

# INTRODUCTION TO SOIL CUBES



**Soil cubes have been used for two thousand years.** The Aztecs would dredge up the peaty mud from the bottom of irrigation canals and form it into small planting cubes, with holes in the center, exactly like we use today. If you want another example of the power of food production, this was a milestone in history and the success of this agricultural technique allowed there to be a huge surplus of food which in turn allowed the Aztecs to amass a large and fierce standing army that would have been impossible without the means to feed them. It has been recently, (this century) rediscovered, and made its way into commercial agro-business. Holland is said to be the largest producer of soil cubes with its enormous flower production facilities. Please consider soil cubes for the simple reason, that by employing this ancient technique, you will be able to produce more plants with much less work. This is key to gardening success right from the start.



Soil blocks or **Chapines** being prepared by a **Chinampero**, a descendant of the Aztecs in Xochimilco, near Mexico City, Mexico

## WHAT ARE SOIL CUBES?

A Soil cube is a cube of growing medium that has been lightly compressed and shaped by a form. A soil cube serves as both a container and the soil for starting and growing seedlings, eliminating the need for plastic pots and trays for transplanted seedlings. Seedlings grown in soil cubes form stronger root systems than those grown in containers due to increased oxygen to the roots and the soil cube's natural tendency to "prune" roots. This creates a substantial advantage when seedlings are transplanted into the field, because plants establish themselves more quickly and, because of lessened root disruption, they are less prone to transplant shock. The key to making good soil cubes is to use a mix containing the correct proportions of peat, compost, soil, and sand or perlite. A "cube-ing" mix needs extra fibrous material—peat—to bind the material together and help the cube retain moisture.

## WHY SOIL CUBES?

- **Save Money! The soil cube system is less expensive.** Soil cubes are made with a small hand tool that will quickly pay for itself. When compared to purchasing peat pellets, peat pots, or other small plastic pots that will deteriorate over time, the small expense of a SOIL<sup>3</sup> tool will be immediately offset in the first few flats of seedlings. Many gardeners will employ coffee cans, yoghurt containers, and other cast off containers to start their seedlings in. Having tried this, I have found the time wasted in preparation and storage is enormous. Soil cubes streamline the process.
- **A few plants at a time or many can be started.** When using flats to start your seedlings you must fill the entire flat with soil, even if you only want to start a few plants at a time. Using soil cubes allows you to sow a few at a time for succession planting. If you want to have continuous lettuce for example, you can sow eight to ten cubes with lettuce every week. By the fourth week, you will have 32 cube set with lettuce and the first batch will be ready to set out into the garden. In a couple weeks, you will be set with lettuce as long as you keep up the sowing of lettuce every week.
- **More kinds of vegetables can be grown in soil cubes.** Basically, since there is no root shock when the cubes are moved to the growing beds, some plants, usually not recommended for transplantation can be raised successfully in cubes like sweet corn, beets, and cucumbers. Space is used more efficiently.
- **Soil cubes permit more plants per square foot than round pots.** There is more soil for the seedling to take advantage of and there is no problem with becoming root-bound as in a round pot. A four inch cube has the same amount of soil as a six inch round pot.



Hundreds of thousands of soil cubes used in a commercial greenhouse

**Using soil cubes is the most radical thing you can do to obtain immediate and long lasting success in your garden.** By using soil cubes, you will be able to control the early plant development, move them to the garden when ready, and have no consequence for having done so. The seedlings will thrive and have you will have a dramatic increase in viable plants in contrast to one who is planting seed directly into the prepared garden beds or rows.



Single S O I L <sup>3</sup> tool and tongs for transplanting