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Beating Shrink: New Trials Proving Benefits of Mixing HydraFiber® and Nutricote®

Plants that aren't sold due to diminishing plant quality results in an increase in every grower's nemesis: shrink. Shrink is estimated to cost growers more than \$500 million annually. Important new research is helping growers beat shrink using a combination of advanced technology in engineered substrates and controlled-release fertilizers. Initial trial results are producing superior quality plants with improved shelf life.

BLENDING INDUSTRY-LEADING TECHNOLOGY TO IMPROVE SHELF LIFE

Profile® Growing Solutions has begun trials using six of the most popular varieties of early-, mid- and late-season annuals and perennials planted into a growing mix of HydraFiber® with Nutricote® controlled-release fertilizer (CRF). HydraFiber is an advanced substrate that has been widely adopted in the greenhouse industry thanks to physical properties that allow for the production of high-quality plants at a reduced overall cost. Nutricote is the leading controlled-release fertilizer technology, offering safe and dependable nutrient release.

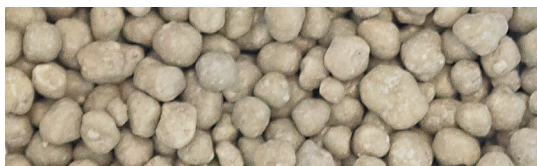
"The main goal of the trials is to evaluate Profile's technology, HydraFiber and Nutricote, to produce plants that maintain a high level of quality in the retail space and help reduce losses for growers."

-Brandon White

applied R&D scientist, plant nutrition with Profile Growing Solutions.



HydraFiber® is an approximately 98% porous fiber substrate with extremely low bulk density.



Nutricote® provides steady feed through a specialized coating compound, ensuring consistent nutrition and reduced leaching. Each prill is 100% homogenous and contains coated minors.

Current trials are comparing HydraFiber mixes with Nutricote at rates of 2 lbs./y³, 4 lbs./y³, 6 lbs./y³ and 8 lbs./y³ versus a common water-soluble fertilizer program at the industry standard 125 ppm nitrogen to compare plant quality metrics at different stages of the crop cycle. Once plants reach retail ready, they are irrigated with clear water as they would be at the retail store.

By measuring plant quality and health at normal retail ready finish times, as well as in the weeks following, researchers can evaluate the differences between the two practices. This work will also allow Profile Growing Solutions to compare costs and ROI between controlled-release fertilizers and other nutritional programs and assess the amount of nitrogen delivered from each system.

Plant varieties involved in the trials include: calibrachoa, pansy, impatiens, geranium, lantana and vinca.

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RESULTS POINT TO AN IMPROVED BOTTOM LINE FOR GROWERS

“Shelf life has always been difficult to measure, and many times has been limited to simply looking at the plants to see if they were attractive or not,” said White. “But in our trials, we wanted to take that measurement a step further and assess quality data like nitrogen levels in the leaf tissue, track pH and electrical conductivity, use photography and implement a qualitative rating scale for plant health to get a better sense of the impact the HydraFiber and Nutricote mix is having at different stages of the growth cycle.”

To date, researchers are seeing higher nutrient levels, better foliar tone and flower color, and overall improved visual quality in plants grown in the HydraFiber with Nutricote mix over water-soluble fertilizers, especially as post-production time increases.

The results point to growers being able to supply superior plants to retailers that then maintain that quality through to the consumer. These improvements in point-of-sale quality lead to better sell-through, an enhanced consumer experience and an improved bottom line for the grower.

White says there are plans to share updated findings as they become available, as researchers continue to optimize rates and blends.



Calibrachoa in HydraFiber treated with continuous liquid feed pictured 2 weeks after retail ready in 10 in. hanging basket.



Calibrachoa in HydraFiber treated with Nutricote pictured 2 weeks after retail ready in 10 in. hanging basket.

Growers or blenders interested in learning more and starting HydraFiber and Nutricote (CRF) trials can visit profilegrowing.com or contact Profile Growing Solutions at growing@profileproducts.com or 800-496-0955.

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