

Measuring yield in onions for dehydration with application of biostimulants in the growth stage.



MilAgro
Quelatos de Aminoácidos

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Introduction

Trial carried out on the cultivation of Onion (*Allium cepa*), by researchers from the extension center of the University of California, in the town of Blythe in the Palo Verde Valley, southeast of California, USA. The product being evaluated was Keylamax® CytoPower® Organic 3-0-8 foliar biostimulant by Mil Agro Inc. This product was added to a conventional chemical fertilization package versus an absolute control that only included the conventional chemical fertilizer package. The parameter to be evaluated was tons per acre suitable for marketing. The study was carried out with various commercial products; in this report the specific results that include our product are shown.

Objetive

To evaluate the efficacy of the product Keylamax® CytoPower® 3-0-8 Organic from Mil Agro Inc., on the harvest yield of product suitable for marketing of onions for dehydration.

Materials and Methods

Between March and April 2019, a trial was carried out where three treatments were evaluated in the crop, the first called absolute control **T0**, which corresponds to plots treated with a base nutritional treatment without biostimulant, the second and third, corresponded to plots where the base nutritional treatment was applied plus different doses of the biostimulant **Keylamax® CytoPower® Organic 3-0-8**, **T1** corresponded to 0.55 lb/ac or 250 g/ac, **T2** 1.1 lb/ac or 500 g/acre, the applications of this product were made in the vegetative development stage, specifically in third, fifth and seventh leaf stages. The onion variety used was Sensient, in silty clay soil, with plots of 6 beds by 25 feet long, with 6 repetitions each treatment. The applications were made with a backpack pump. To determine the results, 15 feet of row were dug and the weight of the onions was obtained.

Results and Conclusions

West Coast yields in dehydration onions are typically between 15 and 25 tons/acre, with an overall average of 18 tons/acre.

For the treatment of the Absolute Control **T0**, only with the base fertilization, an estimated 27.5% more yield than the average for this region of the country was obtained.

For the **T1** treatment, with three applications of 250 g or 0.55 lb/acre of the CytoPower, 11% higher yield over T0 and an additional 41% in yield over the regional average were obtained.

In **T2**, with 3 applications of 500 g or 1.1 lb/acre of the biostimulant, 2% more yield was obtained than in T1, 13% more than the absolute control T0, and 44% higher yield compared to the average of the region.

Performance response with applications on 3rd, 5th and 7th leaves

■ Tons per acre suitable for marketing (Ton/acre)



Apply **Keylamax® Organic CytoPower® 3-0-8**, a biostimulant based on algae extracts and amino acids, in stages prior to bulb thickening, especially in the vegetative stage for dehydrator onions. This improves leaf development, favors bulb formation and increases dry matter yield. In addition, it stimulates key physiological processes such as photosynthesis, nutrient absorption and tolerance to abiotic stress, which translates into more uniform bulbs with a higher content of soluble solids, fundamental characteristics for the quality of the dehydrated product. Its use, especially foliar, must be integrated into strategic nutritional management to maximize results. Check out our Keylamax® product catalogue, where you will find high-efficiency chelates and amino acid complexes for your crop. Powerful like nature.