

Vines in the Garden

by Peter Garnham

We're not dealing with grape vines here – which is what most people think of when vines are mentioned – but members of the Cucurbit family: cucumbers, squashes, pumpkins, melons, gourds, and watermelons.

One of the first considerations for the Cucurbits is space. They like a lot of it, and it's hard (but not impossible) to train them in one direction. I have grown melons upwards, on nylon netting, fastening the vines here and there to encourage them in the right direction. But if you let them ramble, and it's hard to stop them, five or six plants can easily cover an entire 20x20 garden!

They like a soil that is rich in phosphorus (bone meal), and magnesium (Epsom salts). Our soil at EECO Farm generally has plenty of both these nutrients, but you can add a *little* more. About 5 lb. of bone meal and 3 lb. of Epsom salts is ample for *one entire garden*. As usual, the caution: More is NOT better! Soil pH should be about 6.2 to 6.8, which our soil is.

You can buy transplants now from local nurseries, or grow your own from seed. You should get the seed into the ground during June to ensure a summer crop. Plant the seed about 1 inch deep. Put two or three seeds together, leave a space of *at least* 48 inches, then plant another two or three seeds, and so on across your garden.

Forget hills. The theory is that the soil in hills warms more quickly (which is true) but with our well-drained soil, hills also dry out more quickly. Just plant in a nice straight row and you'll be fine. Keep the rows 48 inches apart, too, so that no cluster of three plants is closer to its neighbor than four feet. This is why some people have one whole garden just for Cucurbits!

Since all the Cucurbits like warm soil, they will be happy if you place them in holes cut in black plastic. This warms the soil and reduces weed pressure (on you and the plants). But remember that they like quite a lot of water, so if you use plastic you must lay drip irrigation or soaker hose under it. If you cut the holes large enough to allow watering, you'll get a bunch of deep-rooted weeds growing there that can't be pulled out without disturbing the shallow-rooted Cucurbits.

When you put young plants in the ground, *protect them immediately*. The best way is floating row cover, held over the plants by wire hoops. Insects – particularly cucumber beetles and squash bugs – do a lot of damage to young plants. Once the plants are old enough for you to remove the covers, most beetles and bugs have passed their peak population, and anyway the plants will be big enough to survive most attacks.

There are two types of cucumber beetle, striped and spotted, both of which are yellow and black. They and the squash bugs do a lot of damage all by themselves, and they also carry diseases from infected to uninfected plants. Another nasty critter is the vine borer, which lives inside the stems of the plant, causing it to collapse. If that happens, remove the plant, put it in a garbage bag, and *take it to the dump*. Please do not put it in the compost weed wagon.

The other foes of the Cucurbits are the mildews. Downy mildew produces large brown spots on the leaves that spread and will kill the plant. Powdery mildew is a sort of light frosting that soon covers all the leaves. An organic fungicide will treat downy mildew, and a product containing neem oil will deal with powdery mildew (and, by the way, will kill cucumber beetles).

My friend from Cornell, Dr. Meg McGrath, has a great piece on another common disease of Cucurbits, *Phytophthora* blight, at http://vegetablemendonline.ppath.cornell.edu/factsheets/Cucurbit_Phytoph2.htm

When buying fungicides or *anything* that will get applied to your plants, always look for the OMRI Listed symbol.



OMRI is the Organic Materials Review Institute, and the Listed seal is your guarantee that the product is truly organic. Never trust package or advertising claims that something is “natural.” You can check what OMRI does at <http://www.omri.org/index.html>.

Hint: The best way to avoid these problems is to grow or buy varieties that are resistant to common diseases. This is indicated after the plant name. For example, the letter F means it is resistant to fusarium wilt, V means it resists verticillium, and so on. Some hybrids have a long string of letters after their name!

As with all garden plants, *water deeply and regularly*. With all the Cucurbits, do everything you can to keep water off the leaves. You can't control the rain, but you can help avoid the conditions that diseases like by *never* using a hose spray on your plants. If you absolutely *must* water that way, do it in the morning so the leaves have a better chance of drying off in the daytime.

If you feel the need to fertilize your plants, find an OMRI Listed fertilizer, such as a fish-seaweed fertilizer or something based on dehydrated chicken manure.

Should you have any questions or problems, you are welcome to email me at pgarnham@eecofarm.org.

Happy gardening!

Peter Garnham



The spotted cucumber beetle

The striped cucumber beetle