

An entirely automatic system can be built using an aquarium pump and a household timer. The timer triggers the release of the nutrient solution from a sealed reservoir into the growing tray or planter.

Connect a plastic dishpan to a five-gallon plastic gas can (used for the reservoir) with flexible half-inch tubing. Apply silicone rubber cement to make the openings around the tubing airtight. Run the tubing to the bottom of the sealed reservoir. Next, attach the aquarium pump to the top of the reservoir with aquarium tubing. Seal the connections with silicone rubber cement. By plugging the air pump into the timer and setting it for a two-hour "on" cycle every 24 hours, you'll have an easy-care setup for a crop of vegetables or flowers.

Remember to cover the planter's drainage hole with netting. Then add the rooting medium. Pour the solution through the dishpan planter to fill the reservoir.

When the timer turns on, air will blow into the reservoir, forcing the solution into the planter. The solution will drain back into the reservoir when the timer is turned off. Add new solution every two weeks. The used solution can be poured around outdoor plants.