



The Effects of Foliar Applied Soar® Micronutrients and Biostimulants on Yield of Tomato (cv. Phoenix) in Florida

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Tomato for the fresh market is the most important vegetable crop in Florida. In 2004-2005, tomatoes were harvested from 42,000 acres (Fla. Agr. Stat. Directory, 2006). Production was 62.16 million cartons (25-lb/carton) for a value of U.S. \$ 804,972 million. In average years, tomato growers receive high prices for their produce early in the season and for extra-large fruit. Consequently, they are searching for methods to increase early yield and fruit size in an economical manner. The application of biostimulants to vegetables claimed to increase earliness, fruit set and fruit size. This study was conducted to evaluate the yield response of 'Phoenix' tomato cultivar to foliar-applied "SOAR Micronutrient Mix" and "SOAR Bloom Spray" biostimulants (Chemical Dynamics, Inc., Plant City, FL). In this study, total yields by size and cumulative totals, as well as, calculated crop value were significantly higher with Soar applied five times at a two quart rate than the control treatment. In addition, cull yield was significantly less with the five applications at the two quart rate (see Fig. 1). Tomato fruit yields in the 2nd, 3rd, and 4th harvests

were higher with the two qt/A "SOAR" biostimulant than with the control treatment. This result is similar to the results in previous studies conducted during the spring and fall seasons in 2005 to investigate the effect of "SOAR" biostimulants on the yield and fruit size of Florida 47' tomato (Cszizinszky, 2005, Cszizinszky, 2006). In both of those studies, yields of US Fancy and marketable total fruit yields were higher with the two qt/A "SOAR" applications than with the control treatment especially early in the season. The increase in the yield and fruit size of 'Athena' tomato with the foliar application of "SOAR" biostimulants at two qt/A, resulted in a significant increase in the estimated shipping point value of the crop, compared to the value of the crop with the control treatment. Therefore, the application of "SOAR Micronutrient Mix" and "SOAR Bloom Spray" at the two qt/A rate is a good economical method for the growers to increase the fruit size and marketable yield of tomatoes for a higher return on their investment for producing the crop. (Soar® is a registered trademark of Chemical Dynamics, Inc., Plant City, FL.)

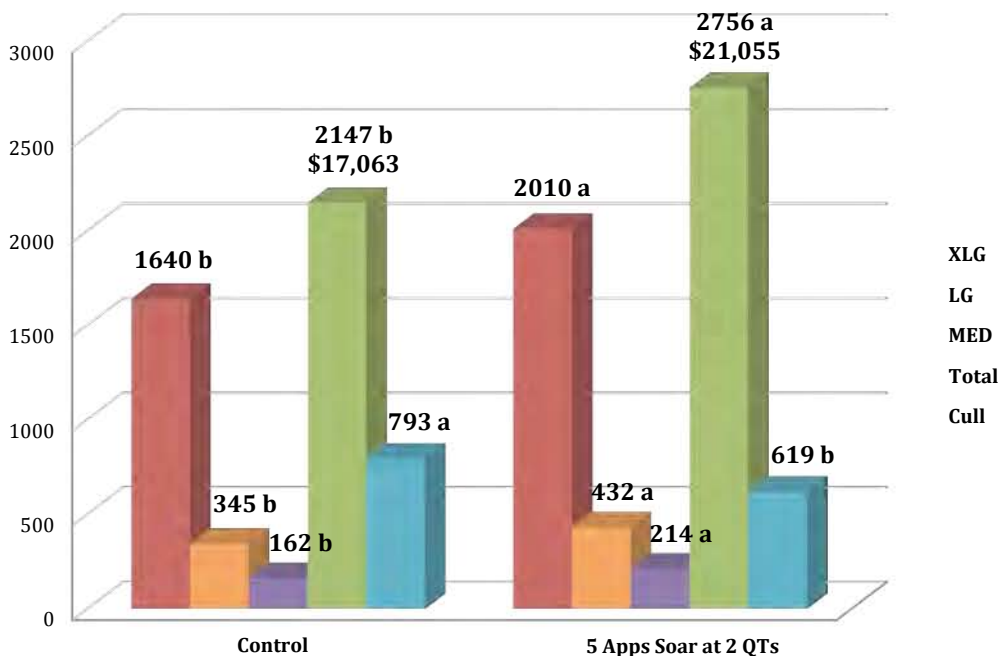


Fig. 1. Total yield (25-lb ctn/A, by size, total marketable, and total cull of tomatoes (cv. Phoenix) and estimated value of total yields for crops treated with 'SOAR', (UF, GREEX, Cszizinszky, Fall 2006.)

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