

# Grow Potatoes in Perlite by Terry DeValle



Have you tried growing vegetables using hydroponic techniques? An easy method is to use perlite as the media and add a nutrient solution. This is an excellent way to try growing vegetables and avoid some of the problems of traditional gardening.

To get started, find a sturdy container. Any size or shape container will work, but it should be at least ten inches deep. Rubbermaid or other brand storage containers work great. Light colored containers are best as they reflect light and will not build up heat on hot sunny days. Drill small holes around the perimeter of the container two inches above the base and two inches apart (not on the bottom) to allow



excess water to drain out of the container. Purchase a bag of perlite and fill the container leaving 1 inch of space for watering at the top. Fill the container outside because perlite creates a dust that may cause respiratory problems.

Before wetting the perlite, place the container in an area that will get a minimum of 6 hours of sunlight, preferably morning sun. Avoid areas that could get too much rain from roof runoff. Once water is added, the container will be heavy and difficult to move. Add water until it saturates the container, obvious as it starts to come out of the holes. Potatoes work great in this media, but other crops like lettuce, radishes and carrots will thrive as well.



If planting potatoes, try to find certified seed potatoes that are early maturing varieties (70 to 90 days). If not, plant your favorite potatoes from the local grocery store. Large potatoes can be cut into sections leaving 2 or 3 eyes (buds) per seed piece. Cut into sections and let them dry out for a day before planting. Plant the seed pieces with the cut surface facing down about an inch below the surface and four to six inches apart.

While you're waiting for the potatoes to emerge, check to make sure the perlite doesn't dry out. Cover

the storage container with the lid until the plants come up to conserve water, but check them each day and remove the lid as soon as leaves pop up. Don't overwater because the seed pieces could rot. After about 2 weeks, sprouts should be visible. If you haven't seen green shoots by week 3, check to make sure seed pieces are producing roots.

Once plants have emerged, begin a regular water and fertilizer schedule. Depending on the weather, plants will need water every 3 to 5 days. As plants get larger water demands may increase so if plants are wilting, increase the frequency. The perlite has no fertilizer content so a liquid fertilizer is required. To make up the fertilizer solution, add 1 teaspoon of a 20-20-20 soluble fertilizer that contains micronutrients to a gallon of water. Initially add the fertilizer solution until the material comes out of the drainage holes. Then rotate water with the fertilizer solution and apply as needed. This will vary with weather conditions and the size of the plants. Once the plants reach about 18 inches in height, switch to a fertilizer with a higher potassium content (10-10-20) to encourage tuber development.

If the perlite is washed away and developing potatoes are exposed to light, cover them up so they don't turn green. In about 70 days from planting, potatoes will be ready for harvest. If you want larger potatoes, let them continue to grow. The tops of potatoes will typically turn brown and die when plants are mature.



Then comes the fun part – the harvesting. When harvesting potatoes, clean them carefully and allow them to air dry. They are amazingly clean when growing in perlite compared to soil. Potatoes can be stored for several months after harvest.

The container can be reused, but the perlite should be removed and the container should be cleaned thoroughly. The perlite might make it for another crop, but it's safer to replace it with each crop.