

# **Berry Soil and Nutrient Management**

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## **Incorporating Compost into the Soil around Chandler Blueberries**

We host a number of special groups on our farm; educational tours and curious individuals that are always asking about our operation. One of my favorite sayings to anyone wondering what it takes to produce fruit in New York is: “These plants have been growing for thousands of years before I was born, and will probably continue growing the same way for thousands of years after I’m gone. What we as farmers try to do is provide the best possible situation for those plants, to produce the best possible fruit that another human being would want to eat.” Anyone can put a plant in the ground and watch it grow, but we as farmers are trying to make that plant produce something amazing that we can make a living from. That is why projects like this are so important.

This project was an effort to take a close look at what was going on in perennial berry crops across New York. And to try new methods of handling the sustainable health of the land those crops are planted on.

### **Soil Test and Analysis**

- With the help of Cathy Heidenreich, we did a Cornell soil health test in late June and leaf tissue sample in late July. We sampled across one section of our Chandler blueberry planting and set up a 10’x10’ “test” area, as well as a control area to measure results against.
- The soil sample showed a higher than ideal pH, and a severe lack of organic matter in the soil.
- The tissue sample showed an iron deficiency, and slightly lower than ideal nitrogen levels. We wanted to address this issue.
- Through this study we found that many other growers had a lack of good organic matter in their soils; which is what we thought was leading to our lack of usable nitrogen.

### **What We Did**

We decided to incorporate compost into the soil around the base of the blueberry bushes. With some advice from O2 Compost (if interested check out [o2compost.com](http://o2compost.com) they have some great resources and were very helpful to us) we created an aerated static pile system. We were able to create 8-10 yards of usable composted material this year.

Unfortunately, we were not able to use this batch of compost this year. We bought several bags of composted manure, raked off the top layer of wood chips around the blueberry bushes and scraped back 1” of soil (down to the first visible roots.) We then incorporated the compost in as best we could and replaced the wood chips.

### **Our Results**

- Nothing overly conclusive. Fruit quantity and quality were almost identical
- The composted test plot bushes had slightly better overall growth.
- Weed pressure on both plots was severe; however it was a bad year for weeds.
- Bud set, and new shoot growth seemed better on the composted test plot.
- We started a better waste management system on the farm.
- Started a new visible effort to conserve and recycle our farms resources.
- May have improved our soil health.
- Learned more about our growing operation and experimented with new ideas.
- Helped us and other farms across NY.

### **What We Learned and Some Comments**

- We will continue to grow our composting program.
- Keep experimenting with improving organic content in our soil, and monitoring N, and pH levels.
- Be more diligent on soil and leaf samples throughout the growing season.
- This was an excellent networking opportunity between my self, our farm, and some of the incredible support networks that exists to growers in New York.
- This was not an easy thing to do; it was especially hard to simply take the extra time during some of the busiest days of the season. However, our farm is better for it and it was an opportunity to help other farms across the state in the future.

I would like to extend a personal thank you to Cathy Heidenreich, for sharing her knowledge, and showing her patience with myself, and our whole farming operation.