to those who wait.”

Growers need to understand that with aquaponic systems it may take a good year or two before the

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aquaculture balances and starts to out-produce hydroponic systems.

Aquaponic systems that run with a smaller number of fish usually produce lower amounts of Phosphorus and Potassium than those with a larger number of fish stocking densities. And the reason for this is due to less fish feed going into the system, and less fish waste (or poop) being released.

With higher fish densities in your aquaponic system, flowering plants like medical marijuana will be able to grow much more rapidly and produce larger yields of medicine.

In addition to higher fish densities, aquaponic gardeners will add worms to grow beds that will help to break down the fish waste and turn it into usable plant food faster. Some growers even add a bit more worm compost tea that is high in potassium and phosphorus to help boost the system during the flowering period.

Another common practice in aquaponics is to add supplemental nutrients into the system that add key additional nutrients for healthier plant growth during the blooming period.

One is MaxiCrop Liquid Seaweed, which contains high levels of Potassium, along with many other beneficial nutrients. Another way to indirectly add potassium into your aquaponic system is by adding banana peels (high in potassium) in the grow bed for worms to break down as “food” for medical marijuana.

Aquaponic systems that need potassium and the pH raised, you can use potassium bicarbonate, potassium carbonate, or potassium hydroxide when needed.

Many of these can also be applied by foliar feeding, such as using diluted Eco Rose that will add potassium, while helping to prevent Powdery Mildew and Black Spot on your plants.

When an aquaponic system is allowed to fully mature (in one or more years) and its beneficial bacteria comes to balance in the system, aquaponics is capable of producing great quality medical marijuana.



Though aquaponic gardening is relatively new to the world of medical marijuana, aquaponic systems have been proven to grow tomatoes and many other types of foods very well and taste delicious.

