

GRIFFIN GAZETTE

Vol. 43 | Issue 2 | 2026

**GARDEN MUM
PRODUCTION**
Top 5 Issues and Solutions

RECLAIM YOUR YARD
with Everguard

Summer Plant Health
FIRST AID

Organic Water Soluble
NUTRITION





GRIFFIN GAZETTE

VOL. 43 | ISSUE 2 | 2026

Welcome to the Griffin Gazette, delivering industry tips and insights from notable partners and experts.

In each issue, we bring you valuable knowledge, innovative strategies, and expert advice to help you stay ahead in your business. As a family-owned nationwide leader and distributor for more than 7 decades, Griffin Greenhouse Supplies offers resources, workshops, and training to help you build a thriving growing business with knowledge-sharing and caring.

As your single source supplier for all your horticultural needs, we invite you to join us as we explore and serve industry expertise and empower your journey of growth and success.

LOCATIONS

1.800.888.0054

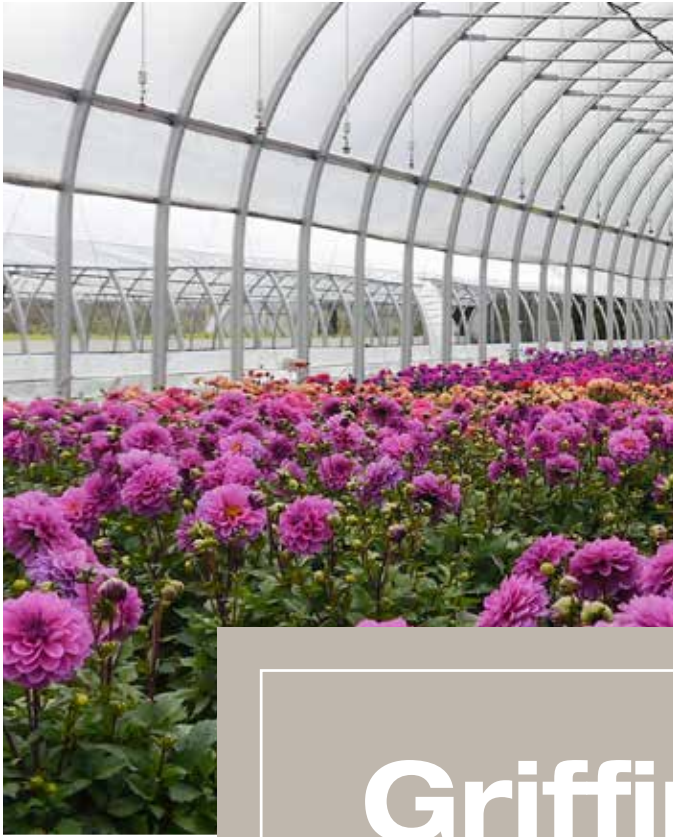
Denver, CO
Cheshire, CT
Stafford Springs, CT
Canton, GA
Woodridge, IL
Tewksbury, MA
Gray, ME
Bridgeton, NJ

Sparks, NV
Auburn, NY
Brookhaven, NY
Schenectady, NY
Perrysburg, OH
Morgantown, PA
Richmond, VA

Articles and material featured in this Gazette cannot be duplicated without written permission.
Copyright © 2026 Griffin Greenhouse Supplies, Inc.

COVER PHOTO:

Gigi Coral Garden Mum from Syngenta Flowers



GriffinExpo
REGISTRATION IS OPEN



WEST EXPO
August 26-27, 2026
Grand Sierra Resort, Reno, NV

EAST EXPO
September 10, 2026
Lancaster Marriott at Penn Square, Lancaster, PA

www.griffins.com/griffin-expo



COMMON PITFALLS IN GARDEN MUM PRODUCTION:

top five issues and solutions

Garden mums are a crop that almost every grower has experience with but producing them for fall sales comes with real challenges and when multiple issues hit at once, the stage is set for crop failure. Here are our top 5 things to watch out for.

By Brian Krug, Lauren Kilpatrick, and Jamie Gibson,
Syngenta Technical Services

1 **Variety selection** is one of the most critical decisions in programming a successful garden mum crop, so ask yourself: did I program appropriately?

Use the Fresh-All-Fall tables in our Garden Mums Catalog to select cultivars that flower exactly when you need them. Identify your region using our Geographical Regions map which accounts for varietal responses to night temperature and day length, then match your desired finish week and color accordingly.

Additional resources including At-A-Glance tables and Culture Guides are available to support your program.

2 **Fertility:** Garden mums are heavy feeders requiring continuous nutrition. Begin fertilizing with a complete N–P–K fertilizer containing 200–300 ppm of nitrogen at the first irrigation and use continuous liquid feed throughout production. Later in the crop cycle, fertilizer rates can be reduced once the plant body has been built and/or if irrigations occur multiple times per day. Always apply enough fertilizer solution to allow full saturation of the soil and up to 10% of the solution drains out of the pot to prevent soluble salt build-up.

After a significant rain event (1/2–1-inch), apply 200–300 ppm N feed to recharge the soil solution.

Controlled release fertilizers (CRF) can be used as a top dress application or incorporated into the substrate before planting. Northern growers should use a 3–4 or 5–6-month product while southern growers should use a 5–6 or 8–9-month product. When using CRFs be sure to use a water-soluble fertilizer for the initial irrigation after transplanting.

3 **Disease Management:** Disease requires three elements: inoculum, a favorable environment, and a susceptible host. Eliminating any one of these prevents disease from developing.

The primary soilborne threats are *Pythium* and *Fusarium*, both of which thrive when plants are stressed. Common stress factors include:

- High temps and intense, direct sun on a container
- Fluctuating moisture levels (overly wet or dry conditions)
- High soluble salt buildup in the growing media

Fungicide programs are the most effective defense against both pathogens. Follow a comprehensive product rotation to manage crop health throughout the season. See our **Protecting Garden Mums Against Soilborne Diseases tech sheet** for more information and example preventive programs.

4 **Managing Cool Nights:** Mums can initiate flowering under long days when cool nights are present, making early-season temperature management critical. Two strategies can help prevent premature budding and phosphorus deficiency from inactive roots:

- Use larger propagation cells. A 32 to 50-cell tray gives liners more room to branch and develop, allowing them to stay indoors under controlled temperatures longer before transplanting.
- Start and transplant later. Delaying transplant until mid-to-late June — when nights consistently stay above 62°F — reduces premature bud set. Though it shortens crop time, it results in larger, healthier finished plants.



5 Irrigation Strategies: Moisture levels directly impact growth and flowering; more water promotes growth and delays flowering, while less restricts growth and speeds it up. Adjust moisture by changing the frequency of irrigation, not duration, and avoiding extremes that can damage roots. Note that even budded plants can increase in size with excess moisture.

Wilting can restrict branching and overall growth as well as contribute to premature budding. Slight wilting can be beneficial late in the crop to help harden the plant off, control height, and promote more uniform flowering.

Keeping plants moist (not wet) can increase overall plant size even after buds are seen. This can be a useful tool if plants look like they will finish too small.

If plants wilt during peak heat despite adequate soil moisture, “syringe water” the crop by lightly misting the foliage. This cools plants through evapotranspiration, reducing stress without over-saturating the soil and risking root disease. Always use clear water for this method. Fertilizer solutions leave soluble salts on foliage and may cause burn.

For complete culture information, tools and resources on garden mums, please visit <https://www.syngentaflowers.com/ams/>.

© 2026 Syngenta. Important: Always read and follow label instructions. Some products may not be registered for sale or use in all states or counties. Please check with your local Extension Service to ensure registration status. Some or all of the varieties may be protected under one or more of the following: Plant Variety Protection, United States Plant Patents and/or Utility Patents and may not be propagated or reproduced without authorization. Trademarks are the property of their respective owners.



Chrysanthemum Nutritional Observation



Fusarium



Fusarium Late Season Mum



Responsible Growth Starts Here

EarthSafe connects materials, recovery, compliance, and reporting into one practical sustainability platform for growers.



 **Forward. Rooted. Ready.**
growscape.com

A woman with blonde hair, wearing a patterned jacket and light blue jeans, is walking on a green lawn. She is holding a large blue container of Everguard granules, which is spilling some granules onto the grass. The background is a blurred green lawn and trees.

RECLAIM YOUR YARD *with Everguard*

THE GREAT OUTDOORS, WITHOUT THE UNINVITED GUESTS

By Hannah Sadosky, Retail Education & Business Manager

There is nothing quite like the peace of your own backyard or garden space. Whether you're kicking back on the patio or watching the kids or pets play in the grass, our outdoor spaces are where we go to unwind. Unfortunately, nature often has other plans for us.

From the silent threat of ticks to the relentless buzz of mosquitoes, pests can easily turn a relaxing evening into a retreat indoors. But before your customers reach for the harsh chemicals or signing up for a spray company, there's a professional-grade, eco-friendly alternative: Everguard Tick & Mosquito Spray or Granular.

UNDERSTANDING THE ENEMY

To beat the bugs, you have to know how they move.

- **The Hitchhikers:** Contrary to popular belief, ticks can't fly or jump. They are patient hunters, crawling to the tips of tall grass and extending their front legs—a behavior called "questing"—waiting for a host to brush by.
- **The Aerial Attack:** Mosquitoes are the more aggressive invaders, flying in to find a host and capable of ruining a garden party in minutes.

WHY EVERGUARD STANDS OUT

Everguard was originally developed as a commercial formula in Rhode Island, this powerhouse solution is designed to handle the toughest coastal and woodland environments. **The Professional Edge:** Everguard contains more active ingredients than the leading consumer brands, offering a commercial-strength barrier for your home. What we love most is that it is **Eco-Friendly & Family Safe:** You shouldn't have to choose between a pest-free yard and a safe environment. Everguard is safe for use around children and pets, and it is proudly labeled bee-friendly, so you can protect your family without the fear of harming pollinators. **The Power of Six:** While most products rely on one or two active ingredients, Everguard packs a punch with a high-concentration blend of six botanical powerhouses: Citronella, Cinnamon, Cedarwood, Lemongrass, Thyme, and Garlic. **Weather-Resistant Durability:** Don't let a rainstorm wash away your protection. One application of Everguard is designed to last up to 4 weeks, standing strong against both rain and snow.

READY TO SPRAY?

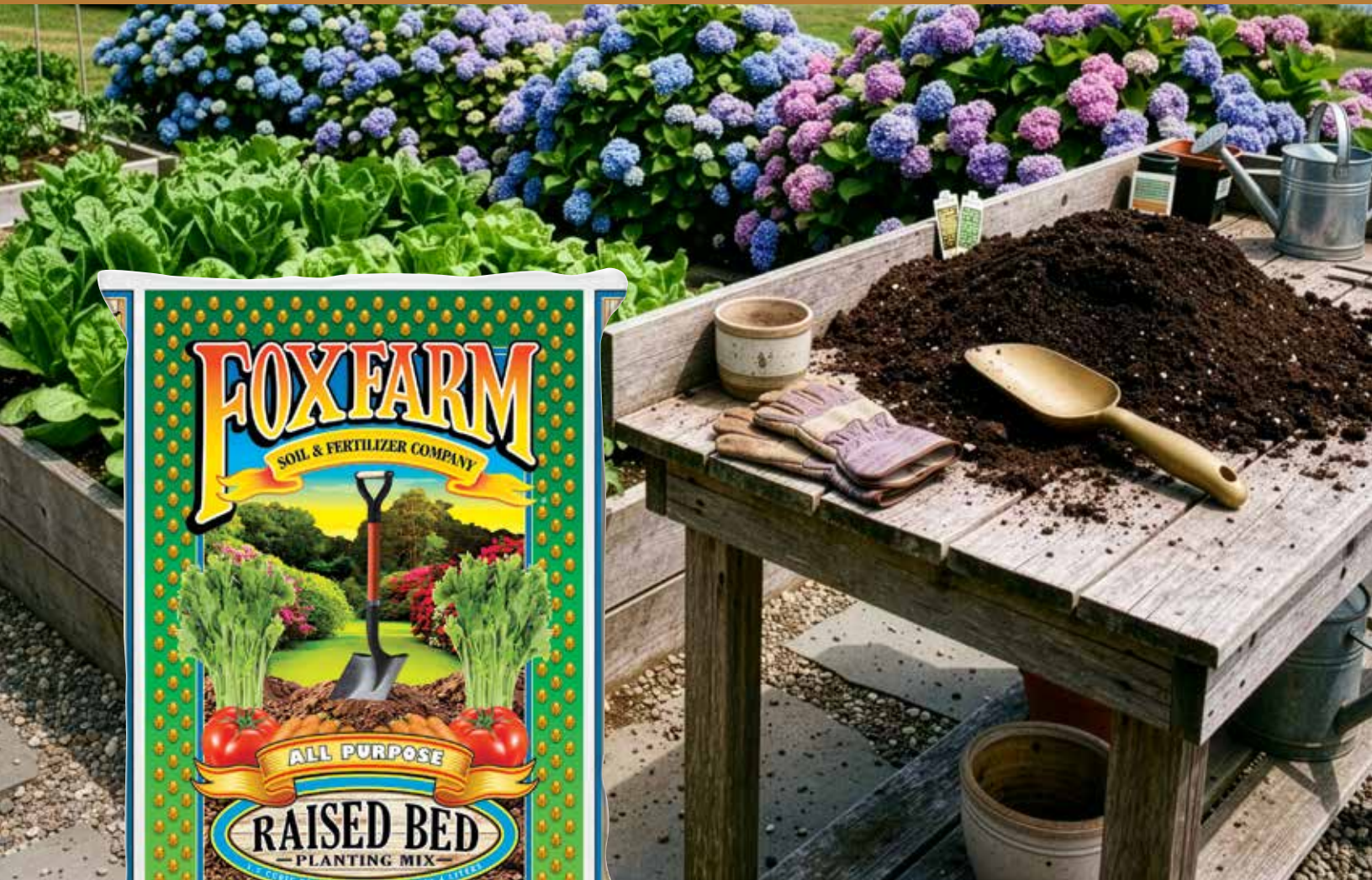
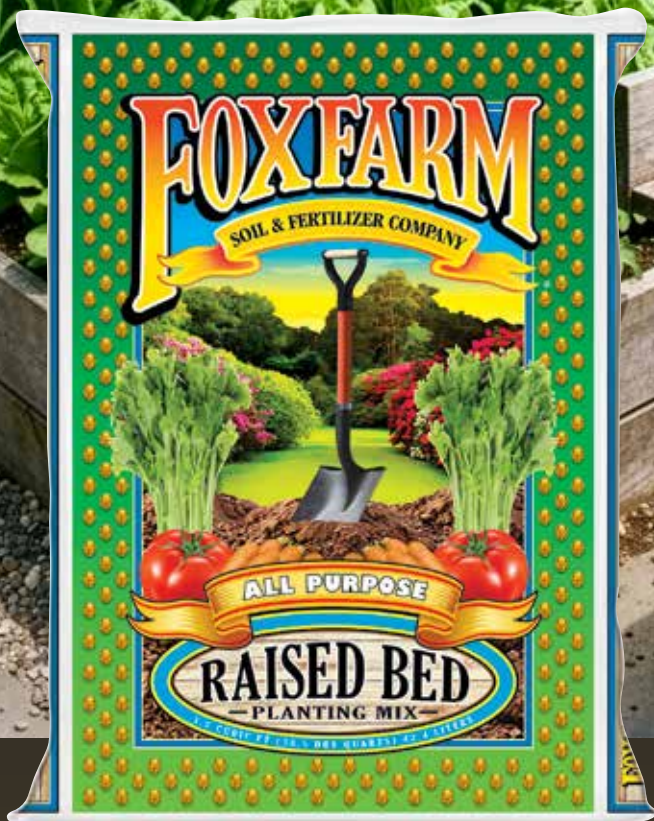
Whether you prefer the precision of the Spray or the long-lasting coverage of the Granular application, Everguard provides an easy-to-use solution for lawns and gardens of all sizes. (I personally love the granular, and use it all around my patios to beat the bugs)

**Give your backyard the protection it deserves.
Try Everguard today and see the results for yourself!**



FOXFARM[®] RAISED BED *planting mix*

ALL PURPOSE PLANTING MIX SPECIALLY BLENDED FOR FRUITS, FLOWERS, VEGGIES AND HERBS



- **Ready for Planting**
- **No Additional Ingredients Required**
- **Bat Guano and Earthworm Castings**
- **Retains Moisture**

Bring back the wonders of your youth, feeling that sweet earth in between your fingers, and the excited fascination and anticipation of nurturing and watching a garden come to life!

From ancient civilizations to current day, goodness still remains the same in a garden. From watering to harvesting your bounty, be in harmony with Mother Nature, and enjoy the fruits of your labor. Share the experience and thrill of growing something new with your children and come together over a delicious and healthy home grown meal. Uplift spirits and Bring More Nutrition to Your Table™ when you grow yourself another hobby using FoxFarm® Raised Bed Planting Mix in your garden.

FoxFarm® Raised Bed Planting Mix has been specially blended for fruits, flowers, veggies, and herbs. This product is ready to use right out of the bag and contains aged forest products, sphagnum peat moss, and fertilizer derived from earthworm castings, bat guano, oyster shell and dolomite lime. It has a carefully selected custom blend of mycorrhizal fungi and contains Humic Acids. Uplift spirits and Bring More Nutrition to Your Table™ when you grow yourself another hobby using FoxFarm® Raised Bed Planting Mix in your garden.

FoxFarm® is passionate about producing the finest soil mixes, fertilizers, and micro-brewed liquid plant foods. Their formulas are greenhouse tested to ensure quality and consistency. FoxFarm® takes great pride in delivering uncompromising quality and supreme customer service. FoxFarm® has supplied this consistency to their customers since 1984.

CLEARANCE
SALE

POTS, •PLANTERS, •TOOLS, •
SOIL, •FERTILIZER & MORE!

BIG SAVINGS WHILE SUPPLIES LAST

www.griffins.com/retail-clearance



FIRST AID

for summer plant health

By Joanne Lutz and Karen
Steuer, Ph.D. – GGSPRO
Technical Services Specialists

Cool weather, outdoor fall activities, and vibrant garden decorations may be months away, but production begins in the summer, during some of the most challenging weather conditions. Cool-season annuals and fall vegetables are popular choices for late-season greenhouse production, while outdoors, fall-blooming perennials, shrubs, and trees need to be finished or maintained.

Aside from the heat of summer, growers are competing with extreme light levels and weeds that are trying to become permanent residents. All of the above rob the plants of moisture, requiring increased irrigation. In this environment, root diseases, thrips, and spider mites can thrive if allowed. A number of tools that may not have been needed or used in the spring become valuable tools in summer to prevent or mitigate the risks associated with these seasonal conditions.



WETTING AGENTS

We all know that wetting agents incorporated into starting soil-less mixes lose efficacy with time. This can be seen as uneven growth among a group of plants that are being irrigated identically, or show slow seepage into the soil after irrigation events. Pop a plant out of its container after irrigation - the dry pockets and water channeling become obvious. When the wetting agent breaks down, water and fertilizer are wasted, running out the bottom of the container instead of being retained by the media. This alone justifies

the rather modest cost of supplementing the root zone with an additional wetting agent. A substrate drench with a liquid wetting agent, such as AquaGro L and H2Pro, refreshes the water retention of tired soils, leading to fewer wet/dry cycles, efficient use of water and nutrients, and less plant stress. Granular products can also be incorporated into the soil, including Reténu G Advanced which contains an OMRI-listed carrier.

SHADE CLOTH & GREENHOUSE COATINGS

Shade cuts down the light intensity and can also reduce the temperature within production spaces. Crop, retail, and work areas can generally be shaded at 30-80% light reduction using woven shade cloth material or knitted cloth (stretches). Knitted cloths are offered in a variety of colors or reflective aluminum to provide a myriad of options. Shade cloth is custom-cut and finished to fit.

Shade coatings, commonly referred to as “whitewash”, also work very well and can allow for more rapid deployment and flexibility when needed. The percent shade can be easily altered by the amount of product or thickness applied. Additionally, aerial applications via drones are becoming more common for applying as well as cleaning off shade coatings for large production areas. Along with reducing heat stress, ReduSystems offers a full line of liquid concentrate products for manipulating light intensity, spectrum, and distribution. It is important for growers to understand the range of liquid and fabric shade solutions they have available at their disposal. There is a specialized solution to help mitigate plant stress in the summer environment for every location,



crop, and production type. Reach out to Griffin's GGSPRO or Construction Departments for more information on selecting the right shading product for your specific needs.

WEED CONTROL

Weeds steal water and nutrients from crops and ultimately decrease plant value by their nuisance. Physical and/or chemical weed control can provide benefits that transcend a single season. This season's seeds are next year's weeds. That is, unless they germinate sooner, which might be next week. Replace tattered ground cover cloth as the first line of defense against invading weeds. Apply post-emergent herbicides, hand weed, mow, or do whatever is necessary to prevent the blooming and seeding stages of weeds near crop areas.

A number of post-emergent herbicides can be used as a directed spray to target weeds. Several of these utilize 'softer' chemistry that is more environmentally friendly and kill or burn down the foliage. Products in this category include Axxe, Cheetah Pro, Finale XL T&O, Hoplite, and Scythe. Perennial weeds can be prevented from seeding with the use of these products, but eradication requires a systemic product to kill the roots, such as glyphosate-containing Ranger Pro or RoundUp. A range of pre-emergent herbicides is available for use in crop production areas, including in the greenhouse and directly over compatible crops listed on the product label. Contact GGSPRO for the best options for your situation and production schedule. In the end, whichever approach is chosen, prevention is by far the most cost-effective strategy when it comes to weed management.



BIOSTIMULANTS

"Biostimulants" are a quickly growing addition to the grower's toolbox. By definition, this vast umbrella of products is designed to promote healthy growth without directly providing nutrition to the plant. The biostimulant category includes a diverse array of ingredients that work by numerous mechanisms to enhance and protect plant health. For example, biostimulants can work by promoting hormonal pathways in the plant cells, providing a protective barrier on surface tissues, and by improving nutrient uptake. Some biostimulants can promote branching and flowering, while others promote drought and salt tolerance. Drought tolerance delays wilting and helps plants rebound after severe dry-down events. It has been reported that the water requirements for summer containers may be reduced by as much as 50 percent with the use of effective biostimulants. Although we still have a long way to go in learning the full capabilities of products currently available on the market, we have outlined some solutions that we have seen have a repeatable positive impact for growers. Note - plant responses vary by species, so small-scale trials are recommended before investing in inputs across your entire production system.

Humic & fulvic acids derived from Leonardite coal have long been known to promote plant growth. These earth-derived substances promote growth in part by delivering nutrients to the roots and also by promoting the proliferation of beneficial organisms in the soil. Humic substances can increase shoot and root growth and increase the nutrient content of the plant tissues. Griffin offers Humax, Fulmax, and Essential Plus as concentrated, water-soluble sources.

Silicon is another earth-derived product, with several beneficial impacts on plants. Silicon helps to regulate water use efficiency and transpiration and protects against stress due to drought, high or low temperatures, and sunlight. Silicon is a unique active ingredient that can act as a biostimulant, preventative fungicide, or preventative insecticide depending on the product, plant, and application method. AgSil products can be applied to the foliage, or the root zone for maximum silicon accumulation in the plant. Sil-MATRIX LC is a preventative fungicide and insecticide for foliar applications.

Chitosan triggers the plant's natural immune system (Systemic Acquired Resistance – SAR) to prevent or reduce the incidence of fungal, bacterial, and some viral pathogens. WarHammer is a proven, grower-friendly Chitosan product within the industry used as a nematicide, fungicide, and bactericide. It is recommended as a foliar spray or drench

for many diseases, including powdery mildew, and suppression of root knot nematodes. Chitosan can also lead to enhanced vigor with increased chlorophyll and photosynthesis.

Microbial species include bacteria, mycorrhizae, and other fungi or yeast can act as biostimulant, preventative fungicide, or preventative insecticide through both direct and indirect effects on plants. Some of these live products bridge the categories of registered pesticides and biostimulants or soil inoculants. Examples of such commonly used products include: BotryStop, Cease, LalStop K61, Obtego, RootShield, Stargus, and Triathlon BA. These products increase the plant's ability to endure and recover from stress and can improve nutrient use, branching, and flowering. More complex mixes of bacterial species found in products such as TerraGrow and Liventia SOS/SSB (BioSafe Systems) and SP1 (DPH Biologicals) can provide relatively long-lasting establishment. Mycorrhizal fungi form a permanent association with the roots of most plants in nature. This symbiotic partnership increases nutrient uptake while mediating various environmental stresses. Both MycoApply mycorrhizae products and PRO-MIX AGTIV REACH products bring this beneficial partnership from nature to the greenhouse.

Small changes can have a big impact on stress management for plants and growers. We encourage you to think about one of the solutions discussed here and where it might have a major impact on your operation. From growth promotion to soil moisture management and weed control, Griffin has the products to help make it a stress-free summer. Contact GGSPRO or your local sales representative for all your summer needs before you need them.

KEYSTONE™

**BUILT TO PERFORM.
DESIGNED TO SAVE.**

Durable. Efficient. Cost - Effective.



Up to **20%** **TRAY FOOTPRINT SAVINGS**



- **Optimized Fit:**
Unique design with pots that fit rim to rim to avoid fill waste



- **Tagging:**
Designed for easy tag insertion on all 4 sides.



- **Multi-Level Drainage:**
Promotes healthier root systems.



- **Branding:**
Enhanced branding visibility and merchandising appeal on all 4 sides

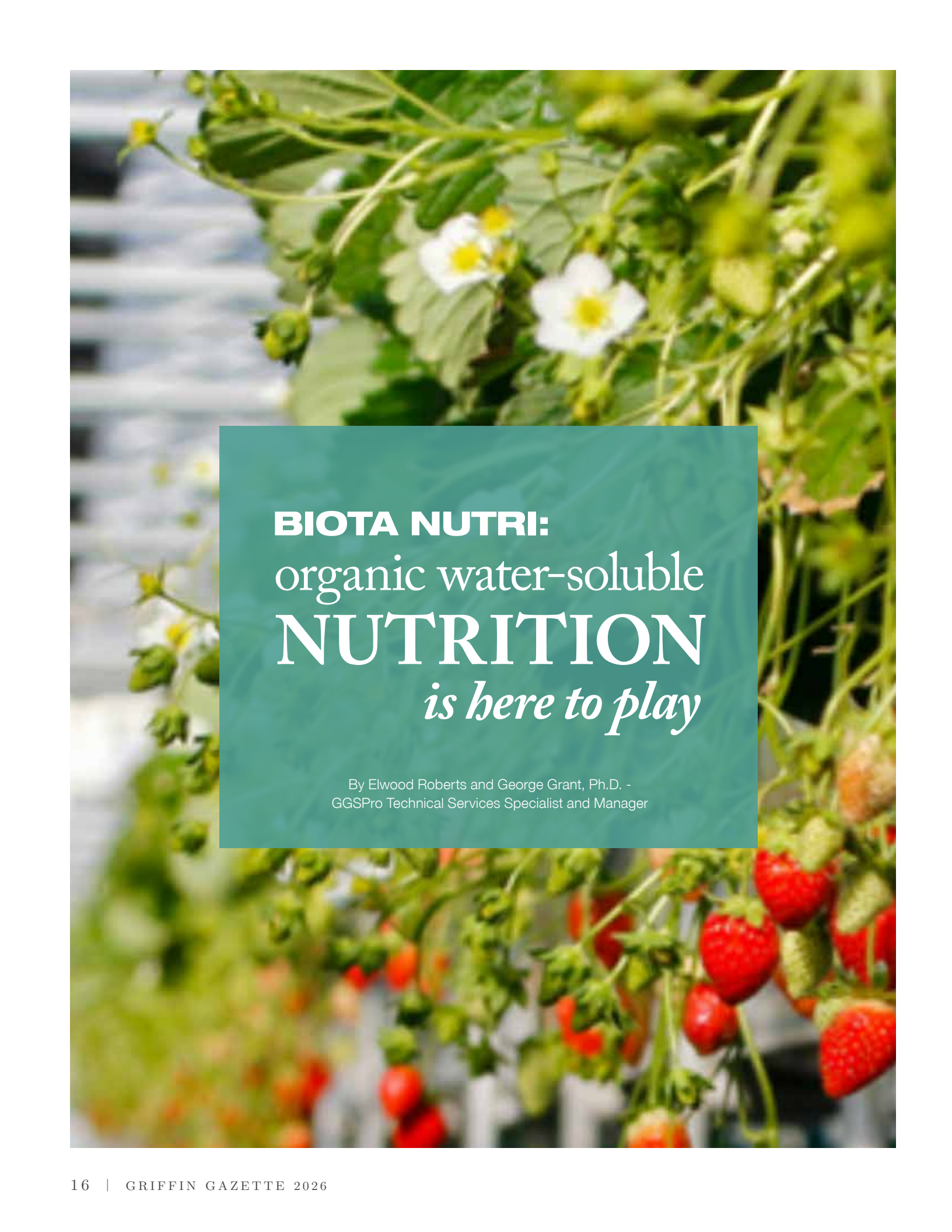


- **Space Efficiency:**
Increased number of products per square foot

By  **GROWSCAPE**

Solutions that grow your business.

Contact your Griffin rep to learn how Keystone™ can help your business



BIOTA NUTRI:
organic water-soluble
NUTRITION
is here to play

By Elwood Roberts and George Grant, Ph.D. -
GGSPro Technical Services Specialist and Manager

Finally, controlled environment agriculture (CEA) operations have access to a full line of high-concentration, water-soluble, organic inputs to meet the nutritional needs of any crop. Biota Nutri, in partnership with Griffin Greenhouse Supplies, is bringing innovative organic fertilizer solutions to the US market. This vendor-distributor partnership seeks to break down the nutritional barriers that have kept organic practices out of large-scale hydroponic systems for years – join us as we discuss the benefits both teams bring to the table for growers.

BIOTA'S FOCUS ON SUSTAINABILITY

Developed and produced in their own facilities in the Netherlands, Biota Nutri produces organic, plant-based, vegan-friendly fertilizers derived from residual plant materials generated during industrial vegetable processing. Biota Nutri supports sustainable growing, with four patents issued and patents pending for organic fertilizer processes and technology. Peter Klein, the founder of Bio Nutri discovered that various plant-based waste flows were filled with nutrients and developed a patented technology to extract those nutrients. The goal is to create a circular agriculture model where the fertilizer feeds the crop, and once the crop is harvested and processed, the residual plant material is once again turned into fertilizer. This goal reflects a commitment to sustainability that extends beyond product performance. Along with being able to produce nutrient-dense organic fertilizer inputs, Biota Nutri has also developed an Organic Nitrate Production (ONP) System that utilizes their own bioreactor technology to allow growers to produce onsite organic nitrogen.

FILLING THE GAP WITH PROFESSIONAL INPUTS & SERVICES

Proven in highly competitive CEA markets of the Netherlands and focused on ease-of-use for growers, Biota Nutri offers fertilizers that are low in organic particulates and come in clear, easily mixable, concentrated formulations. These products are available in isolated forms, similar to conventional fertilizer “straights”, providing the full gamut of macro and micronutrient solutions for CEA crops. Suitable for aquaponic, hydroponic,

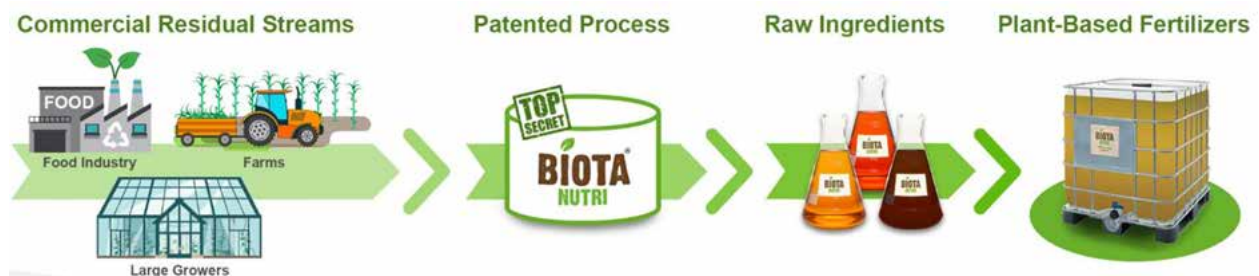
soiless media, and field soil cultivation, their formulations contain very low sodium and chloride levels to prevent the buildup of unwanted salts for less root stress and faster nutrient uptake by the plant.

Compared to other organic fertilizer options, Biota Nutri inputs have been engineered to minimize biofilm and algae development. The reduction in biofilm formation ensures cleaner irrigation lines and cleaner production systems, which can be a major headache for all types of production systems. Additionally, their extraction methods provide a significant decrease in viscosity, which enhances ease of use and application, providing a smoother experience during mixing, handling, and injecting. We understand grower compatibility is key!

Additionally, Bio Nutri offers a unique tool for growers in the form of their Biota Nutri Calculator, the online nutrient recipe calculator. It is an easy-to-use tool that helps growers create a personalized organic fertilizer recipe or combine organic and inorganic fertilizers. This aspect of the program is designed to aid growers who have not yet transitioned to a fully organic nutritional program but want to gain the advantages of the Biota Nutri single-element solutions. Both Biota Nutri's and Griffin's GGSPRO technical support teams are also here to help build organic fertilizer programs from the ground up, incorporating a grower's production system, starting water quality, and customized nutritional targets.

KEY SOLUTION HIGHLIGHTS

Biota Nitro: Nitrogen is the foundation for all fertilizer programs and can often be the biggest expense. Biota Nitro provides 10% ammoniacal nitrogen fertilizer in organic form that feeds both the plant and the system's microbial life. This high-concentration nitrogen source consists mainly of peptides and amino acids, allowing for fast mineralization and uptake in both hydroponic solutions and soiless media. Biota Nitro is able to meet and maintain high nitrogen crop demands, as well as providing components to fuel beneficial microbial populations.





BIOTA PHOS: When formulating water-soluble organic programs, finding a high percent phosphorus (P) input can be a bottleneck and often a limiting factor to forming a complete program. Biota Phos is unique because it is one of the highest-concentration, liquid organic phosphorus fertilizers found on the market (8%). Due to the unique production process, we are left with a very stable and plant-available source of P.

BIOTA IRON POWDER: Biota Iron is produced through a proprietary organic complexing process. This results in a water-soluble, fine-powdered iron source that resists precipitation and maintains availability across a wide range of application conditions, maintaining stability up to a pH of 10. Similarly, Biota Iron is very stable against oxidation in systems that utilize ozone or other sanitizing agents. Compared to traditional chelated iron options, Biota Iron is clear in solution. This unique characteristic allows for greater compatibility with UV water treatment systems, and it helps prevent the discoloring of application equipment and hard surfaces. Free of sodium and clay, it is suitable for both irrigation and foliar feeding applications.

BIOTA TRACE (MICRONUTRIENT PACKAGE): This contains the necessary micronutrient elements for every crop. Micronutrients are essential for regulating various enzymatic processes in the plant. Biota Trace prevents or corrects a shortage of trace elements in the soil, which helps to increase yield and prevent nutritional deficiencies. Because of its composition, Biota Trace can be used in combination with most other fertilizers and is suitable for both foliar applications and chemigation. Biota Nutri also offers individual micronutrient products to optimize the parts per million for each element within a fertilizer program.

PRODUCT	FORMULATION
Biota Nitro	9.6% Organic Nitrogen, 0.4% Ammoniacal Nitrogen
Biota Phos	1.5% Ammoniacal Nitrogen, 8% Phosphate/P2O5
Biota Kalium	15% Soluble Potash/K2O
Biota Calcium	5.7% Calcium
Biota Mag	3.15% Magnesium, 4% Sulfur
Biota NK 3-0-9	3% Nitrate Nitrogen, 9% Photash/K2O
Biota Trace	0.2% B, 0.1% Cu, 1% Fe, 0.5% Mn, 0.1% Mo, 0.1% ZN
Biota Iron Powder	13% Complexed Iron

TAKE AWAY MESSAGE

Biota Nutri’s innovation presents a massive opportunity for organic CEA production. The ability to grow plants in various production systems using high-concentration, water-soluble organic fertilizers that provide growers with repeatable results year-round is a “game changer”. As with anything, there is a learning curve when it comes to growing organic. We encourage you to leverage your resources, which include the professional support available by Biota Nutri and Griffin’s GGSPRO Team. Filling gaps with innovative solutions is an important value here at Griffin. Partnering with vendors such as Biota Nutri opens up new avenues within the organic realm that capitalize on the growing momentum for sustainable production of high-quality food for consumers.

Jack's®
FERTILIZERS

FEED EVERY PLANT



**JR PETERS
LABORATORY**



**JACK'S
TECH TEAM**

THE JR PETERS LABORATORY + JACK'S TECH TEAM - *"The right information when you need it!"*

Give us a call today and experience the difference yourself. For fast and accurate analysis of soilless media, plant tissue, water or fertilizer and fertilizer solution reach the JR Peters Lab online at jrpeters.com/lab-testing-services

Samples can be mailed to:
JR Peters Laboratory
6656 Grant Way
Allentown, PA 18106

For technical support:
jackstech@jrpeters.com
866-522-5752 ext. 22

Proudly crafted in Allentown, PA | 866-522-5752 | jrpeters.com | [@jacksfertilizers](https://www.instagram.com/jacksfertilizers)

SUSTAINABILITY REALITY CHECK

WHAT RESPONSIBLE GROWTH LOOKS LIKE IN 2026

By Tom Marting, Director of Sustainability at Growscape

OUR
2026
REPORT





For years, sustainability conversations in the horticultural industry centered on future goals, broad commitments, and aspirational benchmarks. Recently, the conversation has shifted. Growers are now navigating a more practical reality: sustainability is no longer defined by what companies promise, but by what operations can consistently execute.

Across the industry, expectations are accelerating. Retailers want measurable reporting. Regulators are introducing new compliance requirements. Consumers increasingly expect environmental responsibility to be embedded into the products they purchase and the companies they support. At the same time, growers continue balancing labor shortages, supply chain instability, margin pressure, and rising operational costs. The result is a more grounded approach to sustainability, one focused less on optics and more on systems that work in real-world production environments.

Recent industry developments, including insights from Growscape's 2026 Sustainability Report and the launch of its EarthSafe stewardship platform, reflect this broader shift toward operational sustainability. Expanded initiatives such as its ReSource Recycling and ReAssure regulatory and EPR compliance programs also point to a growing industry emphasis on connected systems that integrate materials management, recovery, reporting, and compliance into everyday business practices.

One of the clearest changes is the growing demand for measurable sustainability data. Increasingly, growers are being asked to provide documented proof of environmental performance through retailer scorecards, state reporting requirements, and supply chain audits. Data collection and traceability are becoming essential business functions.

That evolution is also changing how growers evaluate sustainability programs internally. Programs that succeed are the ones that support and improve labor structures, shipping schedules, production workflows, and equipment systems. More sustainable outcomes are shown to come from this focus on simplicity and practicality.

Recycling programs offer one of the clearest examples of this reality. The industry increasingly recognizes that recyclability alone does not guarantee recovery. Without local infrastructure, coordinated logistics, and scalable processing systems, many materials still end up in landfills despite being technically recyclable.

For growers, successful recycling programs must fit seamlessly into existing operations. Collection systems need to accommodate commercial-scale volume, transportation logistics must be reliable, and recovery partnerships must minimize operational disruption.

At the same time, the industry's understanding of waste streams is expanding. Sustainability efforts are no longer focused exclusively on plastics. Corrugate, pallets, metal, and mixed materials are increasingly being incorporated into comprehensive recovery programs designed to improve efficiency across the operation. The ability to include the broader assortment of materials is a core element of Growscape's ReSource Recycling program.

This broader systems approach is also being shaped by ongoing supply chain volatility. Localized sourcing and regional recovery partnerships are becoming more valuable, both economically and environmentally. Regional execution can reduce transportation emissions while creating more resilient supply networks.

Regulatory pressure is adding another layer of urgency. State-level sustainability legislation continues to evolve rapidly, particularly around extended producer responsibility (EPR) and packaging accountability. In many cases, financial and reporting obligations now extend deeper into the supply chain. As a result, Growscape continues to invest resources in remaining compliant with all regulatory obligations, including minimum Post Consumer Recycled (PCR) content requirements, as well as partnering with its customers to do the same.

Innovation in materials is evolving alongside these changes. New product development is increasingly focused on balancing environmental responsibility with real-world performance requirements. Next generation sustainable materials like Growscape's ReTerra plantable bioplastic are gaining attention because they are being engineered to maintain durability, functionality, and scalability in commercial applications.



Importantly, sustainability is no longer isolated within a single department or initiative. Decisions involving packaging, disposal, logistics, procurement, and reporting now carry broader financial and operational implications. Environmental stewardship is now an essential part of every company's overall business strategy.

Perhaps the biggest lesson emerging across the industry is that progress matters more than perfection. Long-term sustainability impact is rarely driven by one-time initiatives or highly publicized launches. Instead, progress comes from repeatable systems that can be maintained, measured, and improved over time.

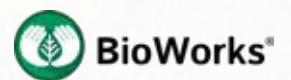
As the horticulture industry moves forward, the growers best positioned for success will likely be those who embrace sustainability as an operational framework rather than a standalone program. Practical execution, measurable outcomes, and scalable systems are becoming the new standard.

In today's environment, responsible growth is ultimately defined not by what growers can start, but by what they can sustain.





ROOTSHIELD & BOXWOODS



A CASE STUDY

By Dave Spampinato, Director of Marketing at BioWorks





STRONGER ROOTS, FEWER LOSSES AND HOW ROOTSHIELD•PLUS+ G TRANSFORMS BOXWOOD PRODUCTION AT CANNING

Japanese boxwoods (*Buxus microphylla japonica*) are widely grown in nurseries but highly susceptible to soilborne pathogens—especially during hot, humid summers. Diseases like *Phytophthora*, *Pythium*, *Fusarium*, *Rhizoctonia*, *Cylindrocladium*, and *Thielaviopsis* can cause major crop losses and inconsistent quality.

RootShield PLUS+ G is a biological fungicide combining *Trichoderma harzianum* strain T-22 and *Trichoderma virens* strain G-41 for broad-spectrum, preventive disease control. Incorporating RootShield PLUS+ G into potting media during canning provides early root-zone protection and supports strong root development.

In a recent trial, BioWorks tested RootShield PLUS+ G in 208 potted boxwoods (in the previous crop, 80% exhibited disease symptoms) to compare its performance against standard fungicide rotations and untreated control.

COMPARISON OF ALL FOUR GROUPS IN THE TRIAL



Control 1

Control 3

RootShield PLUS+ G

Control 2

RootShield PLUS+ G: 3 lbs/yd³ in media: \$30 per hundred pots (no additional fungicides were applied during the trial)

Control 1: Standard fungicide spray rotation - four different chemical fungicides: \$46 - \$54 per application, per 100 pots depending on rotation

Control 2: Standard fungicide spray rotation - four different chemical fungicides: \$46 - \$54 per application, per 100 pots depending on rotation

Control 3: No RS+ and no fungicide rotation

ROOT DEVELOPMENT; AVERAGE DRY ROOT WEIGHTS

- **RootShield PLUS+ G:** 445 g
- **Control 1:** 189 g
- **Control 2:** 306 g
- **Control 3:** 212 g

RootShield PLUS+ G plants had dense, white roots with full container fill.

DISEASE CONTROL; LOSS REDUCTION & VALUE PRESERVATION

- **RootShield PLUS+ G:** 0.96% (2 out of 208) disease incidence, plants had bright white, vigorous and abundant roots (please reference photo at bottom of article)
- **Control 1:** 60% disease incidence
- **Control 2:** Minimal losses because this section sat higher and drained better
- **Control 3:** 15% disease incidence, roots did not fill pot and were thin

Only 0.96% of RootShield PLUS+ G plants showed root disease compared to 60% in Control 1, 15% in Control 3, and minimal losses in Control 2 due to better drainage.



RootShield® PLUS+ G on left and Control 3 on right

COST EFFICIENCY (PER 100 POTS)

- **RootShield PLUS+ G:** ~\$30
- **Controls 1 & 2:** \$46–\$54 per application
- **Control 3, untreated:** \$0 input cost, but high downstream risk

At \$30 per 100 pots, RootShield PLUS+ G reduced direct disease management costs by ~35–45% versus the standard fungicide rotations. With fewer plant losses, a single application, and the ease of replacing six to eight products with a single biofungicide, RootShield PLUS+ G offers a more cost-effective solution.

OPERATIONAL ADVANTAGE

RootShield PLUS+ G is applied once at canning, eliminating the complexity, labor, and variability of multi-product spray rotations while delivering exceptional performance—even under high disease pressure.

ROOTSHIELD PLUS+ G

RETURN ON INVESTMENT DRIVERS

- **Lower input costs** than multi-product fungicide rotations without the risk of resistance
 - **Near-elimination of disease-related losses** (<1%)
 - **Improved root mass** (445 g vs. 189–306 g in controls), supporting higher-quality, more marketable plants
 - **Reduced need for ongoing fungicide applications**, lowering labor and application costs
-

BOTTOM LINE

RootShield PLUS+ G provides a lower-cost, higher-performance alternative to traditional fungicide programs. By combining reduced input costs with dramatically improved plant survival and quality, it represents a high-return, resistance free, risk-reducing investment for nursery production.





ICL
H₂PRO[®]

**OPTIMIZE WATER MANAGEMENT AND PREVENT SUBSTRATE DRY-DOWN
WITH ADVANCED WETTING AGENTS**

No growing operation is immune to the challenges of water management and substrate dry-down. Even the most refined irrigation programs can struggle when environmental conditions shift, evapotranspiration spikes, and growing media begin to lose consistent moisture. For greenhouse and nursery growers, these moments often lead to uneven crops, wasted inputs, and increased labor demands.

Taking a proactive approach to water management—rather than reacting after dry spots develop—can significantly improve consistency and efficiency. By incorporating advanced wetting agent technologies into your production plan, you can better manage substrate moisture, optimize water use, and protect crop quality throughout the entire production cycle.

Water is one of your most valuable resources, and increasingly, one of the most difficult to manage. Modern soilless substrates, made up of components like bark, peat, and coir, can become water-repellent as they dry. Once this happens, rewetting becomes uneven, creating dry pockets that restrict root uptake and lead to variability across containers.

PRECISION HYDRATION FOR CONSISTENT GROWTH

ICL's H2Pro® wetting agents are designed to address exactly these challenges. By optimizing both water penetration and water-holding capacity, they ensure that moisture moves efficiently and evenly throughout the root zone—even in severely water-repellent media.

This improved moisture distribution supports stronger root development and more uniform nutrient uptake. Water and fertilizer are used more efficiently, runoff is reduced, and irrigation frequency can be decreased. The result is not only better resource management, but also more predictable, consistent crop performance.

Equally important, these benefits extend beyond production. Plants grown in consistently hydrated substrates are better equipped to withstand the stresses of shipping, retail conditions, and post-purchase environments—helping maintain quality and reducing losses at every stage.



FLEXIBLE SOLUTIONS FOR EVERY PRODUCTION SYSTEM

The H2Pro® product line offers flexibility to fit a wide range of greenhouse and nursery operations, as well as turf applications where water management is equally critical.

H2Pro Greenhouse and Nursery Liquid delivers efficient, long-lasting performance through irrigation systems or stock tank mixes. It enhances water-holding capacity, reduces irrigation demand, and is ideal for applications like propagation misting.

H2Pro Greenhouse and Nursery Granular offers a convenient option for growers who prefer to incorporate wetting agents during media blending. It can also be surface-applied to containers at any point during production or prior to shipping.

Beyond container production, H2Pro Turf brings similar advantages to turf and landscape systems, improving water infiltration and retention in managed soils. This makes it a valuable extension for growers producing sod or maintaining high-visibility landscape areas.



BUILT FOR FLEXIBILITY AND LONG-TERM PERFORMANCE

H2Pro products can be applied at any stage—during media blending, throughout production, or prior to shipping—giving you the flexibility to respond to changing conditions without disrupting workflows.

Performance is rate-dependent, allowing you to match longevity to your crop cycle. Higher rates can extend effectiveness for months, supporting crops from propagation through retail and into the consumer environment.

Even under repeated wet-dry cycles or extended media storage, H2Pro maintains consistent performance, delivering reliable results when and where you need them.

SUPPORTING EFFICIENCY FROM PRODUCTION TO RETAIL

Dry-down stress doesn't stop at the greenhouse. Shipping and retail are critical points where inconsistent moisture impacts plant quality and shrink. Applying H2Pro ahead of these stages helps maintain hydration, protect plant integrity, and extend shelf life.

By eliminating dry pockets and improving root zone conditions, you produce crops that are more resilient, more uniform, and better prepared for real-world conditions.

MEASURABLE BENEFITS ACROSS YOUR OPERATION

When integrated into a comprehensive water management strategy, H2Pro wetting agents deliver clear, measurable benefits:

- Optimized moisture penetration and uniform distribution in container substrates
- Reduced irrigation frequency and overall water usage
- Lower runoff and fertilizer waste
- Fewer dry spots and improved rewetting of media
- Reduced losses during production, shipping, retail, and in the home environment
- Consistent performance through repeated wet-dry cycles
- Flexibility to match crop cycles through rate adjustments

A SMARTER APPROACH TO WATER MANAGEMENT

Effective water management isn't just about how much you apply—it's about how efficiently it's used within the substrate. With advanced surfactant technologies like the H2Pro line, growers can take greater control over moisture distribution, reduce variability, and optimize inputs without adding complexity.

The result is a more resilient crop, a more efficient operation, and a better-quality product from greenhouse to end user—all built on smarter water management.



FeED THE CROP, NOT JUST THE DEFICIENCY

By: JR Peters

When iron starts to slip in a fertility program, it doesn't whisper—it shows up in the crop. New growth pales, interveinal chlorosis creeps in, and suddenly high-value crops like petunia, calibrachoa, pansy, and mum stop looking like themselves. And in a market where "finish" is everything, there's no time to chase symptoms after they appear.

For years, many growers leaned on Sprint as a reliable iron correction tool. With Sprint no longer available, that gap isn't just a formulation issue—it opens the opportunity for rethinking nutrient delivery. Growers don't just need "an iron source." They need a system that holds iron steady, keeps nutrition complete, and doesn't force constant intervention.



That's exactly why Jack's FeED formulas were built to step in.

A Jack's FeED isn't positioned as a rescue product. It's a whole program itself—complete fertility with a designed-in iron strategy that holds. At the center of that strategy is a chelated iron base composed of three sources: EDDHA, DTPA, and EDTA. This isn't redundancy for the sake of complexity—it's coverage. Each chelate operates in a different pH window, and together they extend iron availability from roughly pH 4.5 to 9.0. Just as importantly, these chelated iron sources were selected for their 100% solubility and stability in solution. Unlike iron sulfate or black iron materials that can leave sediment or create cloudy nutrient solutions, EDDHA, DTPA, and EDTA chelates dissolve cleanly and remain available in solution. That means fewer injector issues, cleaner stock tanks, and more consistent iron delivery to the crop.



20-3-19 Petunia FeED: the OG Performance Driver

If there's a crop that exposes weak micronutrient programs fast, it's the Petunia Group of plants. High demand, rapid growth, continuous flowering, and very little tolerance for imbalance. Petunia FeED was formulated for exactly that pressure.

One of the original Jack's FeED formulations launched in 2004, Petunia FeED was designed specifically for iron-inefficient crops. Reduced phosphorus supports flowering without stretch, while elevated magnesium helps maintain strong chlorophyll production and deep green color through heavy bloom cycles. That makes the formula especially effective with hard water sources and fluctuating greenhouse conditions where deficiency can quickly become a problem.



22-5-16 Mum FeED: Structure, Timing, & Control

Mums don't forgive sloppy nutrition either. Here, the game is timing, height control, and uniform finish. Mum FeED is tuned for that rhythm.

Early in production, it supports steady vegetative development without excessive stretch. As the crop transitions, it maintains micronutrient availability—especially iron—so foliage stays green and growing through the heat of the summer.

In chrysanthemum production, inconsistency costs more than anything else. Mum FeED reduces that variability by simplifying the fertility program and cost. The additional 2% nitrogen in the formula reduces fertilizer usage by 10% compared to feeding a traditional 20-10-20 blend.



18-2-18 Boosted Base FeED: the Backbone

18-2-18 Boosted Base FeED was developed for growers managing diverse crop mixes under a single fertility program. The balanced nitrogen and potassium ratio delivers consistent baseline nutrition across a broad range of greenhouse crops while supporting steady growth, controlled size, color, and overall plant health. What truly separates this formula is the micronutrient package, delivering nearly twice the micronutrient levels of a traditional Peat-Lite formulation.

Designed for constant liquid feeding at lower nitrogen rates of 75–125 ppm, 18-2-18 maintains boosted Peat-Lite micronutrient levels at every watering without requiring additional trace element supplementation. In mixed crop production, it creates a stable nutritional starting point that simplifies injector management, improves consistency across multiple crop groups, and helps buffer against changing water quality conditions throughout the season.



From Greenhouse to Garden: Same System, Scaled

While Jack's FeED products were originally formulated for a commercial greenhouse environment, the same nutrition logic doesn't stop at greenhouse scale. Iron availability, balanced fertility, and consistent micronutrient delivery are just as critical in a patio container or backyard garden as they are in a finished greenhouse crop. That's why the FeED system extends into the retail space through Jack's Classic FeED formulations. Instead of changing the science, the retail FeED line simply supports growth for the home gardener too.

20-6-22

Petunia FeED supports high-performance flowering plants where color, uniformity, and continuous bloom matter most. Think baskets, porch pots, and garden annuals that need steady feeding to stay in peak display.

12-15-30

Veggie FeED is designed for the vegetable garden plants, where consistent nutrition translates directly into overall crop health, from transplant to harvest.

20-10-20

Citrus FeED targets citrus and fruiting plants that demand steady iron availability and balanced nutrition to support both vegetative growth and fruit development.

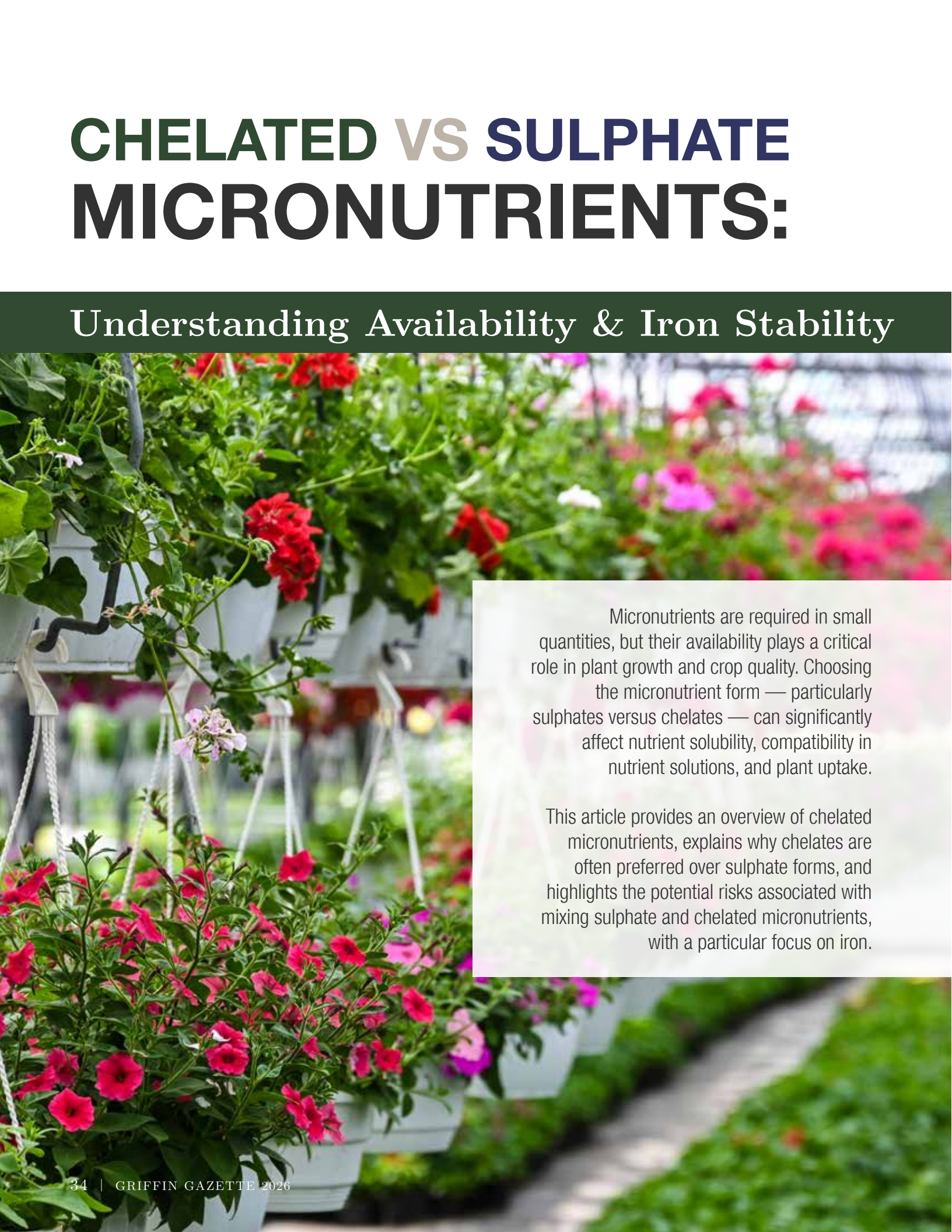
The foundation stays the same: complete fertility with a stabilized iron system. That's the thread that connects the entire Jack's FeED system. Different crops, different environments, same nutritional focus.

Good fertility isn't about reacting to problems—it's about preventing them from showing up in the first place.



CHELATED VS SULPHATE MICRONUTRIENTS:

Understanding Availability & Iron Stability



Micronutrients are required in small quantities, but their availability plays a critical role in plant growth and crop quality. Choosing the micronutrient form — particularly sulphates versus chelates — can significantly affect nutrient solubility, compatibility in nutrient solutions, and plant uptake.

This article provides an overview of chelated micronutrients, explains why chelates are often preferred over sulphate forms, and highlights the potential risks associated with mixing sulphate and chelated micronutrients, with a particular focus on iron.

What Are Chelated Micronutrients?

Chelated micronutrients consist of a micronutrient ion bound to an organic molecule known as a chelator. This chelating agent surrounds the micronutrient in a stable structure that protects it from reacting with other ions in the growing medium or nutrient solution.

This protection prevents micronutrients from precipitating, oxidizing, or becoming immobilized — reactions that can occur when micronutrients are supplied in non-chelated forms. Chelation improves the stability and plant availability of micronutrients such as iron (Fe), manganese (Mn), zinc (Zn), and copper (Cu).

Why Chelated Micronutrients Are More Available Than Sulphates

Sulphate micronutrients dissolve in water but exist as free metal ions once in solution. These ions can readily react with phosphates, carbonates, or hydroxides, forming insoluble compounds that plants cannot absorb. These reactions become more common as pH increases, particularly above pH 6.0–6.5.

Chelated micronutrients remain protected from these reactions. The chelating agent keeps the micronutrient soluble and available across a wider pH range maintaining consistent nutrient availability.

Iron: The Most Commonly Chelated Micronutrient

Iron is the micronutrient most frequently supplied in chelated form because it is highly sensitive to pH and oxidation. As pH increases, iron readily converts into forms that are poorly available to plants, leading to deficiency symptoms even when total iron levels appear sufficient.

Chelated iron protects iron from oxidation and precipitation, making it beneficial for greenhouse production, hydroponic systems, and high-pH media.

Choosing the Right Iron Chelate Based on pH

Not all iron chelates perform equally. Chelate stability — and therefore iron availability — is strongly influenced by root-zone pH.

Iron Chelate	Relative pH Stability	Typical Use
Fe-EDTA	Lowest	Stable between pH 1.5 - 6.5
Fe-DTPA	Moderate	Stable between pH 1.5 - 7
Fe-EDDHA	High	Stable between pH 3.5 - 10

Plantex® Iron Chelates: A Solution for Greenhouse Growers

For greenhouse growers, incorporating Plantex® Iron Chelates into their nutrient program ensures the availability of iron, even in challenging soil conditions.

Plantex® Iron 11% DTPA is ideal for a pH up to 7, ensuring that iron remains in a soluble, plant-available form preventing and correcting deficiencies under mildly acidic to slightly alkaline conditions.

Plantex® Iron 6% EDDHA is top choice for high pH situations. Featuring a strong ortho-ortho isomer, it provides exceptional stability up to pH 10, ensuring reliable iron availability where uptake would typically be limited.

Both products are easy to integrate into any fertility program and can either be applied to the soil as a drench or to the foliage as a fine spray. For best results, mix thoroughly with water until fully dissolved.

Compatibility Risks When Mixing Sulphates and Chelates

Using sulphate micronutrients alongside chelated micronutrients can introduce compatibility challenges. Free metal ions from sulphates — particularly copper, zinc, and manganese — can displace iron from its chelate. When this occurs, iron may precipitate and become unavailable to plants.

Depending on pH and solution conditions, this exchange can result in iron losses of 20–50%, increasing the risk of iron deficiency. To reduce this risk, chelated forms of manganese, zinc, and copper are recommended whenever chelated iron is used.

Plantex® NutriTrace CSM Fertilizer

Plantex® NutriTrace CSM Fertilizer is a water-soluble fertilizer mix of chelated secondary micronutrients which can be used as a preventative supplement or as a corrective application where known deficiencies exist. By supplying micronutrients in a chelated form, growers reduce the risk of precipitation and maintain availability of those nutrients for plant uptake.

Key Takeaways

Chelated micronutrients improve availability by protecting nutrients from precipitation and oxidation. Plantex® Iron Chelates and Plantex® NutriTrace CSM Fertilizer are key tools for greenhouse growers looking to prevent deficiencies and manage micronutrients in their crops. By incorporating these highly effective products into their nutrient programs, growers can ensure their plants have access to necessary nutrients for healthy growth and optimal yields.



THE MISSING LINKS TO YOUR

Biological Program



As we continue looking for ways to improve efficiency, maximize fertilizer performance, and produce stronger, more resilient crops, biological technologies are becoming increasingly important in modern production systems. Reducing production pressures tied to labor, inputs, and crop consistency often requires more than standalone biological products. Today's growers are looking beyond single-product solutions toward biological strategies that support plant and soil health.

The BioSafe Systems biological lineup featuring BioPhyter, RadiSynQ, and VivaSynQ provides

an opportunity to build a more connected biological program from the rhizosphere to the plant apex. Together, these technologies form the foundation of the BioPhyter Level Up Program, an integrated approach designed to support nutrient efficiency, root-zone performance, plant vigor, and crop resilience throughout the growing season.

BioPhyter, a systemic endophyte strain of *Beauveria bassiana*, colonizes the plant internally to support nutrient movement, resource distribution and crop performance. Unlike biologicals that remain in the root zone or surrounding soil, it works systemically throughout the plant, helping connect root-zone activity with whole-plant performance.

From root to canopy, BioPhyter helps improve nutrient distribution, supports photosynthesis, and strengthens

resilience to environmental stress. By supporting internal plant efficiency, growers can maintain stronger crop consistency during aggressive growth and environmental stress common in greenhouse and nursery systems.

RadiSynQ and VivaSynQ focus on the rhizosphere, supporting nutrient and water acquisition while strengthening the plant-to-soil connection.

BioPhyter + RadiSynQ

Supporting Nutrient Efficiency and Plant Performance

RadiSynQ is a 19-strain biological formulation optimized for hydroponic and greenhouse production systems. Designed to support nutrient cycling, root stimulation, and overall plant performance, RadiSynQ helps create a more biologically active root zone throughout crop development.

By stimulating rhizosphere biology, RadiSynQ converts nutrients into forms more available to plants and supports stronger root development, supporting efficient nutrient and water uptake. This helps improve fertilizer efficiency and plant vigor.

This is especially valuable in greenhouse and nursery systems where maintaining nutrient availability is critical during propagation, transplant establishment, and aggressive vegetative growth stages. RadiSynQ also helps plants better utilize micronutrients such as iron, zinc, and manganese, which are often present but not readily available for uptake.



Pairing RadiSynQ with BioPhyter creates a more connected approach to nutrient efficiency by improving nutrient availability around the root zone while supporting internal nutrient movement and plant performance.

BioPhyter + VivaSynQ Strengthening Soil Health and Stress Resilience

While RadiSynQ focuses heavily on nutrient cycling and root-zone activity, VivaSynQ takes a more targeted approach centered on soil biology and crop resilience.

Designed for soil and growing media applications, VivaSynQ supports beneficial microbial activity within the root environment, helping improve root-zone function in greenhouse, nursery, and tree production systems. Its 9-strain formulation helps strengthen the connection between soil biology and crop development while activating natural plant responses associated with stress tolerance and resilience.

By enhancing biological activity in the rhizosphere, VivaSynQ supports nutrient mobilization, microbial diversity, and overall soil function. This helps create more favorable growing conditions that support stronger plant performance across a wide range of production environments, including nursery and tree production.

While VivaSynQ strengthens the biological foundation surrounding the roots, BioPhyter complements this activity internally by supporting nutrient distribution, plant vigor,

and physiological efficiency throughout the plant.

By linking root-zone performance with whole-plant support, the combination helps crops manage environmental stress while improving production efficiency. This approach may be especially valuable during periods of drought stress, salinity pressure, fluctuating environmental conditions, or other stressors that can negatively impact greenhouse, nursery, and nursery tree production systems.

Level Up Program: A More Integrated Approach to Biological Performance

What sets the BioPhyter Level Up Program apart is that each technology is designed to complement the others, creating a more integrated approach to biological performance.

Within the program, RadiSynQ focuses on nutrient cycling, root stimulation, and biological activation within the rhizosphere, while VivaSynQ supports soil restoration, microbial balance, and long-term resilience within the root environment. BioPhyter complements these activities internally by helping maximize nutrient movement, physiological efficiency, and overall crop performance from the roots to the canopy.



Together, these technologies create a biological strategy supporting both root-zone activity and whole-plant performance.

If you're looking to improve efficiency, maximize fertilizer performance, and produce more resilient crops, biological programs like BioPhyter paired with RadiSynQ or VivaSynQ provide a more connected approach to supporting root-zone health, nutrient efficiency, plant vigor, and season-long crop consistency.

BY: BIOSAFE SYSTEMS



LEVEL UP

with
BioPhyter +

LEARN
MORE



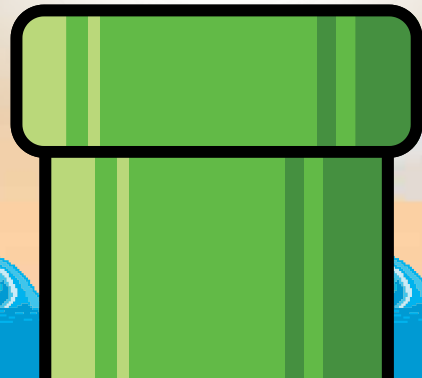
Radi**SynQ**



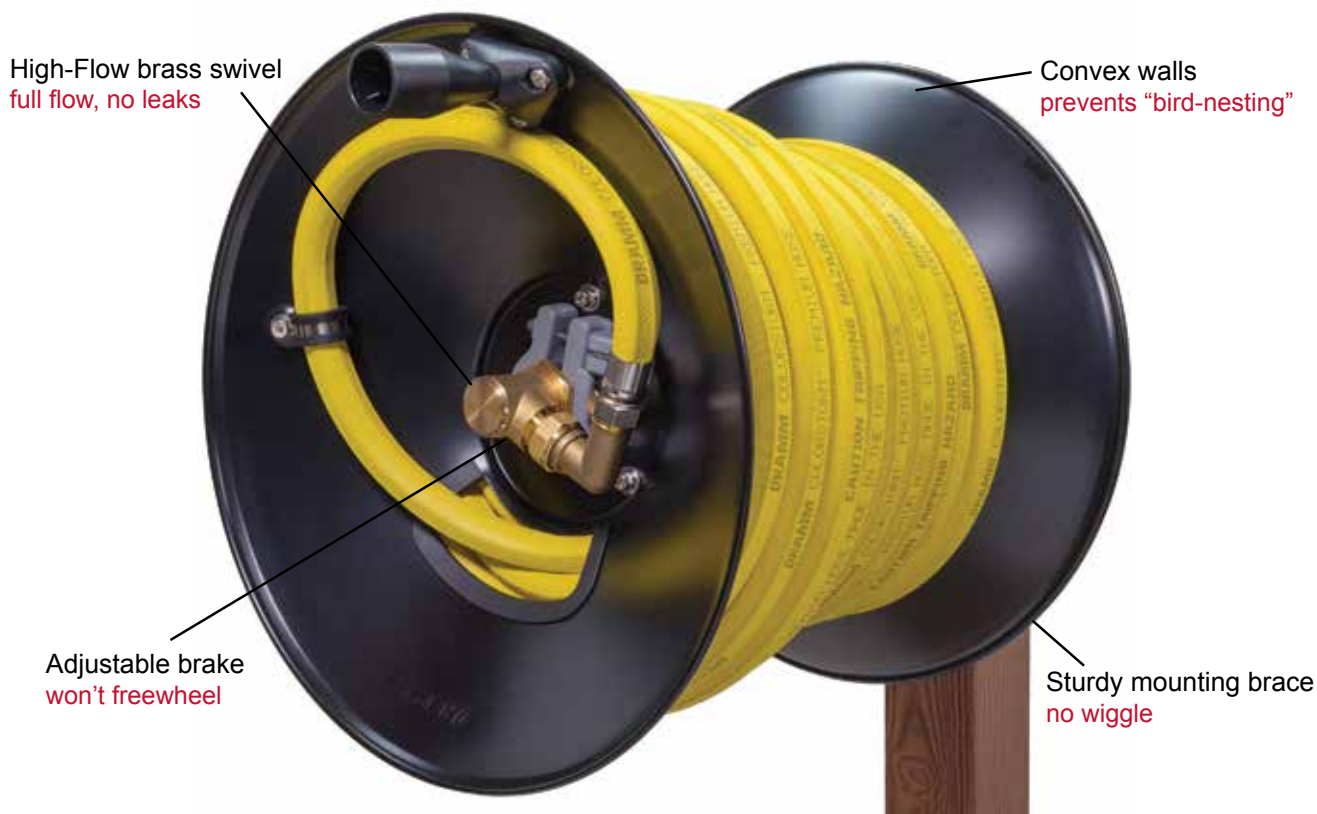
Viva**SynQ**



Clari**SynQ**



The **BEST HOSE** Deserves The **BEST REEL**



MAKE WATERING EASIER



Hose Guide

- Protects plants
- 12" Spike
- 6" Roller
- Durable

Brass Hose Swivel



- Prevents kinking
- Reduces tension from hose
- Makes dragging hose easier

ColorStorm Hose



- Durable, Flexible, Visible



Scan code for video
& more information

DRAMM[®]
Integrated Plant Health

information@dramm.com
www.dramm.com
920.684.0227



Superior & Consistent **GROWING MEDIA**

lambertpeatmoss.com



Professional Peat-Based Substrates



Wood fiber or coir
are available upon request



LP® LANDMARK
PLASTIC™



BUILT AROUND GROWERS

CONTAINERS FOR EVERY NEED



FEATURED PRODUCTS



COURTYARD 2QT POT

Reliable, Durable,
Built for Performance.



CA 1601 (17x17)
CA 806 (17x17)
CA 606 (17x17)

Versatile and Strong
for Everyday Growing.



45P /LPF15TRY

Lightweight Design.
Beautiful Results.



P72SDV

Options that
Work for You.



SIMPLIFIED FREIGHT STRONGER RELATIONSHIPS

- Regional, per pallet freight structure
- Transparent freight rates locked in at time of order

COMING SOON!

EXCITING NEW PRODUCTS FROM
OUR COURTYARD LINE!



1.5 AND 1 PINT
SIZE



STAY TUNED
FOR MORE!



LET'S GROW TOGETHER.

Contact your Griffin Sales Representative today!

LP® LANDMARK
PLASTIC™

landmarkplastic.com

Plantex Iron™

6% EDDHA

A stable, water soluble iron source with EDDHA chelate. Iron stays readily available for longer, improving plant quality and health.

Available in 6 x 5lbs case & 50lbs bags

✓ Features

- Stable in a pH range of 3.5-10
- Correction iron deficiencies in alkaline conditions
- The reliable red iron
- 5lb bag is resealable for easy use & storage

🧪 Feeding Chart

PPM Fe	oz/100 gallons
10	2.2
20	4.4
30	6.6
40	8.8
50	11.11



11% DTPA

A completely soluble iron source with DTPA chelate. This low sodium option can be applied either foliarly or to the roots.

Available in 6 x 5lbs case & 50lbs bags

✓ Features

- Stable in a pH range from 1.5-7
- Corrects iron deficiencies in slightly acidic to slightly alkaline conditions
- Ideal for use in hydroponic systems
- 5lb bag is resealable for easy use & storage

🧪 Feeding Chart

PPM Fe	oz/100 gallons
10	1.3
20	2.6
30	4.0
40	5.3
50	6.6



FOX FARM

SOIL & FERTILIZER COMPANY

POTTING SOILS

ENJOY THE PROCESS
LOVE YOUR PLANTS
REAP THE HARVEST

— SINCE 1984 —



Call Us: 800-4FoxFarm • Find Us: FoxFarm.com • Follow Us:   

Griffin Greenhouse Supplies
P.O. Box 36,
Tewksbury, MA 01876-0036
Phone: 800.888.0054
Website: griffins.com

