



Fyllo: Impact report after one season of usage in grapes

Introduction:

Fyllo was installed at grape plot on November 15, 2019. Harvesting of the crop completed on March 1, 2020.



Following are the details about crop and plot:

Crop Name: Grapes **Variety:** Thompson Seedless **Plantation Year:** 2014

Pruning Date: 3-10-2019 **Installation Date:** 15-11-2019

Spacing: 9'*8' **Tree count:** 605/acre **Soil Type:** Loam with 82% WHC

Practices Followed before Fyllo:

Our system provides farmers with decision support system on irrigation, fertigation, disease and pest predictions based on real time farm data.

Before Fyllo was installed, Farmers used to take decisions based on their experience.

Following are the data points about practices before Fyllo:

Average days/irrigation: 5

Wate usage: 10000 litres/acre/day

Total water usage: $119 * 10000 = 11,90,000$ litres /acre

Fertigation: Per irrigation – 22 totals

Data points about package of practices after Fyllo:

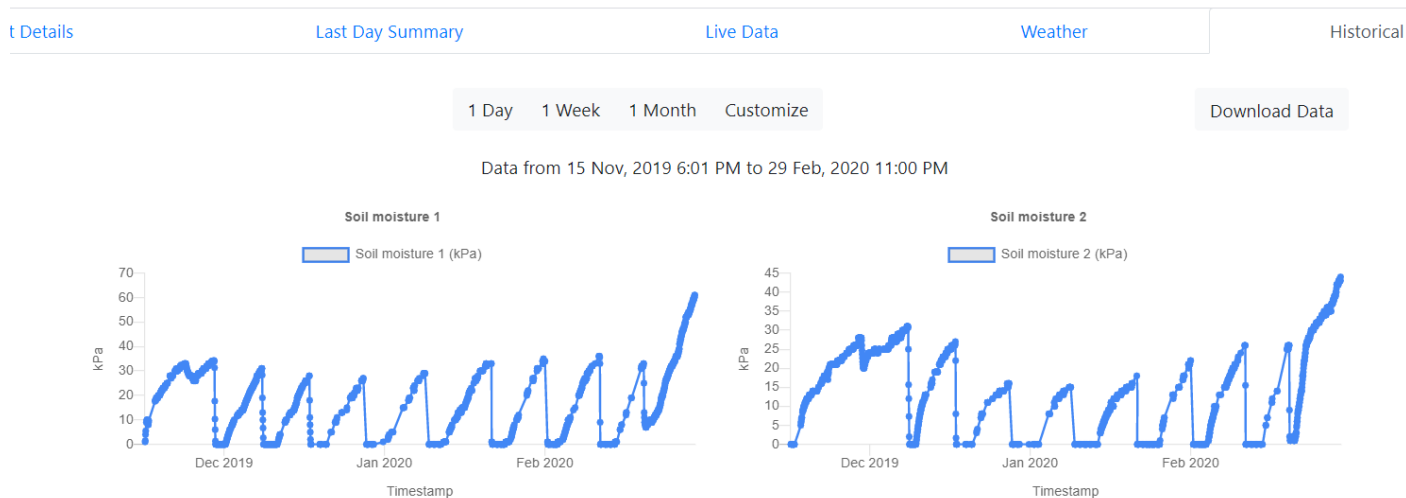
Average Irrigation – 11 days

Water usage: 6516 litres/acre/day

Total water usage: $119 \times 6516 = 7,75,404$ litres/acre

Fertigation: Per irrigation – 10 totals

Irrigation Data:



Note:

1. All the peaks are irrigation points.
2. Initially, there used to be more difference between primary and secondary root zone moisture that reduced gradually showing strengthening of root zone
3. Last line in the graph shows stress given to increase sugar (brix) in the berry.

Results after using for one season:

Harvesting of the plot started on 29th February 2020. Following is the data collected at the time of harvesting:

Berry Size: 18-22 mm

Sugar – 17-18 °Bx

Per plant bunch weight – 25.5 kg/plant

Average bunch size: 0.512 kg /bunch

Total production: 15488 kg

Exported Production: 14580.5 kg/acre

Locally sold production: 907.5 kg/acre

Export Rate: Rs. 111/kg

Local Rate: 35 /kg

Total: $111 \times 14580 + 35 \times 907 = 1650125$ /acre

Note:

1. No cracking was seen on any berry.
2. No black spot or any other disease spots were seen on fruit.
3. All the exported produce was sold into U.K. market.
4. Current market rate for U.K. is Rs. 80-95/kg
5. Bunch Size varied from 450g to 1.2 kg
6. All the sprays were taken preventive based on data

Harvesting Photos:

