

Hydroponics for your Kitchen Counter

By Pat Dickey, Fairfax County Master Gardener

For those of you who do not have a suitable outdoor gardening space for vegetables and herbs, a unique home hydroponic system called an Aerogarden may interest you. With an Aerogarden, you can grow many of the same crops you would grow outdoors. I received one many years ago as a gift from my son, who knew of my love for herb and vegetable gardening. He also knew that we had shade in our yard and an uncontrollable number of grazing deer in our wooded neighborhood. The Aerogarden became the convenient solution for growing and finally harvesting fresh herbs and lettuce to put on the dinner table.

Hydroponics is the technology of growing plants in a nutrient solution composed of water and fertilizer. Even though it seems to be a new gardening method, hydroponics can be traced to the Hanging Gardens of Babylon, where plants were grown in a steady stream of water. During World War II, the U.S. Army used hydroponics to grow fresh produce for troops in the Pacific Islands, which were infertile lands. Today, hydroponics is used in urban areas, where the cost of agricultural land is high. Specialty crops, such as fresh salad greens, herbs and cut flowers are grown with hydroponic methods.

The technology of the Aerogarden units is so advanced that you do not have to know much about gardening to have good results. It comes with a guide that quickly outlines how to start your new garden: add water, add nutrients, and add seedpods and grow domes. There is an easy-to-find fill line for the water in the bottom bowl of the unit. The nutrient comes in a bottle with a measuring cup, and the unit has a reminder about when to add more. Plastic grow domes cover the seeds until they sprout.



Aerogarden lettuce plants with lights off

photo: by author

LED lights over the grow unit are preset to go on and off to allow for several hours of needed darkness for the plants. There are also daily tips for pruning, etc. that appear on the front of the Aerogarden in case you have questions. For those who want to grow larger plants, trellises are also included to keep bigger plants upright. The LED light panel adjusts up and down for whatever you are growing.

The Miracle-Gro Aerogarden began its product life offering lettuce and herb collections. The products have been expanded to include peppers, cherry tomatoes, strawberries and flowers. They even suggest that you may want to grow bonsais, miniature roses and fruit trees in the larger units with the addition of a special grow bowl attachment. My experience has been with lettuce and herbs. I have used their seed collections already planted in grow sponges, as well as my own seeds that I inserted into empty grow sponges. Both ways worked equally well.

If you who are wondering what to do about pollination for tomatoes and other flowering fruits and vegetables, the Aerogarden's specially designed "Be the Bee Pollinator" takes care of it. You simply touch the flowers with the vibrating bristles and then distribute the pollen to the other flowers. They have thought of everything.

For those of you who want to start seeds indoors for your outdoor vegetable gardens, there is also a Styrofoam insert available in which to plant your own seeds. I had success in starting beets, as well as lettuce and other greens. Simply remove the top of the unit where grow pods are usually inserted, and replace it with the Styrofoam piece. Then insert the grow sponges, and plant your own seeds. You can move the plants to your garden when they are large enough, but don't forget to put them in another container, harden them off outside, and keep them moist until they are ready to go in your garden. (See Starting Seeds Indoors Under Lights for the how-tos of growing seeds indoors under lights, including guidelines on when to plant particular vegetables.)



Aerogarden with seed-starter insert

photo: by author

Have a Happy Spring, and enjoy your gardening endeavors.

Resources

MiracleGro Aerogarden

Hydroponics, University of Florida, Baker County Extension