

The Joy of Hydroponics Gardening

How does your garden grow? With fresh air, sunshine and rich, black soil? Not if you're one of the countless gardeners who are now enjoying the benefits of hydroponics gardening.

Also called the cultivation of plants in water, the popularity of hydroponics gardening is booming, partly due to the shrinking water supplies and scarcity of fertile farmland.

The hydroponics method of gardening is not a new idea. One of the Ancient Wonders of the World, the famous Hanging Gardens of Babylon, were made possible by using a form of hydroponics to cultivate the plants. Since those ancient times, researchers have proven that rather than simple black earth, many different aggregates or media could be used to support plant growth. Hydroponics gardening is just one of these alternative methods.

Benefits of Hydroponics Gardening

Many people enjoy hydroponics gardening simply because of the space saving benefits. Homeowners and apartment dwellers alike are able to grow fresh vegetables and plants in the smallest of spaces, even on apartment balconies. Greenhouses have also adapted hydroponics gardening due to these same space-saving benefits.

It's been found that, when properly grown, hydroponics plants are healthier and more vigorous. Because no soil is used in hydroponics gardening, the nutrients are more readily available to the plant. Thus, plants are able to mature faster, yielding an earlier harvest of vegetable and flower crops.

The convenience of hydroponics gardening is enhanced by the ability to automate the entire system with a timer. This reduces the actual time it takes for the home gardener to maintain the overall plant growth requirements. Through automation, the gardener enjoys greater flexibility, and can be gone for periods of time without having to worry about watering the plants.

Raising Healthy Plants

All plants, whether grown with hydroponics or in a traditional soil garden, require the same basic elements: nutrients, water, light and air. When grown in a traditional garden, your plants will obtain their nutrients and water from the soil. The nutrient uptake is a little slower, because the soil can impede the roots' abilities to access what they need.

One of the joys of hydroponics gardening is the very lack of soil. It's a cleaner, easier way to garden. Water and nutrients are always available, so the plants are never stressed. If your hydroponics system is set up outdoors, you can regulate the levels of sunlight and air. Indoor systems will require artificial lighting and air circulation for plants to grow to the best of their abilities.

For artificial sunlight, many hydroponics gardeners use metal halide lamps and sodium vapor lamps in conjunction with incandescent light bulbs. Fluorescent or specially designed grow lights may also be used.

Like all living things, plants need oxygen to stay alive. Healthy, white roots are responsible for delivering all of the nutrients for the plant. If the roots die, it is impossible for the plants to survive. Even if all of the other growth requirements are in place, they will be useless if the plants are not able to access nutrients through the roots. Therefore, your hydroponics system will require proper aeration through a means of supplying air circulation. This technique mixes the air throughout the nutrient solution, allowing the plant to draw out the carbon dioxide necessary to carry on photosynthesis.

Finally, a sterile medium is required. There is a selection of media available on the market, from simple gravel to specially made formulations. Due to the lack of soil, a definite joy of hydroponics gardening that's particularly exciting for home gardeners is the lack of weeds to pull. There are also no soil-borne pests to worry about, so diseases caused by these pests are minimized, if not entirely eliminated.

If you're short on time, short on space or simply don't like getting your hands dirty, discover the many joys of hydroponics gardening.