SOME THOUGHTS ON ORGANIC STRAWBERRY PRODUCTION

Strawberries certainly are a tempting crop for the market gardener or truck farmer to try. The demand is high and the crop coming in at a time when there is a great need for cash, early in the season. Having grown this crop organically since 1983, I have learned that it is not a sure bet, but frequently can be rewarding.

Choose a piece of land that is 100% free of perennial weeds, and where a good cover crop has been grown the year before. Buckwheat or oats and peas are good, because they will not leave you with a lot of residue when you are ready to put in your strawberry plants. Another strategy is to have strawberries follow a very carefully weeded crop like carrots.
10 tons of compost is the least to use, as the plants will be growing for 2 seasons. I try to set my plants in early May, using two rows 30 inches apart, with plants 16 inches apart in the rows. This requires about 10,000 plants per acre. Try doing a 1/2 acre at a time to begin with. Irrigate after transplanting to help get the new plants off to a good start.

This layout allows for the use of a Lilliston cultivator, which is a ground driven, highly adjustable rotary hoe. It can be set to throw the runners into the rows, and hill the rows to kill small weeds. A Lely tine cultivator is also a good one to use on strawberries, as they are a tough plant and can get banged around a bit. If you lack tractors and equipment you can use a walk behind tiller between the rows and set the runners by hand. The latest technique is to plant through black plastic and set no runners, but I have not been able to get enthusiastic about generating so much garbage just to grow some berries. I enjoy cultivating, but I admit that there is a lot of hand weeding that goes into a good organic strawberry patch. Pick off the blossoms so the plants put all their energy into their roots. Weed control is essential for the health of the plants and for insect control as well.

Topdress your 1/2 acre patch with 500# of an organic 5-3-4 fertilizer in August or early September. This is the time that the plants are storing up energy to make their blossoms the coming spring. Keep cultivating, cutting off the runners that spread into the aisles. A mother plant should have 4 to 6 runners. Keep watering, too. When the ground starts to freeze, about Thanksgiving here in North Central Vermont, spread a 6 inch layer of straw over the rows. This protects from freezing and thawing, and will act as a mulch between the rows when its is raked off in the spring.

The following spring the work continues. Rake off the mulch after the snow melts and the plants begin to push up new leaves. Don't try to hold them back, it is not good for their production. Set up the irrigation system and be ready to protect the blossoms from late frosts, which are a regular feature at my place. Water protects the blossoms down to 26 degrees, but you must start sprinkling before the freezing temperatures begin. This results in a series of sleepless nights.

Now come the insects. If you are just starting with strawberries, you may wonder what all the fuss is about. If you have been growing them on the same farm for a while you know what I mean. I dust with 5% rotenone once or twice for strawberry bud clipper, a

weevil that lays is eggs in the stem of the flower and essentially cuts it right off. More problematic is the tarnished plant bug. As few as one nymph per flower cluster can result in deformed fruit. Put out some white sticky traps so you know when the adults arrive. Watch the catalogs for an OMRI approved formulation of beauavia bossiana, which is a fungal disease of TPB. I sprayed Naturalis this spring, with some effect. It held the population growth back but failed to prevent the numbers from cresting at about 3 nymphs per cluster at the end of blossoming.

This is where the reason why so few people grow any quantities of organic strawberries becomes clear. This TPB damage means losing the last third of the crop, which is a serious blow to making a profit on all this work I have described here. I love knowing that my fruit is pesticide free, but I also know my pesticide using competitors have their reasons. This insect remains the main stumbling block to more wide spread organic strawberry production, and this insect is relatively easily controlled with chemical sprays. The organic berries are healthier by miles for the consumer, and sell for 25% more. But the later part of the crop is frequently ruined.

Another tack to try is that used by Paul Hartshorn, an organic farmer in Waitsfield, Vt. Paul has pioneered in covering his entire strawberry field each fall with a large row cover, which he leaves in place the following spring. This does not so much act as a barrier against the TPB adults as it encourages much earlier flowering, before the population of TPB nymphs has reached that critical threshold. It also makes the whole crop come on 1 to two weeks earlier, which can run into some seriously cold weather that the row cover will not offer enough protection, so it has its risks. I think I am going to try this system out, as I am growing frustrated with the spotty effectiveness of any approved spray material for TPB control.

Strawberries can be renovated and kept for a second fruiting year. Mow them down to sticks, and narrow the rows again with cultivation. Then water and fertilize and let the rows grow out again. Weed control is problematic with the 2nd fruiting year, and many organic growers skip it. I usually keep my patch for a 2nd try but also plant a new one every year.
This adds greatly to the cost of organic production, as our chemical using neighbors just solve this problem with herbicides. The herbicides frequently end up in the groundwater and on into the environment. Better to ask the public to pay more for their fruit and grow it in a manner without lots of hidden costs.

Growing strawberries organically will make you very popular with your neighbors, whether you pick or invited them in to pick their own. Good luck!

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