

Huma Gro® Program Increases Strawberry Yields 13%, With an ROI > \$3,400/acre

Field Trial

Conducted by: Holden Research and Consulting
 Huma Gro® Products: Vitol®, Breakout®, Super Phos®, Super Nitro®, Calcium, Super Potassium™

Objective

This field trial assessed the effects of an additional 4 foliar applications of Huma Gro® products on the yield of Portola strawberries when compared with the grower's standard crop nutrition program.

Materials & Methods

This trial was set up in a complete randomized-block design conducted during the growing season of July 18 through November 28 in Ventura County, Calif. Two treatment programs were compared: Treatment 1 was the grower's standard nutrition program of controlled-release fertilizer applied at planting and in-season applications of N-P-K; Treatment 2 was the grower's standard plus varied combinations of Huma Gro® products applied foliarly at 4 points during the growing season:

- A. September 5: 1 pint/acre each of Vitol®, Breakout®, Super Phos®
- B. September 26: 1 pint/acre each of Vitol®, Super Phos®, Super Nitro®
- C. October 17: 1 pint/acre each of Vitol®, Super Nitro®, Calcium
- D. November 7: 1 pint each of Vitol®, Calcium, Super Potassium™

The strawberries were picked 16 times during the growing season, and measurements were made at each picking and results calculated cumulatively of trays picked per acre, marketable utilization of berries, yield (by weight), and price paid per yield.

Results

As can be seen in **Figure 1**, Treatment 2 (Huma Gro®) produced the most trays of picked strawberries (10 lb equivalent), with a cumulative total of 2,243.6 trays per acre equivalent, compared with Treatment 1 (Grower's Standard) of 1992.8 trays per acre, a 13% yield increase for Huma Gro®.

Figure 2 shows the daily market utilization for the berries picked during the season (the percentage of marketable berries from the total weight of berries picked), with Treatment 2 (Huma Gro®) resulting in 76% utilization and Treatment 1 (Grower's Standard) reaching only 70%. This represents over 3,000 additional pounds of berries per acre that can be sold due to Treatment 2 (Huma Gro®).

No problems with phytotoxicity (leaf burn) were noted with the use of any of the foliar-applied Huma Gro® products.

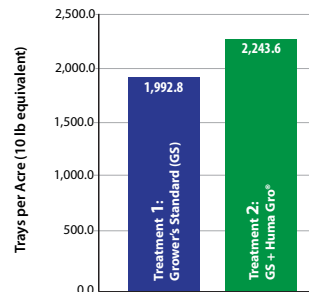


Figure 1. Total Strawberry Trays Yield per Acre, Grower's Standard (GS) vs. GS + Huma Gro®

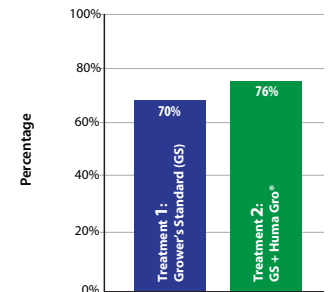


Figure 2. Percentage Strawberry Yield Marketable Utilization, Grower's Standard (GS) vs. GS + Huma Gro®

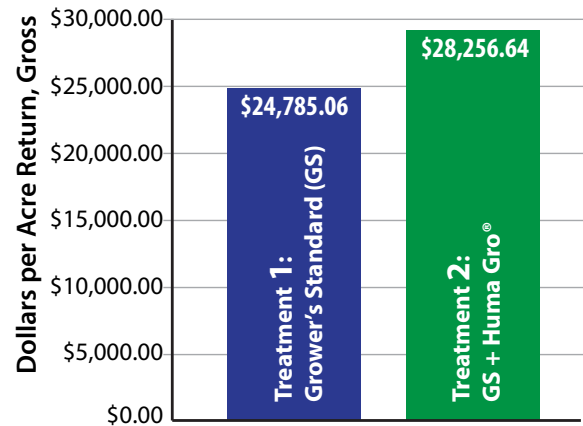


Figure 3. Total Strawberry Yield Gross Return (\$/Acre), Grower's Standard (GS) vs. GS + Huma Gro®

Conclusion

Based on the data collected in this trial, the Huma Gro® treatment program resulted in both higher yields and a higher percentage of marketable yield, resulting in an overall **yield increase of 13%** over the Grower Standard. This yield increase resulted in a return-to-the-farm increase of almost **\$3,500 more per acre, a 14% increase in dollars back** to the farm (see **Figure 3**). Factoring in the cost of the additional Huma Gro® products applied to achieve this yield increase, the return on investment (ROI) was calculated to be **8,226%**.

It is recommended that in future trials the Huma Gro® product combinations be foliarly applied at 2-week intervals and alternate Vitol® and Breakout® in the product mixes.