

BEETS

Beta Vulgaris

Final Crop Analysis

Estimated Harvest goals:

Market	Total Yield Goal [lbs/units]	Notes
CSA	2,100	
FM	100	
Big Y A	300	
Big Y NH	300	
Big Y G	90	
Big Y SH	200	
Earthfoods	40	
Catering	100	

Cultivars/varieties and seeds:

Cultivar	Source	Amount	Cost	Org or Untreated?
Chioga Guardsmark	Johnny's	25,000	64.50	
Red Ace	Johnny's	50,000	67.00	
Touchstone Gold	Johnny's	25,000	145.00	

Reasons for selecting these cultivars:

These varieties were chosen for their diversity. Red Ace is a standard red beet so it will be recognizable to all customers. The Chioga Guardsmark is a candy stripe beet (a pink beet with white candy stripes when cut into) and the Touchstone Gold is a yellow/gold beet, both look good at the market and our Big Y markets appreciate the variety.

Did the variety description meet your expectations? Why or why not?

The beets did well! Despite one of our beds of beets being left with weeds in it for a little to long, which stunted their growth, all of the beets came in on time and have been looking good! There is wire worm damage (and there almost always will be some) but I do not think that we have looked into or taken any action towards mitigating that damage.

Would you recommend these varieties again?

I would recommend these varieties again, or at least a mix of varieties that brings diversity to markets for an otherwise well-known crop.

Make suggestions for two other varieties you think would be interesting to try in 2020.

I would recommend either the Boro or Merlin varieties sold by Johnny's as a replacement for Red Ace. Boro because it apparently grows stronger stems and we have had a little trouble with floppy stems after storage, and the Merlin because it produces more sugar in the beet so the taste would most likely be better.

Planting Information

Expected yield/ft: 0.7lbs.

Direct seed or transplant: DS

In-Row Spacing: 1”

Between Row Spacing: 15”

Number of Rows Per Bed: 3

Bed Feet planted: 2,500’

Field Planted In: B and C-Late Season

Number of succession plantings: 3

Broadcast Fertility: 1,000/A chicken manure 5/23/19 in C 1,000/A chicken manure 5/13/19 in B

Additional Fertility: None

Cultural practices: The beets were direct seeded and weeded with scuffle hoes until they reached maturity.

Notes on Irrigation: This crop was not irrigated.

Diseases observed: I believe we may have seen Leaf Spot on the beets which is a fungal disease that presents as (the same as spinach) white spots surrounded by reddish circles.

Potential Disease Threats: Downy Mildew is also a high potential disease threat of beets.

Insect Pests observed: There were some holes in the leaves which may have been from flea beetles which were in Field C due to nearby brassicas.

Potential Insects: Aside from flea beetles, Aphids and Blister beetles can also negatively effect beet crops. Aphids and Blister beetles will eat the leaves.

Do you think the production practices needed for this crop was worth the yield that we received?

I think that we did the right thing in hoeing the beets as often as we did when they were young, before they had developed enough of a canopy to shade out the weeds. I do not think that any extra cultural practices need to be done given that we have plenty of beets this season.

Harvest & Storage

We harvested our fall beets for the first time on 9/10. Beets are ready to harvest when they’re first set of leaves have died and the “shoulders” of the beets are sticking out of the ground, you judge the size of the beet fairly well by looking at the shoulders, the longer they are in there the bigger they will get.

How was it harvested?

We harvested beets in two different ways. For Big Y orders we pull 4 medium sized beets (3 big ones, 5 smaller ones) and bunch them by their stems close to where the stems meet the beets. For beets that we send to student businesses, dining, and farmer's market/CSA 2-3 people pulled beets from the bed and made piles as they went. Another group of 2-3 twisted the tops off of the beets and filled green harvest bins 2/3 of the way full. As more bins get filled, 2 people break off from twisting tops off and pour 2 harvest bins into the large white bags. The bags are then packed out of the field.

How was it washed at the wash station?

Bunches of beets are dunked in the large dunk tank and then shaken to get the water off. Bulk beets (without the tops) are put through the root washer.

List different post-harvest practices for each market (if any)]

Beets are washed for Big Y, student businesses, dining, and donations. Beets are not washed for the farmer's market/CSA. Be sure to check for small slimy dead leaves/stems.

List different shipping practices for each market (if any)

Beet bunches are delivered to Big Y in lock-top bins. For the other markets we deliver to, bulk beets are put into wax bushel boxes. For the CSA and farmer's market, beets are kept in the black crates and put on display in the wooden and wire handle baskets.

What different or improved harvest and shipping recommendations can you make?

I think that the system we used this season worked well.

Storage and post-harvest handling

Curing: No

Washing before storage: No

Storage Requirements: 32-40°, 95%RH, 2-5 months

How should this crop be processed for long term storage: For long term storage beets should remain unwashed and in the large white bags, preferably at or close to 32°.

Where your crop was stored this fall 2019?

ALC-cooler.

How well did this crop fair in storage and how did it enter storage?

Our beets kept well in the cooler, especially when they remained in the bags. Sometimes we kept beets in the black crates, which works well if they are going to be gone within a week or two. But beets that had been exposed to the air for longer than that got a little soft.

Were there any problems in storage?

We did not have any major problems with the beets in storage this season.

What different or improved storage recommendations can you make?

I would recommend putting a date on each bag that comes out of the field, just in case there are older beets in the cooler when the next succession comes in so that they will get used first.

Actual Yields and Sales: CSA

Date	Week #	Unit lbs., bunches, bags	Amount Per share	Total brought to CSA	Notes
9/13	1	Lbs.		342	
9/20	2	Lbs.		446	
9/27	3	Lbs.		349	
10/4	4	Lbs.		342	
10/11	5	Lbs.		275	
10/18	6	Lbs.		409	
10/25	7	Lbs.		150	
11/1	8	Lbs.		342	
11/8	9	Lbs.		275	

Other Markets

Market	Price/unit	Total Units sold	Total amount of sales
Big Y Amherst	\$1.75/lb.	410lbs.	\$716.63
Big Y Northampton	\$1.75/lb.	422lbs.	\$737.63
Big Y South Hadley	\$1.75/lb.	363lbs.	\$634.38
Big Y Greenfield	\$1.75/lb.	479lbs.	\$838.25
Dining Commons	\$1.75/lb.	75lbs.	\$112.50

Total Gross Income Received From Your Crop:

Wholesale Total: \$2,405.00

Review and Recommendations

What worked really well and should be continued?

Selling beets in bulk is always going to be best for the pricepoint. Beets were a great crop to have for the CSA shares and they sell well as bunches to Big Y.

What changes would you recommend for next year?

I would reconsider growing a golden beet variety.

Should we grow this crop again? Why or why not?

Yes. Beets are a staple at the CSA and Big Y will buy them from us in bunches which means we don't have to spend time topping them in the field.

Farmer Notes:

What words of advice can you give to the next generation of Student Farmers? How has it been juggling farming and full time student life? How can these farmers continue to build upon the legacy you have left them?