December 12, 2017

Case Study on Strawberry Plants Treated with Unleash™

Unleash™ – treated strawberry plants at Black Ranch in Salinas, CA

I. Introduction

California is the leading producer of strawberries in the U.S., with nearly 90% of total strawberries being grown in the state. Strawberries are the fifth most valuable fruit crop grown in California. Almost half of California's strawberry crop comes from the Watsonville/Salinas area. (California Strawberry Commision; www.calstrawberry.com).

From December 2016 through August 2017 a study was done with Naturipe Farms to test the effect of Unleash™ treatment on strawberry production on 4.7 acres of a farm in the Salinas area of California.

II. Test Process

- 4 total Unleash™ applications done
  - 12/6/2016 – 1st application
  - 1/2/2017 – 2nd application
  - 6/30/2017 – 3rd application
  - 7/21/2017 – 4th application

- The strawberry harvest began on May 13, 2017, with strawberries being harvested continually until August 30, 2017.

- The strawberry season was cut short by an extreme heat and labor shortage in September 2017.

- Unleash™ was used to treat 4.7 acres of land on the South side of block 6 at Black Ranch in Salinas, CA.

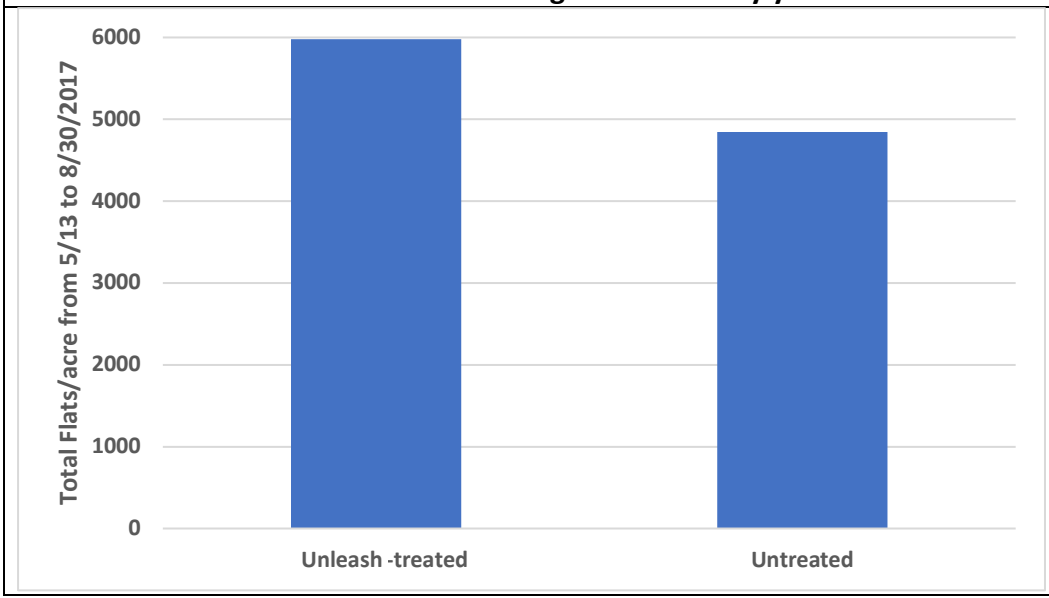
- 7.1 acres of non-Unleash™ treated land on the North side of block 6 at Black Ranch in Salinas, CA was used as a control plot for comparison purposes.

- Because the Unleash™-treated area had less acreage than the untreated control area, all yield results are reported as the amount harvested per acre rather than as the total amounts harvested.

- Brix and moisture tests of Unleash™ - treated and untreated strawberries done by Food Safety Net Services Lab, 199 W. Rhapsody, San Antonio, TX 78216 for Xgenex on September 15, 2017.

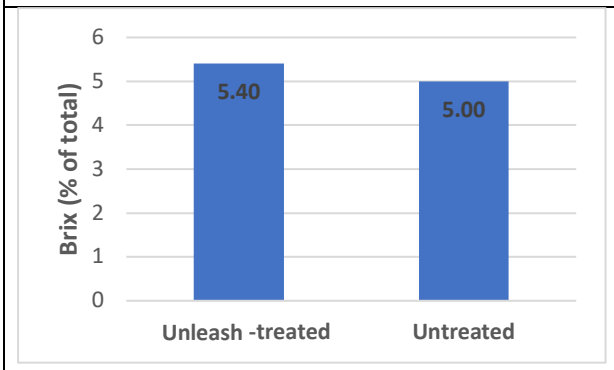
III. Results

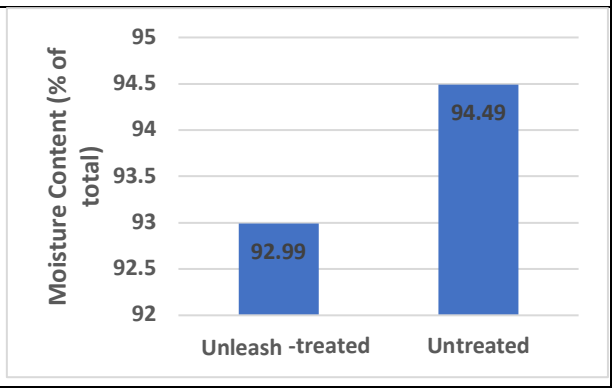
Unleash™-treated area had 23% higher strawberry yield than the untreated area



- The total harvest for the Unleash™-treated area from May 13 to August 30, 2017 was 5,975 flats per acre.
- The total harvest for the untreated control area from May 13 to August 30, 2017 was 4,848 flats per acre.
- The Unleash™-treated area harvested 1,127 more flats per acre, **a 23% yield increase over the untreated area.**

Unleash™-treated strawberries had 12.5% higher Brix than untreated strawberries, and lower % Moisture





- Unleash™-treated strawberries had 5.4% Brix content, while untreated strawberries had 5.0% Brix content, which is a 12.5% increase in total Brix for Unleash™ - treated strawberries.
- The Unleash™-treated strawberries had lower total moisture content than the untreated strawberries, which correlates with the Brix results.

IV. Conclusions

- Unleash™-treated acreage had a 23% higher overall yield than untreated acreage during the 2017 growing season at Black Ranch in Salinas, CA.

- Strawberries harvested from the Unleash™-treated area at Black Ranch had 12.5% higher Brix than untreated strawberries.

- Strawberries harvested from the Unleash™-treated area at Black Ranch had lower total moisture than untreated strawberries.

- Taken together, these results show that Unleash™ treatment resulted in increased yields, and improved overall fruit quality of strawberries from the Black Ranch in Salinas, CA.