

Prescription Crop Nutrition for Red Potatoes = brighter, deeper skin color and enhanced nutritional qualities.

In Minnesota, two fresh market red potato growers tested a prescription AgroLiquid supplementation to their conventional liquid in-furrow fertilizer. For these wholesale growers an appealing red color and skin quality is far more important than yield. AgroLiquid determined that for these growers a combination of two of our products, LiberateCa and Micro 600, had the best potential for improving skin color. Field side-by-side comparisons were set up using the cooperator's conventional 10-34-0 in-furrow starter blend against the same rate of 10-34-0 blend with 1 gal/ac LiberateCa and 2 quarts Micro 600 added to it. The result of this trial are that the LiberateCa/Micro 600 treated potatoes have a much brighter, deeper red color with a smoother skin, little to no scab, and no spider-webbing compared to the untreated potatoes.

In addition to the enhanced color, the LiberateCa/Micro 600 treated potatoes were found to have significantly enhanced nutritional qualities - more protein, nutrient density, and essential minerals. This chart illustrates how much more nutritious the LiberateCa/Micro 600 treated potatoes are:

| Minnesota fresh market red potato quality 2021 | | | |
|--|--|--------------------------------------|--------------------|
| 1 gal LiberateCa + 2 qts Micro 600 in-furrow | | | |
| Parameter | Untreated. Percent of dry matter | Treated. Percent of dry matter | % versus untreated |
| Nutrient Density | 259.0 | 321.3 | 124 |
| Protein | 3.7 | 7.4 | 200 |
| Calcium | 398.0 | 404.0 | 102 |
| Phosphorus | 73.0 | 162.0 | 222 |
| Potassium | 783.0 | 1393.0 | 178 |
| Magnesium | 50.0 | 112.0 | 224 |
| Iron | 1.5 | 2.8 | 182 |

The LiberateCa + Micro 600 treated potatoes have double the protein, nearly 25% better nutrient density, and significantly better mineral nutrition than the untreated control.





The LiberateCa/Micro 600 treated are on the left

The LiberateCa/Micro 600 treated are on the right



Left is 1 gal LiberateCa + 2 qts Micro 600, middle is 2 quarts LiberateCa + Micro 600, right is untreated.



LiberateCa is a highly soluble and plant available calcium source that we protect in the soil with our unique and highly effective organic chelation using our Flavonol Polymer Technology. This protection keeps the calcium soluble and available for root absorption yet protects it from reacting with other minerals in the soil – thus making it far more efficient than other calcium sources. Calcium is highly important for plant health and nutritional qualities – amply demonstrated in this field comparison.



Micro 600 is a specially formulated combination of soluble sulfur, iron, and four micronutrients that is synergistic in nutrient efficiency and uptake in plants coupled with a high degree of plant safety. These nutrients work together to provide a yield benefit and to improve the quality of tubers. Potatoes require significant amounts of plant available sulfur and iron. Micro 600 protects these nutrients from tie-up in the soil and places them in an efficient band with the seed piece at planting. Our potato research in several states plus Canada continues to demonstrate consistent results with Micro 600 creating more sacks per acre and better tuber quality.