Article Side

Aquaponics Design: Understanding the Different Pieces of the System by DINORAH Oneil

Article published on July 13th 2012 | Book Marketing

In order to understand aquaponics layout, it is important to examine what aquaponics entails. First, aquaponics gardening is a sustainable ecological food production method that combines both aquaculture and hydroponics to grow fish and plants in a symbiotic balance system. The waste excreted by the fish is used as fertilizer for growing the plants. On the other hand, as plants consume this spend, they end up cleaning the water, thereby providing the fish with a healthy aquatic atmosphere.

From the above description, you can easily deduce that, aquaponics layout is composed of two main parts. These include the aquaculture part, and the hydroponic part. The aquaculture part is basically the tank for the fish while the hydroponic part is the one that contains the plants. It is the combination of these two parts that give hydroponics its name. Besides these two main parts, there are some other modest parts that are incorporated in the aquaponics layout, and are essential in the proper functioning of the system.

generally, an aquaponics design will typically feature the following components:

1. A rearing tank

This is the part where the fish are reared.

2. The filtering unit

This is the part that separates plants from the fish. It acts as the filtering unit that not only filters out the solid use up, but also provides an ideal atmosphere for the growth of nitrification bacteria, which converts ammonia (excreted by the fish) to nitrates that are necessary by the plants.

3. The aquaponic grow bed

This is the part where the plants grow.

4. Water collection container

This is a container that is commonly found at the lowest part of the aquaponic system. It collects the water, which has been filtered by the plants before circulated back to the fish rearing tanks.

Apart from these basic components of the aquaponics design, the other necessary elements of the system include the water, electricity, electric pumps for pumping the water amongst these parts and feed for the fish. If you would like to implement a green aquaponics layout, you can install a solar panel to run the electric pumps. Another way you can save power is by planning your system in such a way that the water flows downwards easily without the need of continuous vigorous pumping.

There are many benefits of using aquaponics to grow fish and plants such as vegetables and fruits. First, the plants becoming grown through this system get a continuous access to rich nutrients and water. This accelerates their growth, and they typically mature at a far much faster rate than their soil-based counter parts. With this system, you can get one or two additional harvests in a single growing year or so. Furthermore, you will get a trustworthy supply of fish for your diet.

An aquaponic garden is very effective in the way utilizing the water. It does not require a change of water, but it alternatively reuses and re-circulates the water over and over again. Only a little amount of water is normally lost through absorption by the plants. This tends to make aquaponics gardening very ideal for locations where there is a need to conserve water.

Aquaponics layout is not difficult to put into action, and you can actually assemble one on your own.

Article Source:
http://www.articleside.com/book-marketing-articles/aquaponics-design-understanding-the-different-pieces-of-the-system.htm - Article Side

DINORAH Oneil - About Author:
a Aquaponics 4 You teaches step-by-step a Aquaponics How To Guide which you can get started right away. Visit a Aquaponics4You Review to find out more.

Article Keywords:
Aquaponics Design, Aquaponics, Aquaponics 4 you, Aquaponics System, Aquaponics Parts

You can find more free articles on Article Side. Sign up today and share your knowledge to the community! It is completely FREE!