

EGGPLANT

Solanum melongena

Final Crop Analysis

Estimated Harvest goals:

Market	Total Yield Goal [lbs]	Notes
CSA	2,100	Based off 175 shares.
Farmer's market	20	Achieved this goal as of 9/20
Big Y A	150	
Big Y N	175	
Big Y G	30	
DC	300	
Efoods	140	Did not order on september 13 th
Catering	75	

Cultivars/varieties and seeds:

Cultivar	Source	Amount	Cost	Org or Untreated?
Diamond	High Mowing	1,500 seeds	\$22.50	Organic
Ping Tung Long	High Mowing	1,500 seeds	\$22.70	Organic

Reasons for selecting these cultivars:

“Johnny’s did not have organic orient express or nadia that we grew last year and did really well so I chose Traviata because it is high yielding, very uniform, and has a good classic bell shape. I chose the ping tung long because we grew it in 2015 and it seemed to do well.” – Lee McLoughlin. Lee ended up choosing Diamond in the end because Traviata was sold out.

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

Yes. We have been able to harvest more Diamond eggplant than we planned and all are looking beautiful. Two minor frost events in early September have not harmed the crop. We have not obtained a significant yield from the Ping Tung Long but I am not sure if this is because of the variety or because of the planting / transplanting date.

Would you recommend these varieties again?

Yes. Definitely Diamond – large yield and high-quality fruits. Ping Tung Long could be great too (looks beautiful) if the planting dates were altered.

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

Orient Express, Nadia – The 2018 crew grew these varieties and highly recommended both of them. They were not available this spring but are definitely worth considering in the future.

How and when the crop was seeded/transplanted:**Greenhouse seeding**

Variety	Seed date	Tray size	Number of trays	Notes on germination
Ping Tung Long	6/3/19	128	3	
Diamond	6/3/19	128	3	
Ping Tung Long	6/10/19	128	5	
Diamond	6/10/19	128	5	
Ping Tung Long	6/17/19	128	3	
Diamond	6/17/19	128	3	

Field Planting Info:

Planting #	Plant date	Number of row feet planted	Rows per bed	Planting method	Notes on survival in field
1	7/9/19	550	2	Hand plant	Good.
2	7/15/19	1,100	2	Hand plant	Good.
3	7/22/19	550	2	Hand plant	Good

Farmer Notes: *Late succession of eggplant was planted too late. Ping Tung Long was significantly less fruitful than Diamond but looked beautiful.*

Planting Information

Expected yield/ft: 1 lb/ft

Direct seed or transplant: transplant

In-Row Spacing: 12"

Between Row Spacing: 18"

Number of Rows Per Bed: 2

Bed Feet planted: 1,100

Field Planted In: ALC 7

Number of succession plantings: 3

Broadcast Fertility: Composted Chicken Manure 5-4-31 000 lbs/acre

Potassium Sulfate 500 lbs/Acre

Additional Fertility: Fish Emulsion was applied through the tractor mounted sprayer in early September

Cultural practices:

Black plastic was used.

Harvested with pruners, knife, or by hand.

Sprayed in 7/30/19 with Dipel Entrust at a rate of ½ lb 30oz per ½ acre.

Notes on Irrigation: Eggplant was irrigated with drip.

Diseases observed:

Phomopsis Fruit Rot

Damage caused: Round or oval brown spots on fruit with tiny black dots within, present near ground level where fruit touches wet ground. Not a big problem at all.

How was it scouted or observed: Seen at the time of harvest.

Action(s) taken: Fruit was clipped and tossed aside.

Potential Disease Threats:

Blossom-end rot - Sunken lesions on the blossom (lower) end of the fruit.

Cercospora leaf spot - Small brown spots on the leaves.

Early blight - Brown spots surrounded by a yellow ring increases in size over time.

Powdery mildew - Powdery white spots on stems and leaves eventually causes yellowing and death of leaves.

Insect Pests observed:

Colorado Potato Beetle

Damage caused: Some damage to the leaves.

How was it scouted or observed: Throughout the season, Ellis, Sue and Amanda scouted for insects.

Action(s) taken: Sprayed with pesticide (details above).

Flea Beetle

Damage caused: Tiny holes in some of the leaves.

How was it scouted or observed: Throughout the season, Ellis, Sue and Amanda scouted for insects.

Action(s) taken: Sprayed with pesticide (details above).

Potential Insects:

Aphids - Tiny little bugs usually reside on the underside of leaves, produce sticky honeydew, black mold can grow on honeydew.

Cutworms - Small grayish caterpillars that feed on stems in the night and hide in the soil during the day, can chew through stems completely until plants fall over.

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

This crop was a hit and was pretty straightforward to grow. We had tons of eggplant, especially Diamond, and it was easy to harvest large amounts in minimal time. I think CSA members were getting a little tired of it by the end though. Ping Tung Long was beautiful and a joy to eat but did not produce enough amount of fruit to make it worthwhile.

<i>Farmer Notes: Keep scouting often for any sign of pests or diseases!</i>

Harvest & Storage:

When was the crop ready for harvest? How did you know?

Eggplant was harvested for about the first half of the fall. It is ready for harvest when the fruits are large in size (around 8 inches or larger) but have not yet developed a tough, woody or brown skin. The maximum yield and highest quality fruit can be obtained by harvesting just before the eggplants reached this stage. Before the first big frost, we harvested as much as we could, regardless of the size of the fruit.

How was it harvested?

We systematically moved down the rows, selecting the largest fruits and discarding the ones that had become woody or had defects, rot, etc. It was very quick to harvest with knives, hand pruners, or by pulling the fruits off by hand and throwing them on the ground in a harvest row. It was harvested into green bins. Sometimes we would harvest all the fruits and leave them in the dirt, collecting them all at the end, while other times we would drag or carry the harvest bins along with us. I think both are pretty fast but it is easier to estimate how much you have harvested when you fill the bin as you go.

How was it washed at the wash station?

It was washed in the brush washer in the barn.

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

N/A

List different shipping practices for each market (if any)

Packed in wax boxes for DC and catering and lock tops for Big Y and CSA.

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

Remember which rows you harvested and where you left off so that you don't waste time or re-run over the same area that you already harvested.

Storage and post-harvest handling:

Curing: N/A

Washing before storage: Brush washer

Storage Requirements: Store unwashed in cooler for a number of days or outside of cooler for 1-2 days.

How should this crop be processed for long term storage: N/A

Where your crop was stored this fall? In lock lids in the cooler.

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

It did pretty well in storage but we did not end up having to store much of it. It is best to move it out on the day of harvest.

Were there any problems in storage?

Washed eggplant would rot in storage if constantly in contact with water for too much time. Also, our cooler is not the right temperature for Eggplant storage.

What different or improved storage recommendations can you make?

Try not to harvest too much. Harvest, wash, pack, and ship day-of if possible.

Farmer Notes: CSA members did not know what to do with all the eggplant. Give them a reasonable amount but not too much. Try not to leave a ton on the plants later in the season or else you will have to scramble to harvest it all before a frost and there will be so much that you won't know what to do with it

Actual Yields and Sales: CSA

Date	Week #	Unit lbs., bunches, bags	Amount Per share	Total brought to CSA	Notes
9/13	1	# of fruits	2 full, 1 half	171	
9/20	2	# of fruits	2 full, 1 half	174	
10/4	4	# of fruits	3 full, 2 half	271	
10/11	5	# of fruits	2 full, 2 half	204	

Other Markets – report total amount sold to each market over the season

Market	Price/unit (\$/lb)	Total Units sold (lb)	Total amount of sales (\$)
Big Y A	1.75	93	162.75
Big Y N	1.75	48	84.00
Big Y SH	1.75	69	120.75
Big Y G	1.75	51	89.25
DC	1.75	270	472.50

Total Gross Income Received From Your Crop: \$929.25

Review and Recommendations

What was different between what was done and what was planned?

It is hard to say for sure, but I would estimate that we harvested under half of what we planned for in the spring. We also did not sell much to catering and did not sell any eggplant to the student businesses. All of the rest was pretty much executed according to the plan.

What worked really well and should be continued?

The Diamond variety of eggplant was a great success. Huge yields and we did not even harvest all of it before the first frost.

What changes would you recommend for next year?

Plan for eggplant to mature earlier in the season and plan for less of it. People in the CSA were tired of it (because they do not appreciate the joyous sauce that is baba ghanouj).

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

Yes. Eggplant made a fair amount of money and is very quick to harvest. The demand is there, maybe just not to the degree that we predicted. Nonetheless, it is a worthwhile addition to the array of lovely foods we offer.