

Workshop Title: Organic Strawberries

Speaker(s) & their titles: Paul & Sandy Arnold, Pleasant Valley Farm (NY)

Executive Summary

This workshop offers detailed instructions on how to grow strawberries from tips, the Arnold's new preferred method. It discusses the advantages of the annual bed system using tips as opposed to plugs, and draws comparisons with other methods such the matted system, which the Arnolds have also tried.

Detailed Notes

Paul & Sandy Arnold, the owners of Pleasant Valley Farm in Argyle, New York, own 60 acres of land and lease 120 acres, and produce over 40 varieties of diverse fruit and vegetable crops on about 5 acres of land. Their produce is sold almost exclusively at near-by farmers' markets year-round and to a few restaurants. The farm is certified through Certified Naturally Grown and they are a NOFA-NY Pledge member.

The Arnolds farm is situated in Zone 4. Frost free from approximately May 1st to October 1st.

Benefits of no weeds

- healthier crop
- fewer diseases
- reduced insects
- decreased fertilizer inputs

They have been trying to reduce the weed population over the years by using lots of mulches. Mulches keep things clean, both crops and workers. Using chopped rye or hay as straw mulch.

Matted system for growing strawberries:

This was the system used by the Arnolds for their first attempt at producing strawberries.

Any purchased straw must be weed free. Order early and store if needed. Spread 4"-6" thick.

Plant bare roots 12" apart around May 1st. Add compost along rows.

In fall, rototill excess runners to regain 2' paths. Cover with straw for winter around November.

Take straw off in early spring, weed if needed, then put on row cover (1-3 layers) to protect blossoms. If straw is not taken off soon enough, it can affect yields.

Very popular crop at farmer's market. 4+ weeks of good yields using matted bed systems.

Annual Bed System:

Why did we switch over?

They were taking up a whole year of space and were not all that profitable. Planting in September and harvesting in June frees up the beds for a second planting of a cash crop or planting cover crops. Berry beds are moved around from year to year.

Chandler is the main variety grown by the Arnolds.

Winter Rye or Rye Vetch is planted in the Spring. Chop down cover crop before it goes to seed then chisel plow to turn under and incorporate. Could incorporate clover undergrowth since berries don't go in until September.

Before planting berries in September, decide whether to:

1. Plant a cash crop OR
2. Plant a cover crop OR
3. Do both.

Slightly hill the beds, high and wide. This improves drainage and leaves berries less susceptible to disease. In the beginning they were purchasing the plugs (3500=.13 acre) at a cost of 22 cents each + \$100 for shipping.

Mulch and space at 12" - 2 rows per hill. Plant with compost or soybean meal. Irrigate. Let grow.

Row cover on when temperature in 30s (Fahrenheit) and remove when 10% blossom.

You are aiming for multiple crowns, not runners. Snip them off if needed.

Add fertility in April if needed, usually a foliar spray.

Research has shown that straw cover does not improve yields.

Several layers of row cover in spring to protect blossoms.

Harvest over about 4 weeks (last week of May til end of June).

They find they have few disease issues when they turn them under in July. Aeration is better with this method – no grey mold. Plus you are moving them around every year, so no disease build up.

Pests:

- clipper
- tarnish plant bug (stinging nettle tea as a possible control)
- slugs (Sluggo is a good preventative)

Keep perimeters clean.

What we are doing now:

Raised beds with plastic mulch. 12” between plants and 12” between rows.

Pros and cons – tips vs plugs

Tips

- per plant less \$\$
- greenhouse time
- preparation time
- better quality
- yields?

Plugs

- per plant more \$\$
- come ready to plant
- quality issues
- yields?

tips: \$15 per 1000 plus \$50

Tips are hard to find organically. Talk to certifier.

Tips are the end of the runners. Keep the “hook” on the tips and plant them in the trays, turning them in to “plugs”. Plugs will be more expensive.

Organic soil mix. Winstrip trays. Misting system is a good investment. Until plants are well rooted they need small amounts of constant irrigation. Remember they are in greenhouse in late July!

Prepare soils. Fertilize as necessary. Seaweed foliar fertilizer in spring. Or spread granular fertilizer. Use Biotello as plastic mulch right before planting. Straw mulch between rows. Avoid seed in straw.

Depth is important for transplanting. Plant at same level as plugs in trays.

Irrigation is key - use drip or overhead.

Berries need lots of water to size up and take up nutrients and spread roots in fall.

Check often under row cover even in winter for damage from voles/moles. Typar as control for voles/moles.

Netting for birds. Growth is less dense, fruit more visible and attractive to birds.

Rotate families. Break insect and disease cycles. 3-4 year minimum. Rotation is key. Pick only when fully red. Sort into firsts and seconds.

Market prep is the biggest expense.

Keep good records.

Summary

- lots of different systems
- annual system has been most profitable
- pay attention to details
- keep weeds out