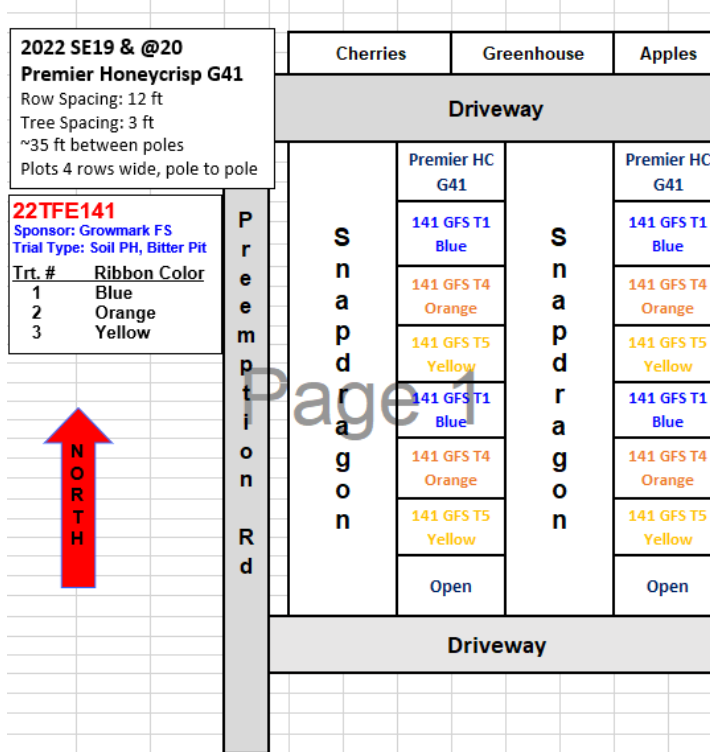


Reality Research Trial done on Premier Honeycrisp G41 in 2022. Trial had 12 ft row spacing, with tree spacing measuring 3 ft. The trial treatments are as follows:  
 TRT #1 (Blue Ribbon): Grower Standard  
 TRT #2 (Orange Ribbon): Solu-Cal Plus (200lbs/Ac Broadcast)  
 TRT 3# (Yellow Ribbon): Intensical L (1.5 gallon/Ac)

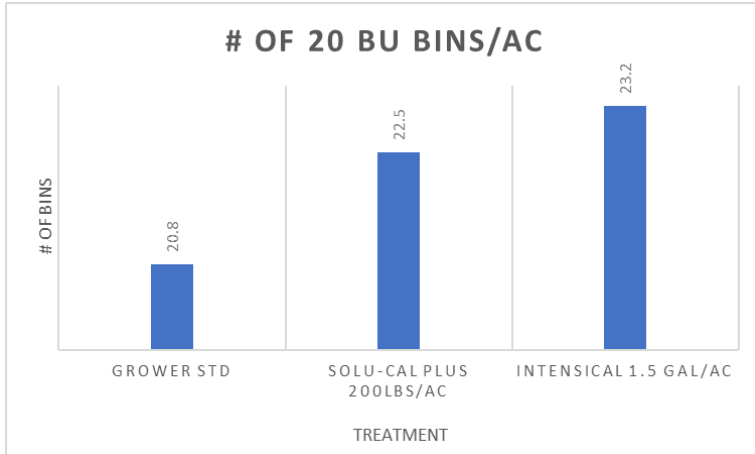
Each treatment was completed in 4 variations to account for field variability. Results have been averaged to provide an accurate assessment of results.

Comparisons drawn from 2021 are provided under the 2022 results highlighted in blue.

Trial Zones:



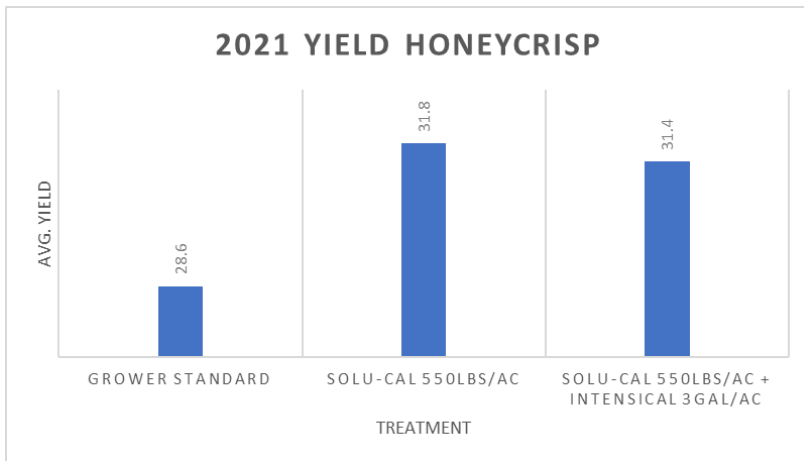
**Yield Results:**



Based off # of 20-bushel bins harvested/Ac averaged for each treatment. The results conclude increases seen from the Grower Standard by the following:

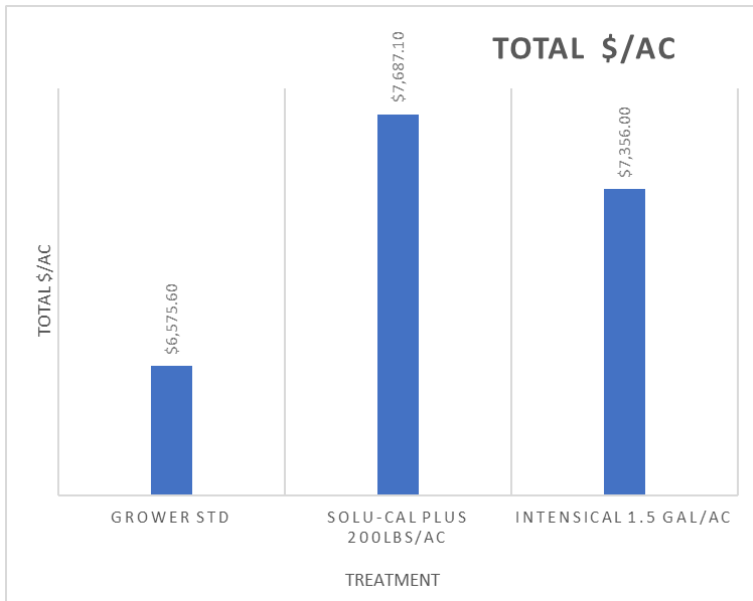
- Solu-Cal Plus (200 lbs/Ac)= **+34 bu/Ac**
- Intensical (1.5 gal/Ac)= **+ 48 bu/Ac**

**2021 Yield Comparison:**



- Solu-Cal Plus= **+ 64 bu/ac**
- Solu-Cal Plus + Intensical= **+ 56 bu/ac**

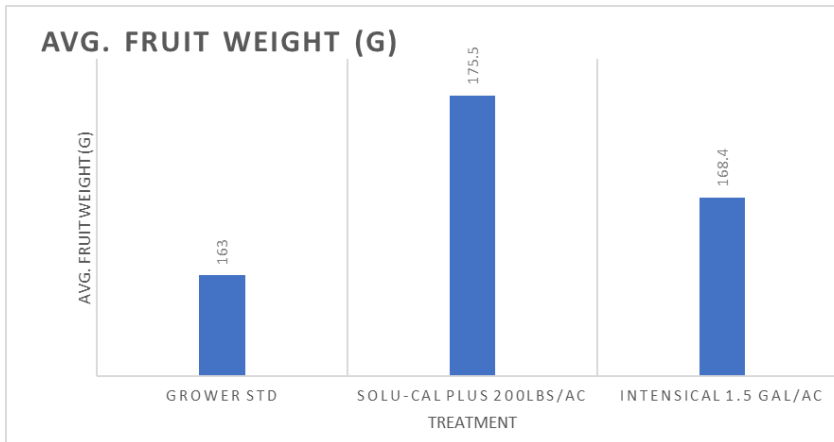
**ROI Based on Yield**



Based off averaged bu/ac for each treatment. ROI per treatment is as follows:

- Solu-Cal Plus= +\$1,111.5/Ac compared to Grower Standard
- Intensical= +780.4/Ac Compared to Grower Standard

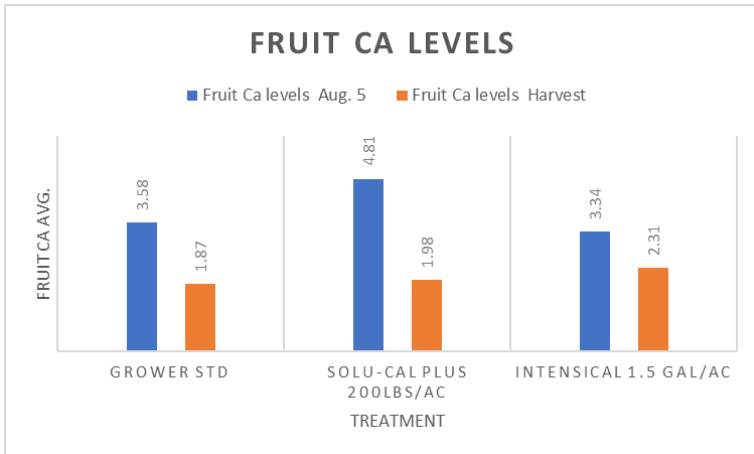
**AVG Fruit Weight:**



Weights averaged across treatments to provide averaged weight at harvest. The weight differences are as follows:

- Solu-Cal Plus = +12.5g compared to Grower Standard
- Intensical= + 5.4g compared to Grower Standard

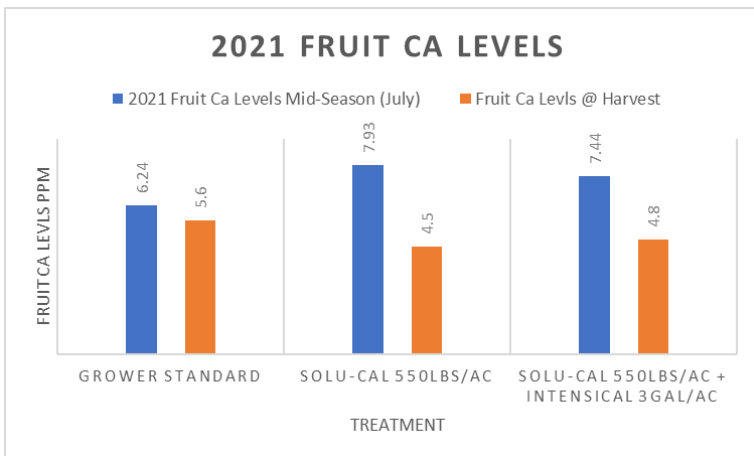
**Average Fruit Calcium Levels:**



Fruit calcium levels assessed on Aug. 5<sup>th</sup> (mid-season) and at Harvest. The following differences can be seen comparing the treatments to the Grower Standard

- Solu-Cal Plus= +1.23 PPM Ca ( Aug. 5<sup>th</sup>) compared to Grower Standard
  - o +0.11 PPM Ca (Harvest) Compared to Grower Standard
- Intensical= -0.24PPM Ca (Aug. 5<sup>th</sup>) Compared to Grower Standard
  - o +0.44 PPM Ca (Harvest) Compared to Grower Standard

**2021 Comparison of Fruit Ca levels**



- 2021 July (Mid) Fruit Ca levels PPM:

- Solu-Cal Plus= +1.69 PPM compared to Grower Standard

- Solu-Cal Plus +Intensical= +1.2 PPM compared to Grower Standard
- 2021 Fruit Ca Levels @ Harvest
- Solu-Cal Plus= -1.3 PPM compared to Grower Standard
- Solu-Cal Plus + Intensical=-0.8 PPM Compared to Grower Standard

Year to Year trends:

- Consistent yield increases even with product rate and application change.
  - o ROI needs to be assessed to determine at which application rate is most cost effective based on return.
- Decrease in fruit Ca levels at harvest compared to Grower Standard application
  - o Decrease in fruit calcium can lead to development of diseases during post-harvest storage.
  - o Reasons as to the decrease in fruit Ca levels need to be researched

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**Comment [1]:** Interesting that we are seeing consistent lower Ca levels around harvest time in both application years. The yield increase is notable however to offset this concern. I would be curious to see how this impacts the overall health of the tree and the fruit load in the coming years.