

# Tech Shares

## Agrocote® CRF Technology in Citrus: Program Options for Producing Citrus Groves

Citriblen®, ICL' young tree fertilizer brand, is an industry standard as a result of the safety, high-quality performance, and overall value to Florida citrus growers. Citriblen® fertilizers derive their longevity and efficiency from the Agrocote® controlled release fertilizer (CRF) technology formulated into the blends. The same Agrocote® CRF technology is available in bulk blends for producing groves. In developing a custom blend Powered by Agrocote®, grove managers can improve the efficiency of their bulk blends and get a positive return on that investment. The concept is rather simple: use the right proportion of Agrocote® in the blend to create the benefits desired (lower rate, fewer applications, less nutrient leach, and/or more pieces of fruit) at an equal cost per acre.

### A Learning Experience

The Specialty Agriculture team at ICL pioneered the introduction of Agrocote® CRF technology in Florida citrus over a decade ago. Initial attempts to create 12-month mature citrus formulas powered by Agrocote® were agronomically successful but not practical for the growers. The approach changed; today Agrocote® forms the backbone of many customized 2, 3, and 6-month formulas designed around Florida weather cycles, crop demand, as well as the growers' cultural practices. Thousands of acres of Florida citrus are currently fertilized with customized blends powered by Agrocote® that fit each grove manager's specific needs while improving fertilizer efficiency.

### Comprehensive Program:

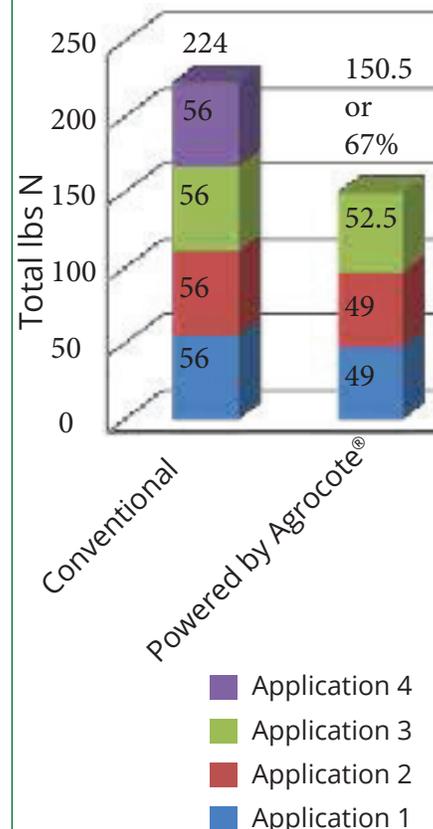
#### Producing equal or greater yield with less fertilizer

Florida commercial citrus growers typically fertilize their groves four times annually. ICL has developed comprehensive Agrocote® programs with several commercial growers that allow the grower to reduce to three applications per year—each application has varying proportions of Agrocote® N and K based on the desired longevity, soil type, and anticipated rainfall for that time of year. The comprehensive programs have also demonstrated that the total nutrient application rate can be reduced by as much as 25-35% of the standard N and K rates without sacrificing yield and quality. And most importantly, with the right balance of Agrocote® in the blend applied at the right time of the year, the cost per acre is the same as conventional programs.



*Citriblen® formulations for young tree resets shown here can efficiently supply the crop's nutritional needs by providing a continuous supply of nutrients over a long period of time instead of the "surge feed" delivered by conventional water soluble nutrient sources.*

### Lbs N/acre per application



*Reduction in Lbs. N / Acre Using a Comprehensive Program*

How are blends powered by Agrocote® so efficient? The Agrocote® portion of the blend is coated—the portion of the nutrient still inside the coating stays protected from leaching during heavy rain or irrigation events. The nutrient in the core releases through the coating slowly over time becoming available to the crop only after release. The resulting release pattern is designed to match the crop nutrient demand pattern as closely as possible. By minimizing potential for nutrient leach and closely matching the crop nutrient demand, blends powered by Agrocote® are clearly more efficient.



### Supplemental Program: Improving productivity of underperforming trees

Trees can go into decline for any number of reasons. In the grove depicted above, this section consists of sandy soil and is in a low spot subject to cold air accumulation. The grower's standard fertilizer practice was not sufficient for productivity. ICL and the blender servicing the grower developed a 12-month Agrocote® fertilizer blend with a micronutrient package and applied it as a supplement to the grower's standard practice at 300 lbs. product per acre to the trees on the right. The trees on the left received no supplemental fertilizer. The trees on the right grew more vigorously than those on the left, increasing the productivity of this portion of the grove. The grower was pleased with the performance and value of the supplemental program .



*Untreated trees on left; mature tree blend 17-5-11 (12M longevity) powered by Agrocote at 300 lbs. product / acre on right*

### Grower Comments

Growers customizing blends powered by Agrocote® are reporting that tree growth is more consistent with less luxuriant growth—the tender growth attractive to pests. Growers also report more uniform fruit shape and increased size have resulted in better crop quality. In fact, this leads to more fruit going to the packing house instead of to juice.

### Contact An Everris Sales Agronomist

Due to the variation in nutritional needs from grove to grove, we recommend contacting your ICL Sales Agronomist or one of our qualified blender partners to customize a program based on the grove's requirements and your goals. To find a blender, develop a program or for more info contact your ICL Sales Agronomist, Ward Gunter at 772-473-3987 or [ward.gunter@icl-group.com](mailto:ward.gunter@icl-group.com).



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