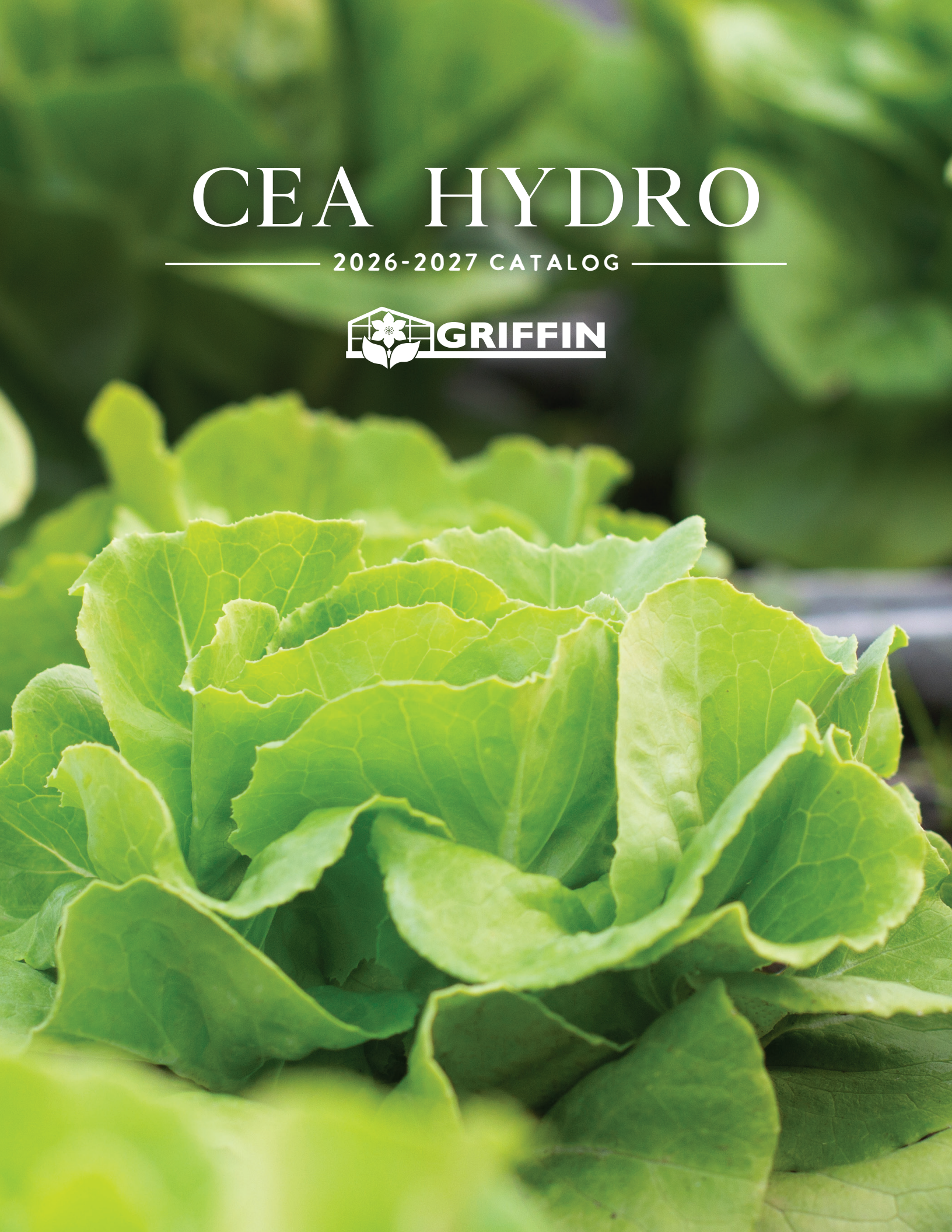
CEA HYDRO

2026-2027 CATALOG

GRIFFIN



A Third-Generation Family-Owned
Single Source Supplier for All Your Horticultural Needs

ABOUT GRIFFIN

Griffin is a partner to horticulture professionals. Family-owned and operated since 1947, we apply our knowledge, experience, and resources to enhance customer success from production to retail.

End-to-end solutions are our specialty. We represent the industry's leading breeders and producers, spanning seed and vegetative, bedding and potted crops, ornamentals and edibles. Our grower supplies offerings include reliable inputs and equipment to help your crops thrive through all production stages. Finally, our quality retail products drive add-on sales for you, while enhancing consumer success and enjoyment.

A LEGACY OF QUALITY AND SERVICE

Charlie Griffin founded his namesake company in 1947 with a simple vision: To maximize products and services for his customers. Originally headquartered in Reading, Massachusetts, his was a one-man operation with a limited offering, delivering supplies to growers in the local community.

Ken Hyslip, Sr. first became an employee of Griffin Greenhouse Supplies in 1952, as a truck driver at the age of 17. At the time, Griffin operated from a single location with no more than five employees. He went on to buy the business from the Griffin family in 1968. Under his leadership and family, Griffin grew steadily across the East Coast.

Today, Griffin thrives among horticulture's premier distributors, serving growers and retailers nationwide. Under the leadership of the Hyslip family, the business has earned a reputation for operational excellence, quality products, and first-class customer service.

We know you have many choices among supplier partners, and we sincerely thank you for your business. We look forward to serving you in the season ahead.

GRIFFIN IS COMMITTED TO EXCEPTIONAL CUSTOMER SERVICE

Our goal is simple: To meet your needs and exceed your expectations. From the time you place your order until it's delivered to your location, our team works to treat you with the utmost care every step of the way.

We strive to deliver every order on time and in full. We'll contact you 24 hours before your delivery date to ensure you're ready for the product. If we're unable to honor a delivery date, we'll notify you in advance and make every effort to reschedule at a time that's convenient for you. In the event of any issue, we're dedicated to working with you and our suppliers as needed to find a swift resolution.

Your opinion matters to us! Customer feedback is key to helping our team deliver on our service pledge. Please don't hesitate to contact us directly – by phone or e-mail – with any questions or input that may help us serve you better.

Dan Lowery | Corporate Customer Service Manager | 800.888.0054 x81404 | dlowery@griffinmail.com



GRIFFIN LOCATIONS

TO PLACE AN ORDER

Online: www.griffins.com
Phone: 1.800.888.0054
Grower / Retail Fax: 1.877.636.3623
E-mail: orders@griffinmail.com

OFFICE HOURS

Our office is open for normal business and telephone service from 8:00 AM to 5:00 PM, Monday through Friday.

WAREHOUSES

Hours for pick-up orders and counter sales are 8:00 AM to 5:00 PM, local time, Monday through Friday.

BRANCH LOCATIONS NATIONWIDE

5303 Havana St, Suite 120
Denver, CO 80239

20 Grandview Ct
Cheshire, CT 06410

10 Middle River Drive
Stafford Springs, CT 06076

111 Bluffs Court, Suite A
Canton, GA 30114

2143 Internationale Parkway
Suite 400, Woodridge, IL
60517

1619 Main St
Tewksbury, MA 01876

50 W Gray Rd
Gray, ME 04039

1240 B Hwy 77
Bridgeton, NJ 08302

550 Spice Islands Drive,
Sparks, NV 89431

1 Ellis Dr
Auburn, NY 13021

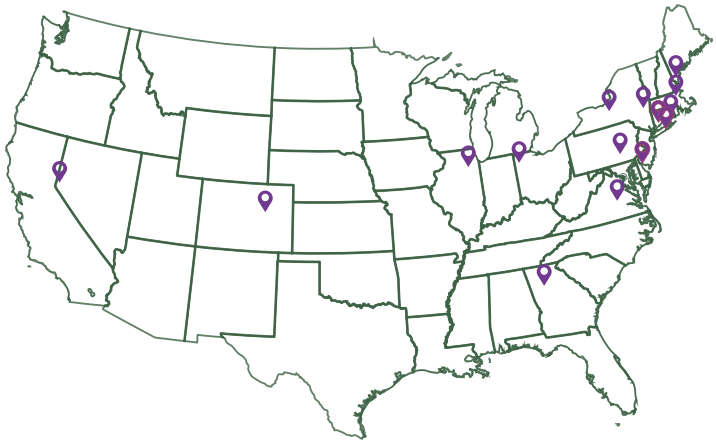
2165 Montauk Hwy
Brookhaven, NY 11719

126 Van Guysling Ave
Schenectady, NY 12305

28214 Glenwood Rd.
Perrysburg, OH

200 Mountain View Rd
Morgantown, PA 19543

5612 Pride Rd
Richmond, VA 23224









PRODUCTION SUPPLIES

Griffin's roots are in production supplies, and they remain the backbone of our company today. We're proud to offer reliable inputs and equipment to help your crops thrive through all growing stages. Look to us for containers, growing media, chemistry, and more from the manufacturers you know and trust. With the increasing demand for more efficient and environmentally friendly methods of growing food crops, we now specialize in Controlled Environment Agriculture for food and cannabis. Our 15 branch locations service customers nationwide with convenience and efficiency. Shop all of our grower products and place your order with your Griffin sales representative or on **www.griffins.com.**

RETAIL SOLUTIONS

Griffin is the independent retailer's best source for lawn & garden products. We make it easy for IGCs to do business, with complete vendor offerings, low order minimums, and efficient shipping solutions. Raise your retail game with help from our experts! Count on us for seasonal promotion ideas, merchandising, best practices, and space-planning tips to maximize your display areas and drive sales. Shop all of our retail products and place your order with your Griffin sales representative or on **www.griffins.com.**

GREEN GOODS

Griffin is a full-service broker of live goods to professional growers. Our assortment includes seed and vegetative material, bedding and potted crops, ornamentals and edibles from the industry's most respected breeders and producers. We're uniquely committed to the seed business, stocking more than 3,300 variety/product-form combinations in our state-of-the-art seed operations facility. Count on us for annuals, perennials, grasses, herbs, and vegetables. We're serious about seed quality: Inventory monitoring and regular performance testing ensure every variety meets its full potential, from the greenhouse to the garden center. Browse our complete portfolio and book your product selections through your Griffin sales representative or on **www.griffins.com.**

TECHNICAL SUPPORT

GGSPro is our in-house technical services team. With more than a century of combined experience, GGSPro delivers prompt, practical and accurate support to Griffin customers nationwide. The team's areas of expertise include: Crop culture, sanitation protocols, plant physiology and pathology, chemical controls, biological control agents (BCAs), and plant nutrition. GGSPro endorses a holistic approach to plant protection, utilizing a mix of cultural practices alongside chemical and biological controls to manage pests and diseases. Visit **www.griffins.com/ggspro** or contact GGSPro at **1.800.888.0054 (89129)**.

CONSTRUCTION SERVICES

Our construction team assists with all aspects of greenhouse planning, construction, and maintenance. Whether it's a new operation or expansion, upgrades or replacements, we can help with options to meet your needs and fit your budget. We offer a full range of equipment to help you grow efficiently and profitably. Look to us for greenhouse structures, films and coverings, lighting, climate control, irrigation, carts, and more. Visit us at **www.griffins.com/construction** to learn more about our product portfolio, see our project showcase, and submit a request for a free quotation.

CONNECT *with us*

SOCIAL MEDIA

Add us to your social network! Follow us on Instagram, Facebook, and LinkedIn, for news on products, events, and more.



GRIFFIN GAZETTE

Published especially for our customers, the Griffin Gazette is loaded with news you can really use. Our team serves up timely production advice, retail inspiration, and product and variety information to help your business thrive!

Check out the digital Gazette! Visit **www.griffins.com/publications** to browse the Gazette archives.



E-MAIL PROGRAMS

We offer several topical e-mail programs for growers and retailers. Tailor your subscriptions to meet your unique needs and interests, from technical tips to product specials and much more. Visit **www.griffins.com** to subscribe or update your preferences.

GRIFFIN CATALOGS

From production to point-of-sale, we've got you covered! Our Grower Supplies, Seed & Plant, CEA/Hydro, and Retail catalogs feature must-have inputs from quality manufacturers, breeders, and producers.

Contact your Griffin sales representative to request our catalogs, or check out our convenient and portable digital editions at **www.griffins.com/publications.**



Table of CONTENTS



CONSTRUCTION & GENERAL SUPPLIES

09



IRRIGATION

35



EQUIPMENT

47



MEDIA, SOIL, & CONTAINERS

55



NUTRIENTS & FERTILIZERS

83



CROP PROTECTION & SANITATION

105



CROP SUPPORT

139



LOOK FOR QR CODES throughout the catalog and scan with your phone for digital bonus information.

Follow us on Instagram
@griffin_cannabis

GRIFFIN



Griffin and GGSPro

Supporting your business with technical advice!

Sign up for Tech Tips at
www.griffins.com

Who are we

The GGSPro technical team at Griffin is a group of 5 professionals with over a hundred years of combined experience in the horticulture industry. Working closely with supplier partners, the team stays up to date on well-established and newly developed tools for growers throughout the industry. GGSPro also maintains strong ties to academic institutions to keep up with promising research into crop nutrition, disease identification and management, IPM practices, and more.



What we do

Address daily concerns over phone and email

The GGSPro team has over 15,000 points of contact every year supporting our grower customers. Whether over the phone or by email, the GGSPro team helps our customers answer questions on product selection and use, issue diagnosis, pest and disease management, and countless other subjects related to production of CEA food crops, cannabis, nursery crops, and ornamentals.

Development of pest control strategies

Whether you would like to focus on a beneficial insect-based program or stick to conventional spray programs, GGSPro has the knowledge to help you design a program that best fits your crop and growing environment.

Build nutrient programs around water test results and crop goals

Understanding source water quality is an essential component of crop success. The GGSPro team can help you interpret your results and tailor your water treatment and fertilizer choices to your specific situation.

Generate culture guides and bulletins for ornamental and edible crops

Through years of experience with growers of a multitude of crops, the GGSPro team has gathered and created hundreds of crop bulletins for a wide assortment of popular crops and subjects. Odds are, the team has something to address your question.

Insect, disease, and weed identification

Proper pest and disease management starts with proper ID of the problem. Send an image of the suspect to the GGSPro team for aid in identification and treatment options.



Resources available at www.griffins.com

Check out our monthly Tech Tips sent out via eBlast!
Order our Technical Reference Guide 6th Ed. or our new Flip Books!
Catch up on recent videos created by the team!
Browse our online catalog!
Read our technical articles published in the Griffin Gazette!
Ask about our informational bulletins on diseases, pests, crop culture, and more!

Griffin's GGSPro Technical Team
ggsprotech@griffinmail.com
1-800-888-0054 ext 89129

CONSTRUCTION & GENERAL SUPPLIES



GREENHOUSES

Conley's Gable Series



Conley's Arch Series



All Conley's greenhouses feature superior strength roll formed steel. Each truss assembly is made from roll formed component, no splices required, between peak to gutter connection.
This greenhouse is engineered in accordance with International Building Codes for almost any wind or snow load ratings.
All galvanized steel frame insures maximum strength and reliability.

Conley's Gable & Arch Series Features

- Superior roll formed trusses or arches and roll formed purlins ensure unmatched structural integrity.
- Each truss or arch assembly is produced from one roll formed component, no splices required, from peak gutter connection.
- Condensate control features built into roll formed arches and purlins.
- Can be covered with polyethylene or rigid covering.

Standard Widths

Arch Series: 21', 24', 30', 35.5', 41.5'

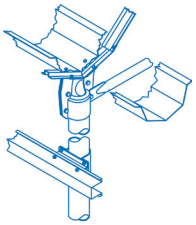
Gable Series: 18', 21', 24', 30', 35.5', 41.5', 50'

Accessory Equipment

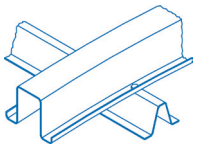
- Conley's Rack & Pinion roof vents - roof vents can be placed at ridge.
- Conley's Rack & Pinion side vents or end vents
- Internal retractable shading systems
- Conley's roll up side or end wall curtains
- Conley's swing, sliding or roll up door assemblies
- Conley's stationary, rolling or palletized bench assemblies
- Conley's space saver sidewall extension



Conley's Superstar Series 3600



Arch to gutter adapters connect to the bottom of the gutter for optimum weight distribution.



Arch and purlin design offers "I" beam technology for superior strength.

Outstanding Features

- Economy, Value & Strength
- Superior strength: rollformed arches, purlins and gutters ensure unmatched structural integrity
- Large easy to walk in gutters are lapped one into the other and cantilevered for increased strength
- 6' arch spacing virtually eliminates structural damage caused by rain and snow
- Components are shipped pre-punched and cut to length simplifying the installation
- Rollformed components nest one into the other during shipment, substantially reducing freight rates
- Certified to meet international building codes



Super strength arch to gutter adapter

Accessory Equipment:

- Conley's Rack & Pinion roof vents- roof vents can be placed at gutter or ridge
- Conley's Rack & Pinion side vents or end vents
- Internal retractable shading systems
- Conley's roll up side or end wall curtains
- Conley's swing, sliding or roll up door assemblies
- Conley's stationary, rolling or palletized bench assemblies
- Conley's space saver sidewall extension

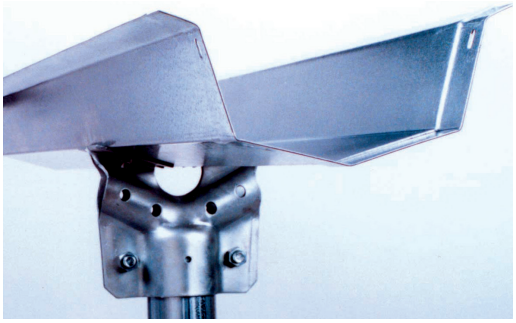


Rack & Pinion Gutter Vent

Gutter Height: 8'-10'-12'-14' Width: 21'-24'-30'

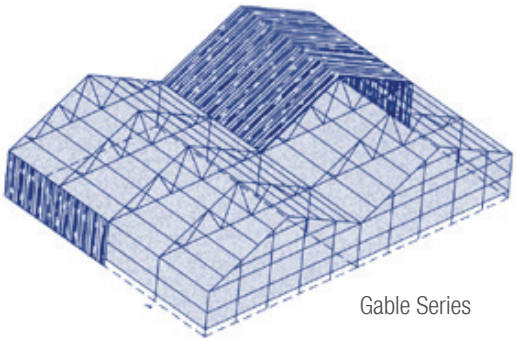


The Conley's Advantage

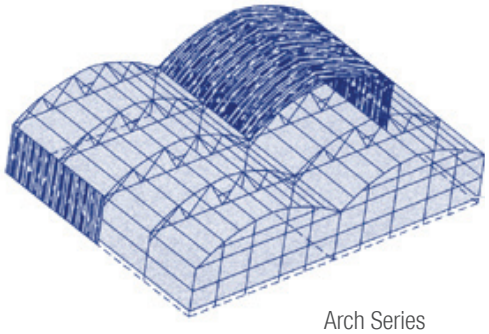


Cantilevered Gutters

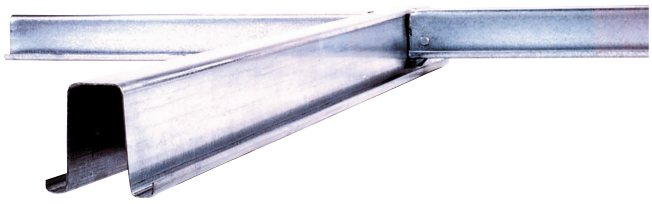
Conley gutters are cantilevered a full 2 feet over greenhouse columns, transferring the normal loads created by gutter connections away from the column. This increases the strength and stability of the structure. Gutters also lap one onto the other, virtually eliminating connection leaks.



Gable Series

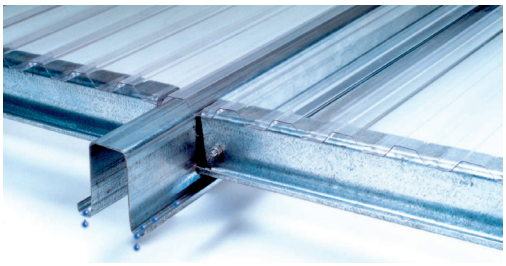


Arch Series



Superior Strength Rollformed Technology

Rollformed components incorporate the same design principle applied to industrial "I" beams. Engineered to be longer than wide, Conley's rollformed members offer substantially greater resistance to the deflection causing forces of rain, snow and wind when compared to conventional components.



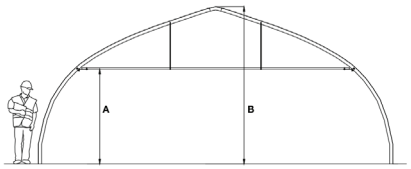


Harnois
serres x greenhouses

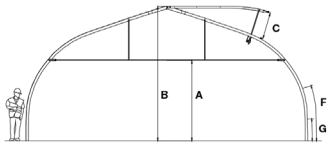
Ovaltech: Freestanding

The popularity of the Ovaltech testifies to its versatility and durability. It has become the standard in terms of wind and snow resistance. Its efficient design lets abundant light in, which promotes uniform crop growth across the greenhouse. Furthermore, it is engineered to enhance natural ventilation, creating a favorable environment for healthy crops while saving energy. ***Stamped engineered drawings are available upon request.***

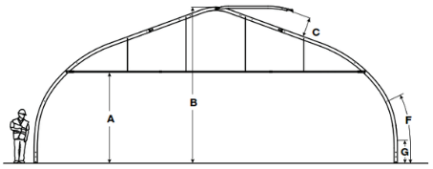
Approved by the NRCS High Tunnel Initiative



Ovaltech I



Ovaltech III



Ovaltech IV

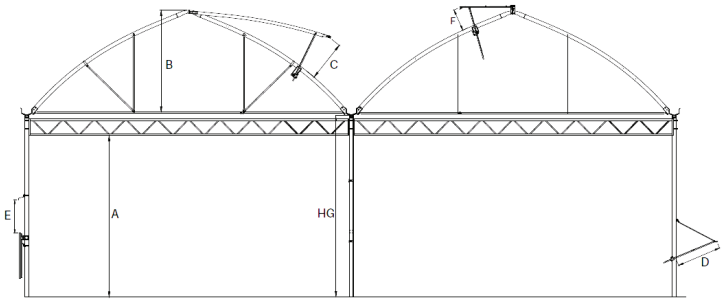
Griffin's #1 Selling Greenhouse

Ovaltech IV

	Ovaltech I		Ovaltech III				Ovaltech IV					
Width	25’	27’	25’	30’	32’	35’	25’	30’	32’	35’	42’	42’+
Arch spacing	5’		6’	3’ - 5’ - 6’	3’ - 5’ - 6’	5’ - 6’	6’	6’	6’	3’, 4’, 5’, 6’		6’
Inside clearance A	6’9”		9’				9’-1”			10”		12’7”
Total height B	11’-2”	11’-6-3/8”	14’-1”	14’-11”	15’-2”	15’-9”	14’-1-3/16”	14’-10-5/16”	15’-2”	16’-7”	17’6”	21’3”
Tubing Dimensions	1- 5/8” x 2-3/4”		2” x 3-9/16”				2 3/4" x 4 5/16"					
Mid roof vent C	-		-	37”			-	29”	33”	27”	42’ 33”	29”
Roll up Vent F	-		72” or 84”				72” - 84”			84” - 120”		84”
Skirt G	-		24” to 30”				24” - 30”					30”

Luminosa: Gutter Connected

Available in different widths. Models 21'-4", 26'-3", 30', 31'-6" and 36' are optimized for vine crops, laid out according to European (metric) best practices, with rows spaced every 5 or 6 ft. The Luminosa line-up is the best choice for for growers looking for a structure that maximizes growing space and profitability while optimizing natural light and air circulation, perfect for multi-variety production. Stamped engineered drawing are available upon request.



Models	Series 8				Series 9			Series 11
Width	21’-4”	24’	25’	26’-3”	28’	30’	31’-6”	36’
Height under gutter GH	12’ 14’ 16’ 18’ 20’							
Inside clearance (with truss) A2	GH minus 23” (15” truss)							GH minus 29 3/4" (22” truss)
	GH minus 28” (20” truss)							GH minus 38 3/4" (31” truss)
Height of gable B	7’3”	7’10”	8’1”	8’4”	8’10”	9’3”	9’7”	10’3”
Dimension of arch tubing	1-5/8" x 2-3/4" or 2” x 3-9/16" or 2-3/4" x 4-5/16"							2-3/4" x 4-5/16"
Dimension of Vents								
Roof vent (opening) C	34-1/2"							
Simple 4', double 8'								
Mid-roof vent D	38-1/2"	37-5/8"	37-3/8"	50-5/8"	49-1/4"	48-3/4"	48-1/2"	60-3/8"
Side panel (opening) E	39-1/2"							
Guilottinie panel (opening) F	37”							

HARNOIS
serres & greenhouses

TunnelPro *Plus*™

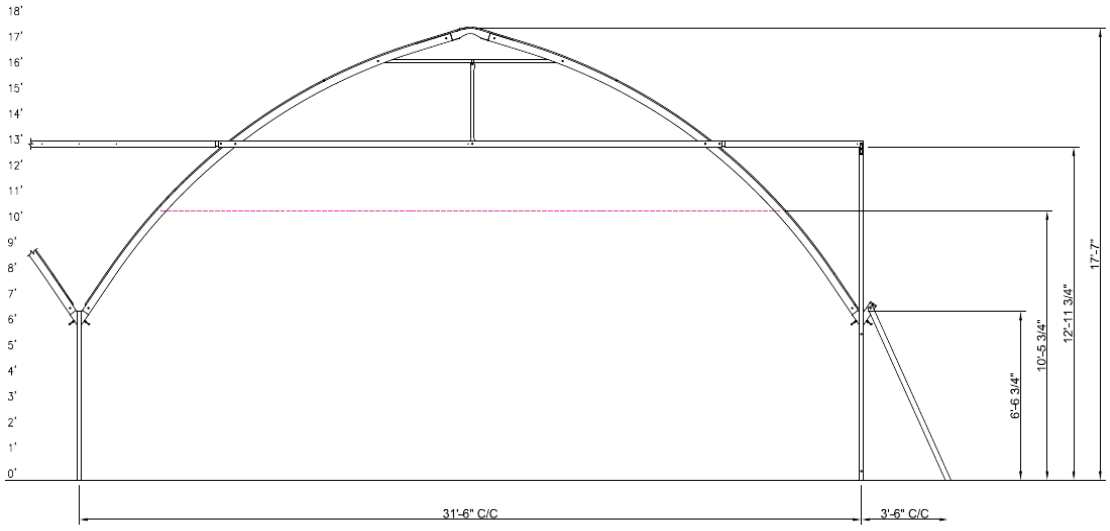
Field Scale High PolyTunnel

Three-season greenhouses that offer several economic advantages for producers.

- Ideal for berries growers
- Structure is manufactured using pregalvanized, oval tubing made of structural steel for years of corrosion protection.
- Fast and quick installation
- Full access for a tractor
- Economical solution to protect against adverse weather conditions.
- Screw-type anchors installed below frost to ensure stability and provide superior uplift resistance.
- Covering is secured with durable 1" wide, UV stabilized nylon straps that are stronger than rope and will not cut through the poly.

Widths	31'6"
Inside Clearance	17'7"
Gable Height	11'6"
Arch Tube Dimensions	2" x 3 9/16"
Screw Piles Width	2" x 2" (14 ga)
Screw Piles Length	9'10"
Galvanization	G90 (15-25 years) GALVALUME (40+ years)

2026
2027







sunmaster®



Sunmaster® is the leading brand of greenhouse covers in North America, offering growers a wide product range from high-performance four-year films to one-year overwintering. With decades of experience in the industry, our covers are designed to meet the unique needs of your greenhouses, ensuring maximum quality and yields.

Sunmaster® films can be produced in different versions depending on the application and needs of the grower. Stock products and sizing are based on most requested items, but Sunmaster® can produce films with various other properties for drop-ship orders.

In double-inflated greenhouses with two sheets, Sunmaster® recommends:

- EVO AC® IR as the inside layer for maximum condensation control, light distribution, and temperature regulation.
- Sunmaster® IV as the outside layer to maximize light transmission.



2026
2027

Sunmaster® EVO AC® IR

The benefits of EVO AC® IR:

- Permanent AC - cost savings on film & labor
- Mist elimination - less spraying & less diseases
- Highest light transmission - more and better production
- Outstanding mechanical properties - better crop protection

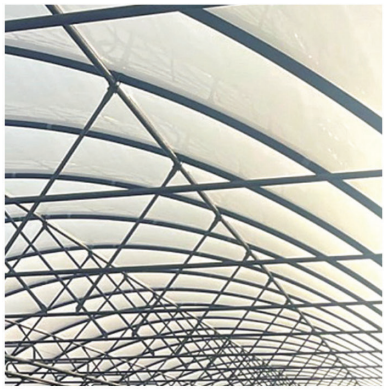
The properties:

- 8-layer co-extruded technology
- >90% PAR light transmission, UV-Open
- Permanent anti-condensate (AC) reduces costs and increases production
- Thermal film with superior Infrared (IR) retention promoting plant growth and energy savings
- High-diffusion (75%) which scatters sunlight uniformly, reducing shadow zones and preventing sunburns.
- Super-Strong for maximum resistance against strong winds, hail & snow loads.
- Superior mechanical properties (folds, tear & puncture) for maximum crop protection
- UV-stabilized for four years

Item	Width	Mil	Length	Fold	Weight/ lbs.
SMTHM624110EAC	24	6	110	4B	70
SMTHM628110EAC	28	6	110	4B	81
SMTHM628150EAC	28	6	150	4B	121
SMTHM632110EAC	32	6	110	4B	102
SMTHM636110EAC	36	6	110	4B	114
SMTHM636150EAC	36	6	150	4B	156
SMTHM642110EAC	42	6	110'	4B	134



Classic AC film after 2 years



EVO AC® after 4 years



Mist under classic AC film



EVO AC® anti-mist effect

Manufactured by Plastika Kritis

sunmaster®

Sunmaster® IR/AC Max

- 7-layer co-extruded
- >89% PAR light transmission, UV-Open
- Provides superior condensation control
- High-diffusion (75%) for uniform lighting when direct sunlight is not preferred
- Thermal film with superior Infrared (IR) retention promoting plant growth and energy savings
- Superior mechanical properties (folds, tear & puncture) for maximum crop protection
- UV-stabilized for four years

Savings

Purchase	Save
$750.00	8%
$1,500.00	13%
$2,500.00	18%

Savings applies to Polyethylene Film

Sunmaster® IR/AC Max Films

Item	Width	Mil	Length	Fold	Weight/lbs.
SMTHM628100	28'	6	100'	4B	84
SMTHM628150	28'	6	150'	4B	126
SMTHM636150	36'	6	150'	6	162
SMTHM642100	42'	6	100'	6	126
SMTHM642150	42'	6	150'	6	190
SMTHM648110	48'	6	110'	6	158
SMTHM648150	48'	6	150'	6	218

Sunmaster® IR/AC Max Tubes

Item	Width	Mil	Length	Fold	Weight/lbs.
SMTHM620100T	20'	6	100'	6	120
SMTHM624100T	24'	6	100'	6	144

Fold Code: 4A = C Fold 4B = U-Fold 4C – Gusseted fold 6 = Double U-Fold 8= Multi U-Fold

2026
2027

Sunmaster® IV

- 3-layer co-extruded
- Crystal Clear film maximizing direct sunlight penetration is desired for specific plant growth.
- >90% PAR light transmission
- UV-stabilized for four years
- Provides superior strength (folds, tear & puncture) and high light transmission

Item	Width	Mil	Length	Fold	Weight/lbs.
SMIV620150	20'	6	150'	4B	90
SMIV624110	24'	6	110'	4B	79
SMIV624150	24'	6	150'	4B	79
SMIV628100	28'	6	100'	4B	84
SMIV628110	28'	6	110'	4B	92
SMIV628150	28'	6	150'	4B	126
SMIV628200	28'	6	200'	4B	168
SMIV632100	32'	6	100'	6	96
SMIV632110	32'	6	110'	6	106
SMIV632150	32'	6	150'	6	144
SMIV636100	36'	6	100'	6	108
SMIV636110	36'	6	110'	6	118
SMIV636150	36'	6	150'	6	162
SMIV640150	40'	6	150'	6	180
SMIV642100	42'	6	100'	6	126
SMIV642110	42'	6	110'	6	138
SMIV642150	42'	6	150'	6	190
SMIV648110	48'	6	110'	6	158
SMIV648150	48'	6	150'	8	216
SMIV650150	50'	6	150'	8	225

Fold Code: 4A = C Fold 4B = U-Fold 6 = Double U-Fold 8= Multi U-Fold

Sunmaster® IV Greenhouse Tubes

Item	Width	Mil	Length	Fold	Weight/lbs.
SMIV624100T	24'	6	100'	4B	144
SMIV624110T	24'	6	110'	4B	158
SMIV624150T	24'	6	150'	4B	216

Fold Code: 4A = C Fold 4B = U-Fold 6 = Double U-Fold 8= Multi U-Fold





Manufactured by Plastika Kritis

Tufflite IV™

Tufflite IV™ is a high quality PAR (photosynthetic active radiation) film offering high clarity, outstanding durability and easy installation. Retains Clarity— Tufflite IV™ stays clear without discoloration or cracking. Outstanding Durability— proprietary manufacturing yields tough sheeting that resists tears, punctures and UV degradation. Easy Installation— heavy duty packing protects every roll and improved folding makes installation fast and easy.

Fold Code: CF= Center Fold CFF= Center Fold Folded CFDF= Center Fold Double Folded CSTF= Center-slit Tubing Folded STDF= Slit Tubing Double Folded
TDF= Tubing Double Folded

See next page for proper poly sizing for your greenhouse.

Tufflite IV™ Greenhouse Film

Item	Width	Mil	Length	Fold	Weight/lbs.
061-6241101	24'	6	110'	CSTF	75
061-6241501	24'	6	150'	CSTF	103
061-6281501	28'	6	150'	CSTF	120
061-6321101	32'	6	110'	STDF	100
061-6361101	36'	6	110'	STDF	113
061-6401101	40'	6	110'	STDF	126
061-6401501	40'	6	150'	STDF	171
061-6421101	42'	6	110'	STDF	132
061-6421501	42'	6	150'	STDF	180
061-6481101	48'	6	110'	STDF	151
061-6481501	48'	6	150'	STDF	205
061-6501101	50'	6	110'	STDF	157
061-6501501	50'	6	150'	STDF	214

Tufflite IV™ Greenhouse Film Tubes

Item	Width	Mil	Length	Fold	Weight/lbs.
061-6201101T	20'	6	110'	TDF	126
061-6201501T	20'	6	150'	TDF	171
061-6241101T	24'	6	110'	TDF	151
061-6241501T	24'	6	150'	TDF	205



Tufflite Infrared™

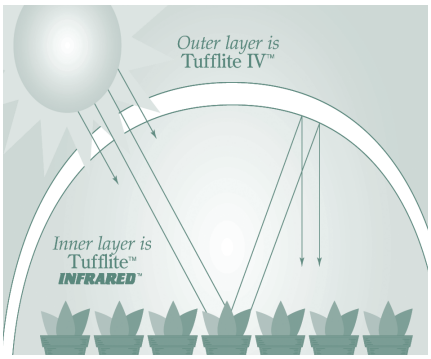
Designed to last up to four years, Tufflite Infrared contains both the Drip-Less feature and an additive that will delay the exit of infrared waves from the greenhouse— maintaining heat factors and thus saving energy.

Reduced Energy Costs— improved nighttime heat retention allows for lower fuel bills.

Improved Light Diffusion— reduces shadows.

Getting the Best of Both Worlds
Combine the extraordinary clarity of Tufflite™ with Tufflite Infrared™ and reap the rewards. When using sheeting (vs. Tubing), your combination of Tufflite IV™ on the outside and Tufflite Infrared™ on the inside gives you:

- The Highest Light Transmission
- Anti-Condensation Protection
- Optimum Energy Savings



Tufflite Infrared™ Greenhouse Films

Item	Width	Mil	Length	Fold	Weight/lbs
062-6241101	24'	6	110'	CSTF	75
062-6321101	32'	6	110'	STDF	100
062-6321501	32'	6	150'	STDF	137
062-6401501	40'	6	150'	STDF	171
062-6421101	42'	6	110'	STDF	132
062-6421501	42'	6	150'	STDF	180
062-6481501	48'	6	150'	STDF	205
062-6501501	50'	6	150'	STDF	214

Tufflite Infrared™ Film Tubes

Item	Width	Mil	Length	Fold	Weight/lbs.
062-6241101T	24'	6	110'	TDF	151
062-6241501T	24'	6	150'	TDF	205

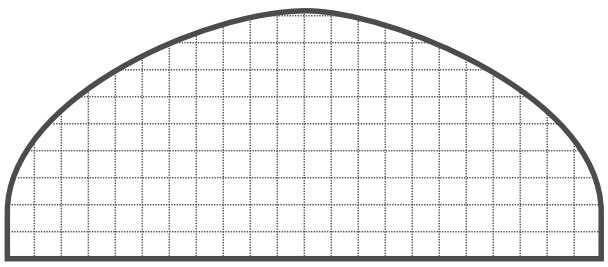
Fold Code: CSTF= Center-slit Tubing Folded
STDF= Slit Tubing Double Folded TDF= Tubing Double Folded

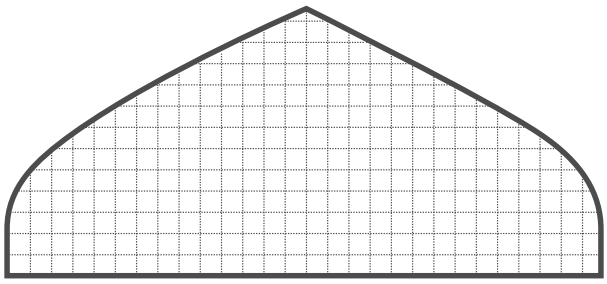
What Size Cover for my House?

Quonset Greenhouse							
House Width	14'	17'	20'	22'	25'	28'	30'
Poly Size Use	24' wide	28' wide	32' wide	32' wide	40' wide	42' wide	48' wide

Gothic Greenhouse							
House Width	17'	20'	21'	26'	27'	29'	30'
Poly Size Use	32' wide	36' wide	36' wide	40' wide	42' wide	42' wide	48' wide

Use this information as a guide to find the poly width for a standard ground to ground greenhouse frame. High tunnels, roll up sides, or raised greenhouses are not accounted in the chart above. Griffin recommends using a soft measuring tape to make a ground to ground measurement before ordering.


Quonset Greenhouse


Gothic Greenhouse

Jiffy
GROWING SOLUTIONS

INDOOR AG



The high technology, sustainable and certified solution you are looking for to improve yield and maximize your production with more convenience.

Developing sustainable plant growing solutions together









STRONGER ROOTS

0% PEAT
PEAT FREE

WIDE RANGE OF OPTIONS

READY TO USE

FOODSAFE

SCAN ME!
YOU WILL GET MORE INFORMATION!

LIGHTING



PL Light Systems develops and manufactures advanced reflectors, LED and HID fixtures for the horticultural market. **Talk to Griffin's Construction Department about customized light plans from PL Light for your next project.**

LED Fixtures

Options for sole source lighting, supplemental lighting for increased intensity and photoperiod control or tiered production. Customizable to crop specific spectra (fixed spectrum). Passively cooled.

ParFX Ultra | Engineered to deliver a light output of up to 3745 µmol/s and a system efficacy of 3.6 µmol/J, the ParFX Ultra delivers ultra-high performance in both full LED and/or hybrid applications. The luminaire features a unique optical lens that produces a symmetrical batwing distribution. This optimized distribution delivers industry-leading uniformity to allow for wider row spacing—enabling growers to achieve their target light levels and consistent crop growth, with fewer luminaires. Available in multiple spectrums, including custom.

TriPlane Linear | Engineered to cast minimal shadowing on the crop canopy—while delivering a performance on par with standard TriPlane model, the TriPlane Linear offers the ideal combination of form and function in greenhouse applications.

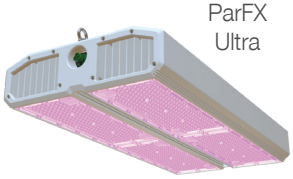
The unique mounting brackets on the TriPlane Linear's LED modules allow for the mounting angle to be adjusted in either direction, for a highly customized light distribution—depending on the application.

TriPlane | High output, true 1:1 HPS replacement for greenhouse and warehouse. Plug and play: integrated drivers, standard power connectors, easy mounting. The TriPlane is available in both RWMB (red, white, medium blue) and RWMB_FR (red, white, medium blue, far red) for supplemental lighting applications.
Field-adjustable for site-specific optimization of distribution pattern. Up to 2203 µmol/s, 3.3 µmol/J. IP-66. Daisy-chain capable, dimmable, and DLC listed.

VertiMax | High-output, full spectrum LED lighting solution for multi-tier applications. PAR output of 1800 µmol/s and system efficacy of 2.8 µmol/J. Integrated driver for reduced installation time and expense. Dimmable. Daisy-chainable.


TriPlane


TriPlane Linear


ParFX Ultra

High Pressure Sodium Lamps

Lighting options to increase intensity for increased growth and day length extension for photoperiod control. Higher percentage of red light than from metal halide fixtures.

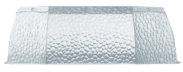
HSE NXT2 | Electronic ballast for quiet operation and extended lifetime. Cooling ribs for more efficient heat dispersal. Double ended lamps. Use with Alpha or Beta reflectors. **600W:** 277V or 347V. 1450 µmol/s. **1000W:** 277V, 347V or 400V. 2100 µmol/s.

HSE NXT-LP | Designed especially for low profile mounting for low ceiling height applications. Double ended lamps. Dimmable, electronic ballasts. Use with Alpha or Beta reflectors. **600W:** 277V or 347V. 1450 µmol/s. **1000W:** 208V, 240V, 277V or 347V. 2100 µmol/s.



PL LIGHT IQ

Achieve multi-zone lighting control of up to 512 ballasts in up to 4 zones. Works with control-enabled NXT-LP fixtures.


Alpha


Beta

CHOOSING REFLECTORS

Superior reflector technology from PL Light Systems can reduce fixture count by up to 15%, saving on cap ex and operating costs.

Choose **Alpha** for strongest uniformity; good choice when vertical space is limited.

Choose **Beta** for deeper light penetration; good choice for high mounting heights in very tall greenhouses, such as over tomatoes.

ReduSystems®

ReduSystems® enables growers to make optimal use of sunlight in their greenhouses throughout the year. Products influence natural light and heat transmission from the sun in every season to optimize the greenhouse climate for the crop – from a cooler climate in summer and more light in winter to diffusing light and influencing the light spectrum.

- Choose your own shading percentage
- Select products based on need – affect light and/or heat
- Wear and frost-resistant
- Potentially higher yield and better quality
- Use with glass and plastic greenhouse coverings
- Easily removed with ReduClean





ReduSol
ReduSol is a shading agent that reflects high levels of solar energy to protect crops against heat and light. Wear-resistant shade across the whole spectrum.

ReduHeat
ReduHeat is a shading agent that blocks infrared energy to reduce heat load while allowing high light transmission of photosynthetically active radiation (PAR) that drives plant growth. Great for high-light crops.

ReduFuse
ReduFuse is a light and heat diffusing agent. Light and heat are spread through the greenhouse more evenly for more uniform crops and stronger light penetration into the crop. Beneficial for vegetables, cannabis, cut flowers, and other high light dependent crops.

ReduFuse IR
ReduFuse IR diffuses light through the greenhouse while reflecting heat. Light penetrates deeper into the crop for a general net increase in photosynthesis. Good for heat sensitive crops that also demand high light.

ReduClean
Formulated to easily remove ReduSystems coatings. Dissolved coatings will rinse off the greenhouse with rain. Safe for glass and plastic greenhouse coverings.

Item	Description	Size
16-3230	ReduSol	14.5 L
16-3240	ReduHeat	13.5 L
16-3290	ReduFuse	14.85 L
16-3295	ReduFuse IR	13.5 L
16-3286	ReduClean	20 L

How Many Buckets Per Acre?

	Average buckets per acre (in North America)	Net shading (excl. roof/structure)		Average buckets per acre (in North America)	Net shading (excl. roof/structure)
ReduSol	4 - 5	22% - 25%	**ReduFuse**	5 - 6	5% - 6%
ReduHeat	5 - 7	6% - 9%	**ReduFuseIR**	7 - 9	11% - 15%

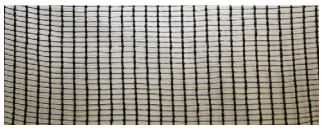
Note: products have to be mixed with water. For machine application 120-150 gallon spray liquid (water + coating) is used per acre. For manual application 180-200 gallon spray liquid per acre is used.

DeWitt
DOWN TO EARTH PROTECTION

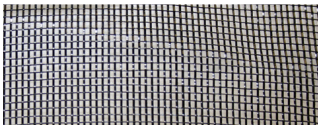
Shade Cloth and Netting

Woven & Knitted Shade, Aluminet and Insect Netting options for your Greenhouse shading needs!

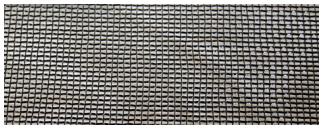
Woven 30%



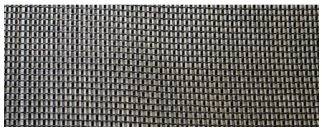
Woven 40%



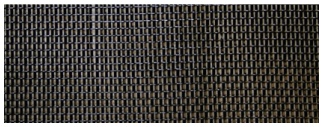
Woven 55%



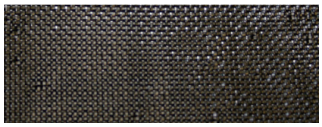
Woven 63%



Woven 73%



Woven 80%





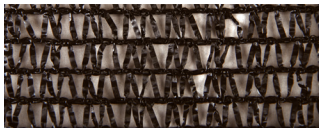
Knitted Black 30%



Knitted Black 40%



Knitted Black 50%



Knitted Black 60%



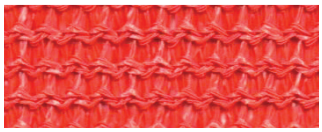
Knitted Black 70%



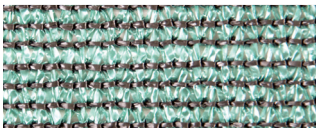
Knitted Black 80%



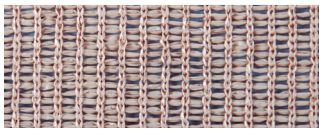
Knitted Red 30%



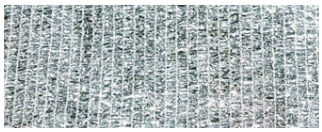
Knitted Green 60%



Knitted Ultra Tan 60%



Knitted Alumi-Shade 50%



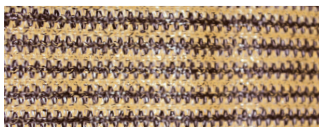
Knitted Red 50%



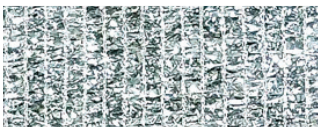
Knitted Steel Grey 50%



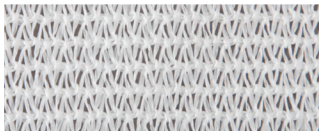
Knitted Mocha 80%



Knitted Alumi-Shade 70%



Knitted White 50%



Custom Shade

- GROMMET
- BATTEN TAPE
- CUT DOWN
- HEM
- SEAM

Insect Netting

VENTILATION FANS, HOUSINGS & SHUTTERS

Windmaster Exhaust Fans

- Slant arrangement protects motor and drives from weather
- High air flow capacity- shutter directs air to fan
- Select fan at 0.5" sp. instead of .10"
- Constructed of heavy gauge galvanized or aluminum
- Includes guard on outlet side
- Wiring knockout allows wiring connections inside building

Exhaust Fan with Slant Wall Housing - Stocked in 115 Volt

Item	Size	Speed	HP
23-1121	24"	1	⅓ HP
23-1126	24"	2	⅓ HP
23-1131	30"	1	½ HP
23-1136	30"	2	½ HP
23-1141	36"	1	½ HP
23-1146	36"	2	½ HP
23-1150	42"	1	½ HP
23-1155	42"	2	½ HP
23-1165*	48"	2	½ HP

All Guards for wall housings have 1" x ½" welded galvanized wire in aluminum frame for inlet side of wall housing. Outlet guards are included on WS wall housings as standard equipment. Inlet guards are mounted with quick release clips.

***Nonstock item:** order will ship direct FOB Freight Origin.



Automatic Aluminum Shutter

Item	Fan Size	Wall Housing Model	Shutter Model
23-1240	24"	WS24DC	WAA2727
23-1245	30"	WS30DC	WAA3333
23-1250	36"	WS36DC	WAA3939
23-1255	42"	WS42DC	WAA4545
23-1260	48"	WS48DC	WAA5454
23-1265*	54"	WS54DC	WAA6060

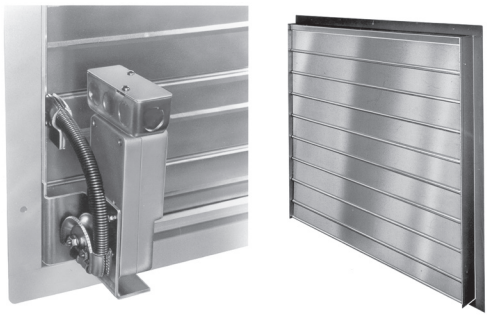
Griffin Construction Department
Partner with us on you next project.
Call for consultation and quote:
1.800.888.0054 then press 3.

Flomaster Motorized Shutters

- Precision counterbalanced aluminum blades open easier, wider to permit higher fan capacity
- Corrosion-proof nylon bearings throughout to help prevent sticking
- Suitable for dusty or humid applications
- Stainless hinge pins will not rust, ensure easy positive blade action
- All shutter blades are reinforced with polished galvanized steel rods, and equipped with double tie-rods
- Automatic: Used with exhaust fans; opens automatically when fan is on, closes automatically when fan is off
- Corrosion resistant heavy gauge aluminum frame
- Keeps out wind, rain, and back drafts when fan is not in operation (See fan selection for shutter sizes)

Motorized Inlet Shutters

- Cam pulley operator provides long life to motor and is corrosion resistant
- Motor draws only 17 watts
- WAAC models are center pivoted to open easier against house static pressures
- Motors available in 24v, 115v, 230v, 460v (specify voltage required (Stock 115v)
- Replacement: Motors, motor and cam linkage or cam linkage only can be purchased separately.



Shutter

Item	Shutter Model	Overall	Opening	Sq. Ft. Opening	Wt.
23-1325	WAAC1818MT	18" x 18"	15" x 15"	1.56	10
23-1330	WAAC2626MT	26" x 26"	23" x 23"	3.67	14
23-1335	WAAC3333MT	33" x 33"	30" x 30"	6.25	18
23-1340	WAAC4040MT	40" x 40"	37" x 37"	9.50	22
23-1345	WAAC6318MT	63" x 18"	60" x 15"	6.25	19
23-1350	WAAC6340MT	63" x 40"	60" x 37"	15.42	35
23-1355	WAAC6362MT	63" x 62"	60" x 59"	24.58	52

Replacement Motor

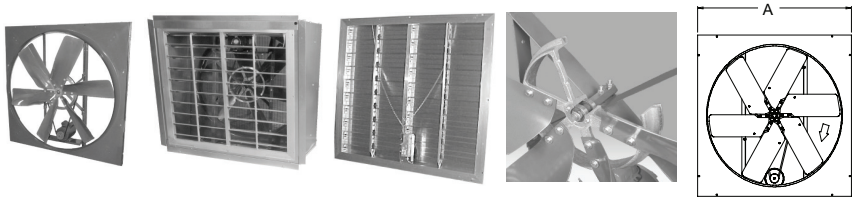
Item	Description
23-1362	Damper Motor with Spring (Motor Only) 115v
23-1375	Motor and Linkage 115v

Economical, Practical, Effective

American Coolair's Type NBF/AL fan provides the solution to fresh air ventilation in most types of farm buildings. Type **NBF fans** are built to give you years of heavy-duty trouble-free service. The rugged, belt driven construction operates in any position, has permanently lubricated ball bearings, and is available with single or two speed totally enclosed motors. Coolair has developed a complete ventilation system for farm use combining the Type NBF fan with all aluminum shutter (Type LRW) and heavy gauge galvanized steel wall housing (square box or slope) for exterior mounting, allowing a maximum of unobstructed interior space. American Coolair's **AL all-aluminum fans** are the answer to concerns about rust and corrosion in today's damp greenhouse environment. Combined with an aluminum wall housing, an aluminum shutter, and a vinyl coated wire guard, the AL fan will provide years of trouble-free and corrosion-free service.

Exclusive Drive Assembly

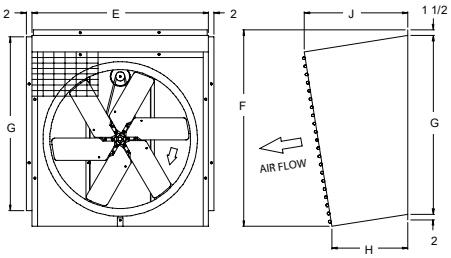
Our engineering department has developed an innovative drive assembly for the Type NBF fan. Our use of quality materials and precise engineering techniques in constructing wheel assemblies assure you of years of quiet, trouble-free service. Power is applied through V-belts directly to the propeller with blade load concentrated directly over the bearings to eliminate overhang bearing load. The exclusive, time tested design has been widely acclaimed by engineers.



Type NBF Fan

Performance and Efficiency

When economy is measured in terms of cubic feet of air per minute per dollar invested, the Type NBF wall fan exhaust unit is unsurpassed. American Coolair's Type NBF fan is today's best investment, Coolair uses only the most efficient ball bearing motors available. They are totally enclosed resilient base motor.



Type GSWH (Slope) Wall Housing

The SLOPE wall housing allows the shutter to be placed on the intake side of the fan and eliminates air turbulence that occurs with the shutter on the down-wind side of the fan. It prevents the warm air from being lost through the metal wall housing to the outside cold air in cold climate conditions. The GSWH housing is constructed of galvanized steel for long, durable wear and low maintenance.

Coolair® Motorized LRW Air Inlet Shutter

The LRW Air Inlet Shutter is designed to be opposite side or end of buildings. It features a sturdy aluminum frame, aluminum blades, aluminum reinforcing brackets and nylon bearings on all movable linkage. The LRW Air Inlet Shutter is fully automatic and comes standard with a motor to automatically open and close shutters.

Evaporative Cooling Systems

Evaporative Cooling in Concept: To counter periods of extreme temperature that affect in-house environments and therefore production, Coolair Evaporative Cooling Pad Systems are used with outstanding success. When large quantities of air are pulled through Evaporative Cooling Pads that are saturated with water, a substantial cooling effect is realized due to the evaporation of that water. Used in conjunction with Coolair fans, a temperature reduction of 10-25 degrees is commonplace. Suited for virtually all geographic locations, the Coolair Evaporative Cooling System delivers the greatest economic benefits to areas where higher temperatures during longer periods of time are normal. Coolair has created a brown out housing accessory for their current evaporative cooling systems and is an easy retrofit if needed. The brown out housing attached to their evaporative cooling system in conjunction with light traps is the perfect system for all of your light deprivation needs.



Coolair products drop-ship to the site from the manufacturer.

HORIZONTAL AIR FLOW

Horizontal Air Flow System

- Propeller - Aluminum blades held securely in place by a steel spider and hub provide quiet operation
- Motor - Heavy duty PSC, totally enclosed motor with automatic thermal overload protection and ball bearings is energy efficient. Motor can be used with variable speed control for more precise air movement
- Guards - Two piece wire guard for easy access has a gray plastic coating to resist corrosion
- Installation - Two piece rotational bracket provides a locking tilt adjustment for proper angle of air flow. "S" bracket provides two different dimensional mountings
- Wiring - Motor comes factory-wired on the "A4" with a 6'3" conductor cord with grounding type molded plug for easy installation



	HAF12A4	HAF20A4
Size	12"	20"
RPM	1566	1626
Motor HP	1/15	1/15
Voltage	115/1	115/1
Watts	124.5	105.0
Air Flow	1145	3005

Item: 23-4020 **Size:** 12"
Item: 23-4025 **Size:** 20"

DRAMM

Dramm AME Momentum Fans

Horizontal Air Flow, or HAF, is an important tool for managing the greenhouse environment. Proper air circulation not only helps to even out the temperature throughout the greenhouse, but also is responsible for distributing humidity, aerosols, CO2 and pesticide sprays. Good air movement can help keep the foliage dry, helping to curb disease incidence. Initially, velocity was the sole measurement in calculating the number of fans. Momentum is replacing velocity as the desired goal in greenhouse HAF systems. The goal of a momentum-based system is to create a stable mass of air that slowly builds momentum as it travels through the greenhouse. The focus is on consistency and stability, rather than air speed. Often, traditional cage style HAF fans spinning at high rpm may move the air too fast and in a much wider pattern causing turbulence and uneven drying throughout a crop. Dramm AME Fans in series, work together to carry the air in a forward direction, reducing the energy required and creating a more even, stable airflow. Additionally, this style of fan creates an intake as well as exhaust to continually pull and push the air forward which increases distances between fans and a lower overall quantity compared to traditional HAF designs. The use of a Dramm Speed Controller allows manual or automated speed regulation. To ensure proper fan placement and to prevent mistakes in HAF layout, Dramm provides a drawing for each installation of the AME system. Please contact your Griffin rep for a custom layout or more information.



Dramm AME fans

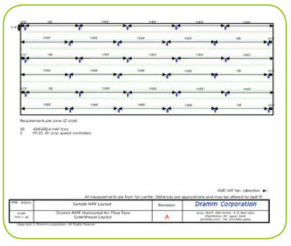
- More even air movement
- Up to 4x fewer fans than basket fans
- Saves on energy and installation costs
- Shrouded design: Propels air further with less energy
- Sealed motor with quiet, cool operation and long life
- Variable speed control
- Engineered installation plans

Custom Fan Layout Available

350 mm HAF fan, 208-240V Single Phase, 1850 cfm
Item: 41-350MM

400 mm HAF fan, 208-240V Single Phase, 2860 cfm
Item: 41-400MM

These fans drop-ship to the site from the manufacturer.



REQUEST A LAYOUT



VOSTERMANS VENTILATION

In greenhouse and warehouse settings, proper air flow plays a vital role in crop growth and health. Through circulation of air, heat distribution in the production space is optimized, which enhances crop uniformity and reduces microclimates that encourage disease.

Circulation/HAF fans

Multifan circulation fans are well-known for consistent high quality, durability and longevity. Motors are produced in-house, and optima motor-impeller combination ensures energy efficient and high-performance fans.

Why choose this fan:

- Considerable increase in energy efficiency compared to previous versions
- Complies with upcoming ErP energy regulation
- Easy to mount/remove wire guards
- Easy to maintain motor/impeller construction
- 3-year warranty

Features:

- Aerodynamic inlet radius for optimized air distribution
- High insulation class F / IP55
- Built-in thermal protection for single phase
- Housing suitable for suspension with profiles or chains
- Wire guards in accordance with CE/OSHA standards
- Serial- or parallel ventilation systems
- Reflecting white color for usage in greenhouses
- Compact design for less shadow

Options:

- Motors for different voltages and 50Hz or 60Hz.
- Three phase motor adapted for frequency control
- Cable + Plug
- Built-in thermal protection for three phase
- Nozzle system set for 20" cm Recirculation fan
  - 8 Nozzles with hoses
  - Wire guard
  - Easy to install
  - Requested 4 bar water pressure

V-Flo Fan for Greenhouses

In modern greenhouses, ventilation plays a vital role. Through circulation of air, heat distribution in the greenhouses is optimized, which enhances a uniform development of the crops. The V-FloFan, Multifan offers the grower the opportunity to reduce the negative impacts, due to humidity, in a simple and energy efficient way. The vertical airflow results in an optimal uniform microclimate on plant level.

Why choose this fan:

- Creates an active microclimate on crop level
- Results an uniform climate in greenhouses
- Controls the humidity level
- Constant low air speed at crop level
- Reduces the energy costs through vertical airflow
- 3-year warranty

Features:

- Special aerodynamic shaped conical outlet for optimal vertical airflow
- The V-FloFan is applicable for several cultivation systems and crops
- Reflecting white color for usage in greenhouses
- IP55 motor (water and dust resistant)
- Low noise (45/47 dB at 7 meters)

Item #	Description
T6E40K1M81190	Vostermans Multifan V-FloFan 1/115V, with cord
T6E40K0M81160	Vostermans Multifan V-FloFan 1/230V, no cord
T6D40K6M81160	Vostermans Multifan V-FloFan 3/230V, no cord
T6D40K4M81160	Vostermans Multifan V-FloFan 3/460V, no cord
T4E45OBM81190	Vostermans Multifan HAF Fan 1/115V, with cord
T4E45OAM81100	Vostermans Multifan HAF Fan 1/230V, no cord
T4D45OBM81100	Vostermans Multifan HAF Fan 3/230V, no cord
T4D45PAM81100	Vostermans Multifan HAF Fan 3/460V, no cord

These fans drop-ship to the site from the manufacturer.

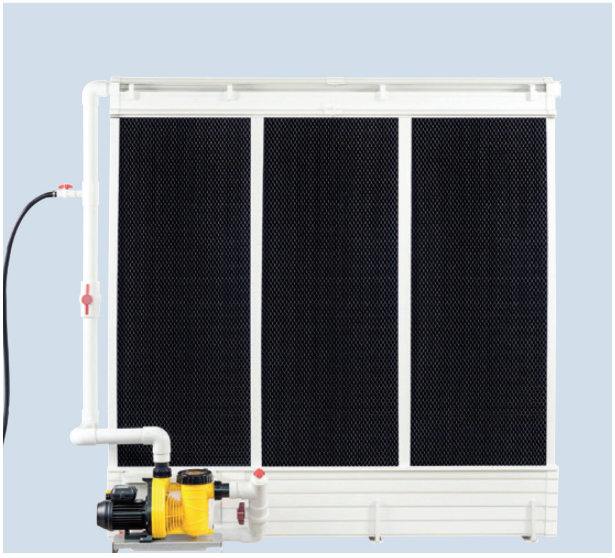


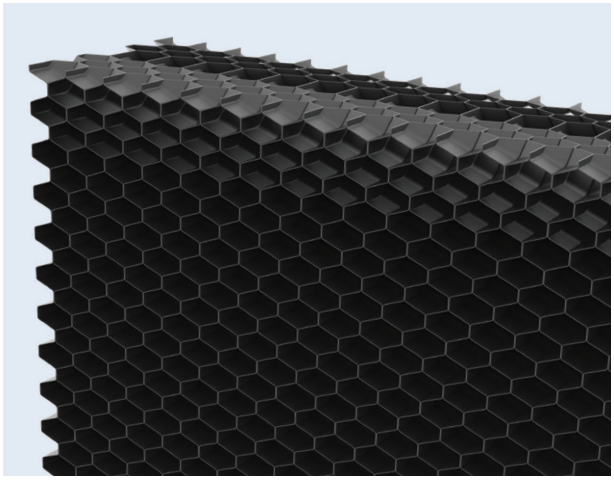


LUBING Evaporative Cooling Pad System



2026
2027





The Benefits of Lubing's Plastic Pads

- **Excellent cooling capacity – patented design:** The special layout of solid surfaces and mesh structures ensures ideal water distribution through the Pad. This allows for proper wetting and less splashing, resulting in highly efficient cooling capacity
- **Easy to clean:** The use of welded, highly resistant polymer sheets allows the plastic pad to be easily cleaned without damaging the Pads
- **Long service life:** The use of polymer sheets in combination with thermal welding guarantees best stability and a long service life
- **Lowest pressure loss:** At an air velocity of 300 ft/min (1.5m/s) the plastic pad's pressure drop is only at 0.40 inches of water (10 Pa.) substantially lowering energy consumption
- **High UV resistance:** The use of UV-stabilizing additives ensures outstanding resistance to UV light for years
- **Impermeable to light:** The plastic pad's geometry blocks out light from the outside
- **Chemical resistance:** The plastic pad is made of Polypropylene, which is highly resistant to most chemicals.
- **Pad width:** Pads are offered in 2' wide sections

Griffin Construction Department
Partner with us on you next project. Call for consultation and quote: 1.800.888.0054 then press 3.

Greenhouse Thermostats

A Line Voltage Thermostat works for direct control of heaters, fans, air conditioners, ventilation equipment and more. Great for both heating and cooling applications.

A graduated temperature control unit that can be used anywhere! Clear cover protects from weather and damage. Weatherproof and corrosion proof with all polycarbonate thermoplastic construction and stainless steel capillary sensor. Not effected by surges, lightning strikes or power outages like a digital thermostat.



Item	Vendor	Description
24-6001	KJ16110	Single Stage Thermostat
24-6002	KT16110	Double Stage Thermostat
24-6010	KP16110	Portable Prewired Single Stage Thermostat - comes with 8' cord



Product Specifications

Construction: Plastic

Function: Heating & Cooling

Voltage: 120/240 VAC



Sourcing has never been this simple

As a single source supplier, you have one login and one place to order all of your green goods and hardgoods, connecting you to the industry's broadest selection of products nationwide.

- Green goods including seed, cuttings and young plants
- Production supplies including containers, growing media and plant protection products
- Greenhouse structures and equipment
- Retail supplies including lawn & garden products, accessories and gift items

Place your order today: **www.griffins.com**



Where innovation cultivates results.

Knowledge and experience combined with a complete climate solution make Wadsworth Control Systems the first choice for greenhouse environments.



Effortless smart control. Easy real-time access and control from anywhere.

Confidence and control with alerts, data logging, diagnostics, backups and tech support.





	Juniper	Juniper Precision	Seed
Outputs / stages	6 stages	12 outputs	16+ expandable
Equipment controlled	Heating, cooling & curtains	Plus lights, irrigation, CO2	Complete facility integration including fertigation
Sensors	Temperature & Humidity, Weather Station	10+ options	20+ options including wireless

Bring smart climate control to your greenhouse at **wadsworthcontrols.com**

Link4 CORPORATION



Pearl Integrated Controller



Pearl Stand-Alone Controller



Pearl Prime

Link4 – Commercial environmental, irrigation and fertigation controllers.

A controller solution for any grower's needs.

Link4 offers a full line of commercial control systems for greenhouse and indoor growing applications. Designed for ease of installation, dependable operation, and integration with Link4 Cloud for remote monitoring.

Environmental Controllers

Pearl Controller
Modular, scalable, cloud-connected environmental controller for greenhouse and indoor agriculture auutomation. Controls heating, ventilation, cooling, lighting, irrigation, fertigation, and CO2 systems.

Key Points:

- Snap-in, hot-swappable modules installed in seconds
- Scalable up to 128 inputs/outputs
- Buy what you need now, expand later
- Manual override switches
- 6 heating and 6 cooling stages
- Humidification and dehumidification control
- Comes in a UL, NEMA4 panel or IP65 weatherproof enclosure
- Supports third-party Modbus sensors

Pearl Prime
Designed for standard pad-and-fan houses and hoop houses. Controls up to eight pieces of equipment in a single zone. Comes with five integrated power relays (15A) for high-load equipment.

Pearl Protect
Standalone environmental monitoring system with integrated temperature and humidity sensor. Sends alerts for critical conditions.

Additional Control Options

iDrive Motor Controller
Controls AC/DC motors via a 5-position manual override switch, motor reverse delay, and high-quality components.

iOptimizer VFD Controller
Smart controller to regulate motor speed to optimize energy use.

Modbus Sensors
Measure temperature, humidity, CO2, PAR light, EC, pH, level, flow, dissolved oxygen, soil moisture, and more.

Link4 Cloud
Offers full visibility into growing operations with real-time monitoring, remote control, alarms and alerts, data logging, trend tracking, reports, and more.

NEW! HydroRoot 16 Irrigation Controller

Ideal for propagation houses, greenhouses, nurseries, and indoor environments. Controls up to sixteen stations with five irrigation modes. These include schedule, misting (to-the-second), VPD, accumulated light, and soil moisture.

Advanced features include rain skip, water now, weather station integration, and more.



Pearl Protect



HydroRoot 16 Irrigation Controller



L4 RO SYSTEM | Produces high purity water by reducing contaminants such as dissolved minerals, particulates, and organic impurities using a reverse osmosis membrane system. Complete, skid mounted, pre-plumbed, pre-wired reverse osmosis (RO) system for quick installation and start-up.

Griffin Construction Department | Partner with us on your next project.
Call for consultation and quote: 1.800.888.0054 then press 3.

Automated Gutter System

Built to reduce overhead expenses while increasing efficiency, the AGS is focused on bringing automation to the small – medium sized greenhouse, and is engineered to fit any greenhouse size.



OVERVIEW:

One of the primary design requirements for this system was to keep both the germination and harvesting at the front of the greenhouse to increase operational efficiency for small growers

This is facilitated by two conveyor runs, one moving gutters to the back of the house and the other returning them to the front with an integrated transfer conveyor at the far end to shuttle gutters over.

The result: less walking down the length of the greenhouse and less manpower needed

For a demo and to learn more please contact Taylor Smith
(205) 902-3478 | taylor.smith@lubingusa.com



CM HORTICULTURE
A DIVISION OF CM FABRICATION

PROUDLY MADE IN AMERICA

GROW MORE IN THE SAME FOOTPRINT.



BENCHING SYSTEMS

Recover wasted floor space.

Our rolling and tracked bench systems reduce aisle space while maintaining crop access, helping growers increase productive canopy without expanding their facility. Available in multiple configurations and customized to your cultivation requirements.



MOBILE VERTICAL RACKING

Turn unused vertical space into productive canopy

Custom-engineered mobile vertical racking systems help growers dramatically increase production capacity within their existing footprint. Designed around your facility, workflow, lighting, irrigation, and crop requirements.

CULTIVATION SUPPORT SYSTEMS

Built for efficient operations.

Complete your cultivation environment with catwalk access systems, in-rack airflow solutions, drying carts, and other custom accessories designed to improve safety, consistency, and labor efficiency throughout the grow cycle.

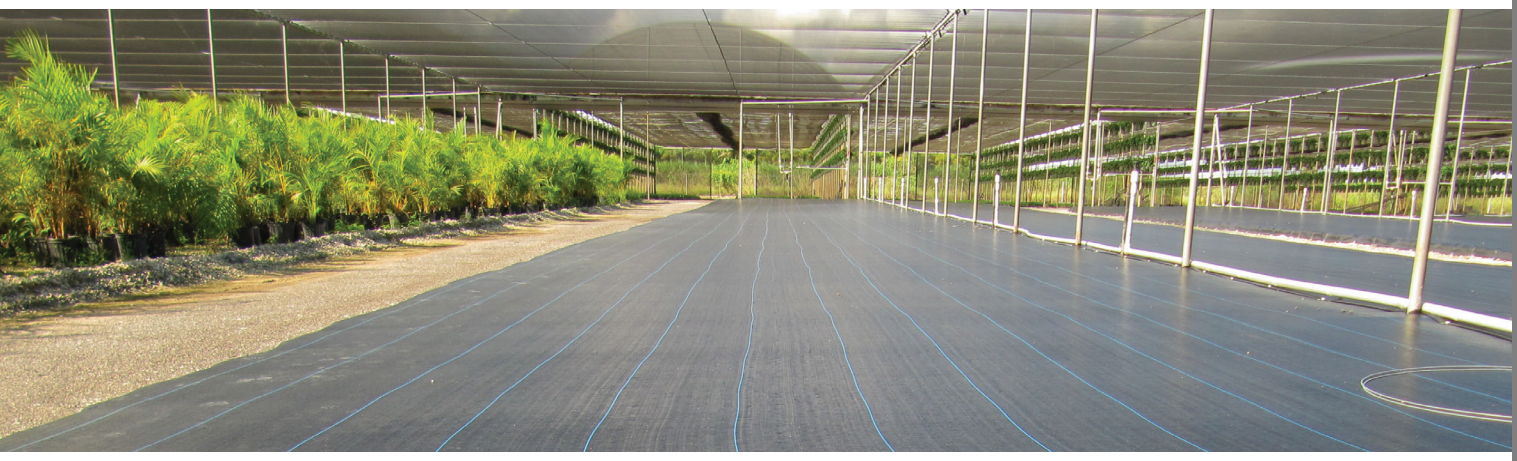
Built in the USA. Engineered for commercial cultivation. Designed to help growers do more with the space they already have.

LET'S BUILD A BETTER GROW ENVIRONMENT.
Contact us today to build your perfect grow space.

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info@cmhort.com
cmhort.com

VISIT OUR WEBSITE

Lumite Blue Line Fabricated Ground Cover



The Grower's Choice - The Best Ground Cover You Can Buy

This tightly woven fabric, constructed of tough UV stabilized polypropylene yarn, is designed to inhibit weed growth and improve the aesthetic appearance of professional nurseries.

Lumite's ground cover is:

- UV Stabilized for extended outdoor life
- Low maintenance
- A non-chemical solution for weed infested growing areas
- A cost effective superior alternative to other methods
- Weight is 3.2 oz / sq. yd.

Used for:

- Landscaping
- Shades structures
- Greenhouses
- Under containers or benches

Easy To Install

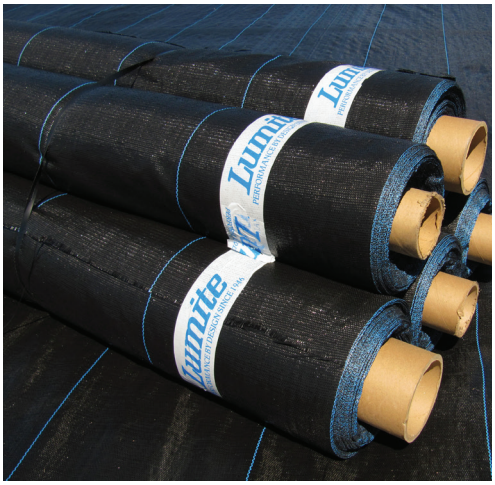
Available in convenient wide widths, this product can be quickly installed to provide years of service. Simply roll the product out and tack it down.

- Stocked widths up to 15' 6"
- Has blue stripes every 12" for easy pot alignment
- Is built tough to resist tears and punctures

The Woven Fabric - Permeable to Air and Water

1094's tightly woven design allows water and nutrients to pass through, in addition to allowing the ground to breathe.

- Reduces puddling
- Is resistant to most chemicals
- Will not rot, mildew, or become brittle in cold weather
- Helps eliminate odors



*custom sizes are available

Ground Cover Sizes

Item	Description
78-2423	10' x 100' Black
78-2420	3' x 300' Black
78-2422	4' x 300' Black
78-2424	6' x 300' Black
78-2425	10' x 300' Black
78-2430	12' x 300' Black
78-2440	15'6" x 300' Black
78-2445	20' x 300' Black
78-2450	24' x 300' Black

Ground Staples



Item	Description
78-2510	6"-8 gauge 100/bag
78-2515	6"-11 gauge 1,000/cs





AutoFog

Spraying made automatic, safe, and effective!


Small


Medium


Large

Automatically apply insecticides, fungicides, and bio-rationals. Dramm has an AutoFog™ for every size greenhouse.

Call **1.800.888.0054** and ask for an Irrigation Specialist.
Or email your inquiry to **irrigationdept@griffinmail.com**.

Scan here to browse product offerings

IRRIGATION



WATER DELIVERY

DRAMM water
Water Management for Horticulture

DESIGN REQUEST

DRAMMwater is founded on the principle of complete water integration through holistic system design. Combining water treatment, fertilizer injection and irrigation into a single, cohesive, engineered solution with a focus on proper water sanitation and plant health. Our solutions incorporate complete engineered installation drawings and startup/support by dedicated DRAMMwater technicians.
Email your inquiries irrigationdept@griffinmail.com

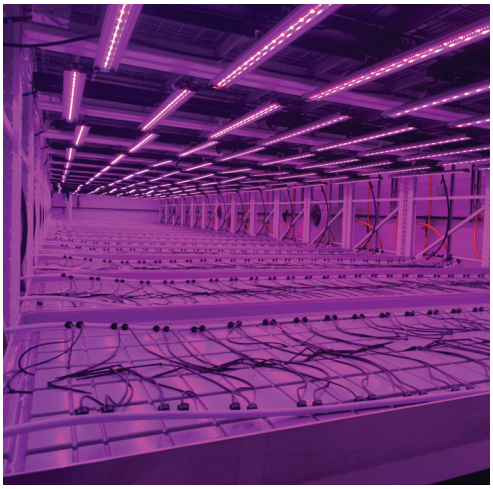


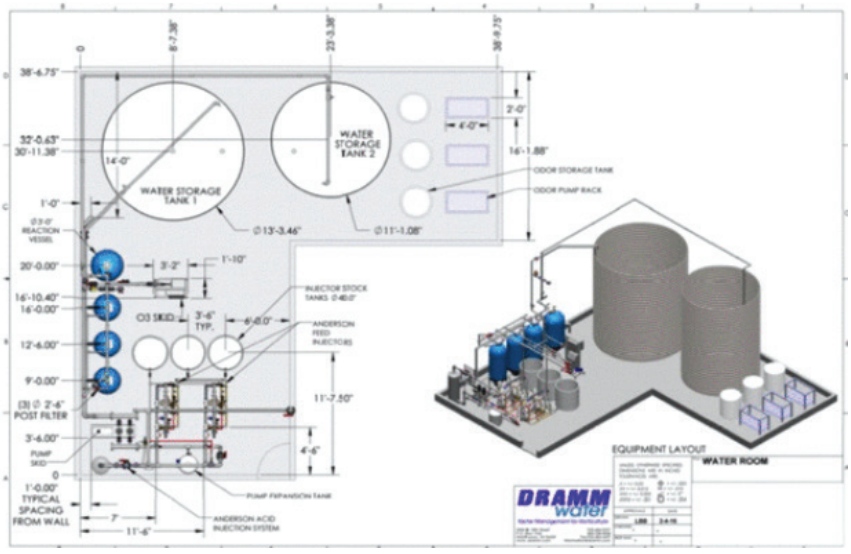




Solutions

- Water Storage - A larger tank can fill overnight, doubling or tripling total water capacity compared to daily watering demand.
- Pumping - Each pump system is engineered for specific operations and compatible with oxidizers and soluble gases when needed.
- Filtration - Pressure, cartridge, screen, membrane/RO, rolling media, biofilters, and zero backwash systems.
- Reverse Osmosis - When mineral levels are too high, R.O. helps reduce them for healthy plant growth.
- Ozone Disinfection - Other oxidizers are costly, often phytotoxic, and can react with nutrients, reducing effectiveness.
- Pond Management - A specialized system gently circulates pond water to reduce algae, boost oxygen, and eliminate thermoclines with minimal turbulence.
- Drain Water Treatment - Recirculating irrigation water conserves water but can spread pathogens quickly if not managed properly.
- Nutrient Management - Sample results are securely stored in the cloud, enabling real-time automated system adjustments.
- Irrigation Design - We ensure your system runs properly, stays clog-free, and is easy to maintain.
- Humidity Control - Fog-based humidification and dehumidification systems to optimize growing conditions.
- Dissolved Oxygen - Raising dissolved oxygen above saturation requires more than simple oxygen injection.
- Ultrafiltration - The VIFRA PURA ultrafiltration system uses a fine membrane to remove organic pollutants from water.





NUTRIENT INJECTION

DOSATRON® WATER POWERED DOSING TECHNOLOGY

The Nutrient Delivery System (NDS) is an assembly of high-quality dosers connected with easy-to-configure kits. The NDS thrives anywhere, from greenhouse environments to outdoors, allowing installation in any application. The NDS features both Water-Powered Dosatron Dosers, and Electric Etatron Dosing Pumps, whose proven technology of reliability and accuracy has been upheld for over 40 years.

** ISP - Indicates Industry Standard Practice*

- Customize solutions based on your nutrient program
- Automate the Nutrient Delivery process to reduce error
- Decrease labor cost and increase profits
- Achieve repeatable performance with a simple interface
- Water-powered, piston-based Dosatron Doser technology
- Solenoid-driven, electric Etatron Pumps
- Modular kit concept for customized systems
- Outstanding customer service and technical support

Lo Flo Nutrient Injection

For systems 3/4" or smaller with flow rates up to 14 gallons per minute. Choose from Water-Powered system kits **(2-10 GPM)** and Micro-Doser system kits **(0.5-20 GPM)** based on flow needs.

Item #	ISP	Description	VPN
33-2441	*	Dosatron NDS Starter Kit Low Flow, 3/4"	HYKSTART-STD
33-2445	*	Dosatron NDS Monitor Kit Low Flow, 3/4"	HYKMON
218-916	*	Dosatron NDS Water Hammer Arrestor Kit Low Flow, 3/4"	WHA34-SS-KIT
219-007	*	Dosatron NDS Mixing Chamber Kit Low Flow, 3/4"	HYKMC34
33-2444	*	Dosatron NDS Mixing Chamb Sleeve Low Flow, 3/4"	MC34-SHADE
33-2451		Dosatron NDS Injector Low Flow, 14 GPM, 1.25 to 11 mL/gal (0.03 to 0.3%), 3/4"	D14MZ3000VFBHY
33-2452	*	Dosatron NDS Injector Low Flow, 14 GPM, 7.5 to 75 mL/gal (0.2 to 2%), 3/4"	D14MZ2VFBPHY
33-2453		Dosatron NDS Injector Low Flow, 14 GPM, 37.5 to 375 mL/gal (0.1 to 1%), 3/4"	D14MZ10VFBPHY
33-2461		Dosatron NDS Injector Low Flow, 14 GPM, 3.75 to 37.5 mL/gal (0.1 to 1%), 3/4"	D14MZ1000BPVFHY

Hi Flo Nutrient Injection

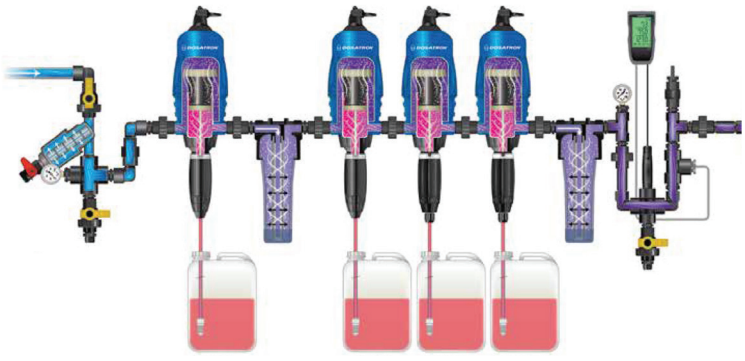
For systems 1.5" or smaller with flow rates up to 40 gallons per minute. Choose from Water-Powered system kits **(5-40 GPM)** and Micro-Doser system kits **(5-60 GPM)** based on flow needs.

Item #	ISP	Description	VPN
33-2442	*	Dosatron NDS Starter Kit High Flow, 1.5"	HYKSTART150
33-2448	*	Dosatron NDS Mix Chamber High Flow, 1.5"	HYKMC150
218-902	*	Dosatron NDS Monitor Kit High Flow, 1.5"	HYKMON150
218-901	*	Dosatron NDS Water Hammer Arrester Kit High Flow, 1.5"	WHA150-SS-Kit
33-2454		Dosatron NDS Injector High Flow, 40 GPM, 1.25 to 7.5 mL/gal (0.03 to 0.2%), 1.5"	D40MZ3000BPVFHY
33-2455	*	Dosatron NDS Injector High Flow, 40 GPM, 7.5 to 75 mL/gal (0.2% to 2%), 1.5"	D40MZ2BPVFHY
33-2456		Dosatron NDS Injector High Flow, 40 GPM, 37 to 190 mL/gal (1 to 5%), 1.5"	D40MZ5BPVFHY
33-2465		Dosatron NDS Injector High Flow, 40 GPM, 3.75 to 37.5 mL/gal (0.1 to 1%), 1.5"	D40MZ1000BPVFHY

How it Works

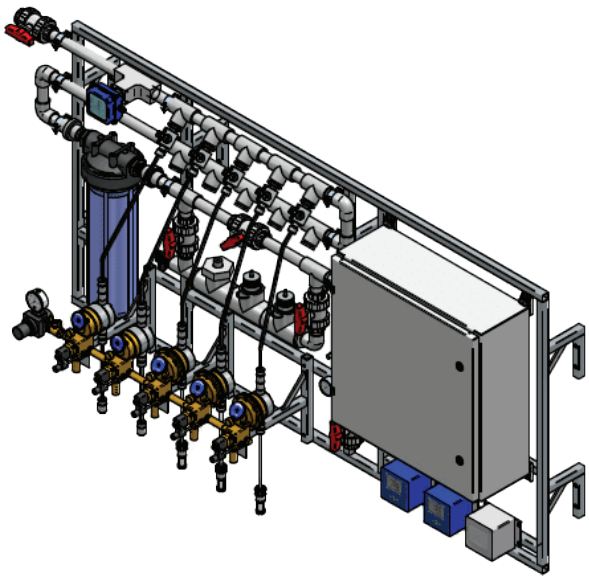
Water-Powered NDS

Applications: Drip Irrigation, Vertical Farming, Overhead Irrigation, Grow Towers, Octo-Bubbler, System Batch, Tank Fill



Anderson Injectors

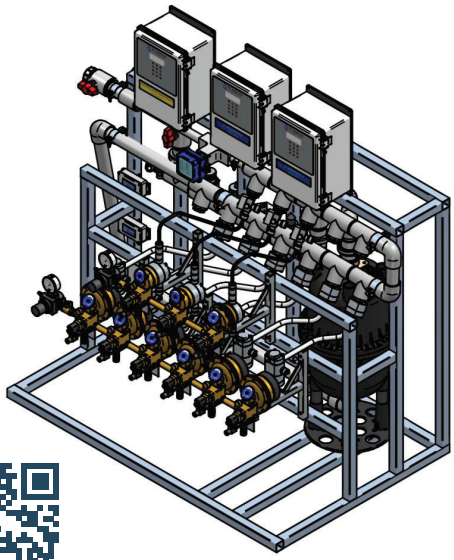
H.E. Anderson Company takes pride in manufacturing the highest quality water treatment equipment on the market. No other brand matches Anderson Injectors' reliability, accuracy, and flexibility.



Ceres Automated Fertigation Systems

Named after the Greek Goddess of Agriculture, the new Ceres Fertigation system provides full and complete automation control of your injector, along with data collection, storage, and export capabilities.

- Proven pumper technology combined with advanced software
- User-friendly, intuitive interface for recipe and scheduling
- Automatic pH and EC correction via probes
- Full control of solenoid valves for automatic irrigation and batch tank filling
- Scheduling based off combination of time, volume, level, input signal, float input
- Flexible recipes allow use of multiple formations (ratio, oz/gallon, ml/gallon, %)
- Available in many flow rates (2-20gpm, 4-40gpm, 8-80gpm, custom flow ranges)
- Simultaneous schedules of irrigation and tank filling events
- Subscription-free software compatible with all operating systems
- Lifetime remote support (phone and email) with options for on-site visits



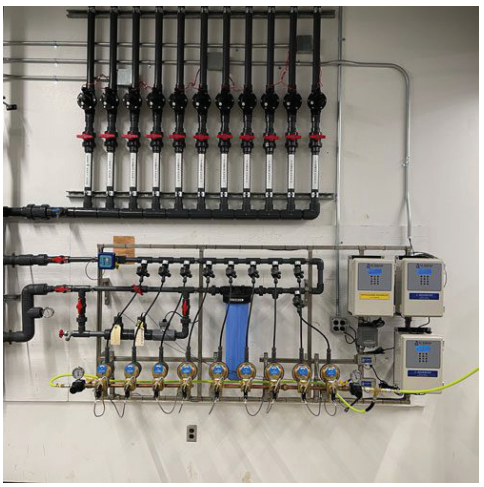
J+Advanced

Ratio:Feeder ® Injection Systems

- Combines J-Series Ratio:Feeder control w/ Ratio:Guard Monitor
- Accuracy does not degrade over time
- Positive displacement and volume proportioning
- Minimal maintenance requirements
- Custom designs available to meet your flow and application requirements
- Low pressure loss
- Expandable and flexible
- Systems can be configured for monitoring or control via ED and pH probes
- Easily integrated with other controls for full fertigation control
- Pre-assembled units available ready for installation.







DRAMM



SCAN TO SEE IN USE

1000PL Water Breaker



Water your plugs or seedlings with the softest full-flow watering nozzle available. The 1000PL Red Head Water Breaker has over 1000 micro holes that create an ultra-soft flower shower which will not disturb delicate soil or harm tender plants. Made in the USA from ABS plastic and stainless steel. Weight 1.6 oz. GPM = 7 @ 40 PSI

Item	Description
33-5233	Regular soft flow - Red
33-5236	Narrow soft flow - Green
33-5237	Wide soft flow - Orange

750 Lemonhead Water Breaker



The 750 Lemonhead Water Breaker is designed to offer a lower, softer flow. Just as soft as the 1000 PL red head, The 750PL allows for more precise watering and gives growers yet another choice for more flexibility in watering. It has 25% less hole surface area which offers a lower flow that can be regulated by a shut-off valve for minimal water and still retain a pattern. Weight 1.6 oz. GPM = 7 @ 40 PSI

Item: 33-5234

Seedling Nozzle



The Seedling Nozzle allows you to water fragile plants, delicate seedlings or plant cuttings. This high-quality nozzle produces an extra fine hollow cone mist pattern and sprays a ½ gallon of water per minute. Made in the US from solid brass with ¾" hose threads. Weight 2.7 oz. GPM = 1/2 @ 40 PSI

Item: 33-5235

170 Aluminum Water Breaker



The 170AL Water Breaker is excellent for watering in areas with low water pressure or with systems which restrict total water volume. It is designed for small containers (hanging baskets), and when using fertilizer siphons. Adjust water flow to 50% of its volume. Cast aluminum with ¾" hose threads. Weight 1.6 oz. GPM = 7 @ 40 PSI

Item: 33-5225

400 Aluminum Water Breaker



The original full-flow shower head nozzle. The aluminum 400 Water Breaker provides fast, full-flow watering without damage to your plants. Used by professional growers worldwide. Cast aluminum with ¾" brass hose threads. Manufactured in the USA. Weight 5.1 oz. GPM = 11.1 @ 40PSI

Item: 33-5230

400PL Water Breaker



The 400PL Water Breaker provides fast, full-flow watering without damage to your plants. Patterned after the original 400 Aluminum Water Breaker with ¾" hose threads, the 400PL is made from high-impact ABS plastic and aluminum to provide a lightweight alternative. Weight 1.3 oz. GPM = 11.1 @ 40PSI

Item: 33-5231

DRAMM

400PL Water Breaker with Protective Ring

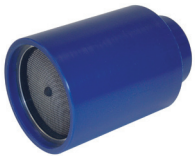


Adds more protection to the plastic 400 PL.

Item: 33-6101



350 PL Water Breaker



High-Flow, Aerated Stream. The plastic 350PL Screen-Aire is a light weight, full flow nozzle for quick watering. Made from durable, lightweight POM plastic and stainless steel screens, the 350PL offers high flow with an ultra-soft, aerated pattern. Perfect for quickly watering containers and nursery stock while not washing the media or fertilizer out of the pot.

Item: 33-350PLC

Handi-Reach Handle Aluminum Extension Rods

Item	Description
33-5120	16" Aluminum Extension Rod
33-5122	24" Aluminum Extension Rod
33-5123	30" Aluminum Extension Rod
33-5124	36" Aluminum Extension Rod
33-5125	36" Extra Curve Aluminum Extension Rod
33-5126	48" Aluminum Extension Rod
33-5128	48" Extra Curve Aluminum

FOGG-IT Nozzle | (4 sizes)

Item	Description
33-5325	2 GPM Regular (Orange)
33-5326	1 GPM Fine (Purple)
33-5327	½ GPM Super Fine (Green)
41-300500	4 GPM Heavy (Blue)
33-6610F4	1/4 GPM Super Superfine (Black)





QAV Shut-Off Valve



The QAV uses a unique, patent-pending valve design includes a single-piece ball, stem and handle assembly to reduce the time to assemble while strengthening the structure.

Item: 44-5607

Dramm 300 Professional Brass Shut-Off



The Dramm 300 Brass Shut Off offers unmatched durability and flow. Built to last, be repairable, and offer full flow, the 300 Brass Shut Off is the gold standard for hand watering. Flow rate: 17 GPM.

Item	Description
41-400300	Brass Shut-Off
41-400400	Brass Shut-Off Repair Kit

OneTouch High Flow Valve



OneTouch HF will offer twice the flow rate with less than an ounce additional weight. Larger openings to accommodate more flow, light enough for all-day use. Flow rate: 16 GPM.

Item: 33-5365

Heavy Duty Plastic Shut-Off Valve



Made from glass filled polypropylene to be very durable, corrosion resistant and lightweight while offering a full flow. Flow rate: 18 GPM.

Item: 33-51051

DRAMM

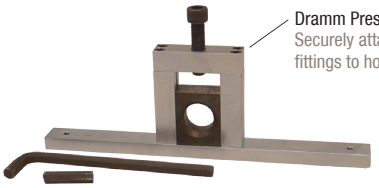
Custom Hose Starter Kit

Make your own hose lengths easily and quickly with our Custom Hose Starter Kit.

Dramm ColorStorm Professional Hose has become the durable and flexible choice of growers around the world. This kit makes it easy to get started cutting your own length of hose.

The kit includes the Dramm Press, our easy to use hose crimper, with one set of jaws, two spools of 330' ColorStorm Hose and 12 male and 12 female fittings with ferrules - enough to make 12 hoses. It is available in either 5/8" or 3/4" kits. Part numbers and components are listed below.

HOW TO USE PRESS









5/8" Custom Hose Kit

- 5/8" Hose
- 2- 330' Spools 5/8" ColorStorm™ hose
- 1- DP Frame
- 1- DP-J625 5/8" Jaws
- 12- 5/8" Male Fittings/Ferrules
- 12- 5/8" Female Fittings/Ferrules

Item: 33-2266

3/4" Custom Hose Kit

- 3/4" Hose
- 2- 330' Spools 3/4" ColorStorm™ hose
- 1- DP Frame
- 1- DP-J750 3/4" Jaws
- 12- 3/4" Male Fittings/Ferrules
- 12- 3/4" Female Fittings/Ferrules

Item: 33-2267

Replenishment Parts for Kit

Item	Description	Qty
33-20343	3/4" X 330' Master Roll ColorStorm Hose (No Fitting)	-
33-20583	5/8" X 330' Master Roll ColorStorm Hose (No Fitting)	-
33-22101	5/8" Male Fitting & Ferrule for ColorStorm Hose	12/cs
33-22102	5/8" Female Fitting & Ferrule for ColorStorm Hose	12/cs
33-22301	3/4" Male Fitting & Ferrule for ColorStorm Hose	12/cs
33-22302	3/4" Female Fitting & Ferrule for ColorStorm Hose	12/cs
33-22304	5/8" Splice & Ferrule Set for ColorStorm Hose	12/cs
33-22305	3/4" Splice & Ferrule Set for ColorStorm Hose	12/cs
33-2263	Dp-J750 Press Jaws 3/4" (Only)	-
33-2264	Dp-J625 Press Jaws 5/8" (Only)	-
33-2265	Dp-Frame Press Hose Crimper (Frame Only)	-
*call for a quote	Heavy Duty Hose Reel Convex walls, brake, lock - holds 175' 5/8" or 150' 3/4"	

ColorStorm™ Custom Size (Min. 10')

Item	Description
33-22000	3/4" ColorStorm Hose ft Yellow Wp 125 psi 17989



Brass Swivel Hose Thread

Item	Description
41-400200	3/4" Hose Thread



EMITTERS, DRIPPERS, STAKES, RINGS & ASSEMBLIES



A properly designed drip irrigation system will deliver an equal amount of solution to every pot on the line for more uniform growth. Drip irrigation easily represents the biggest labor-saving tool in cultivation.

Emitters

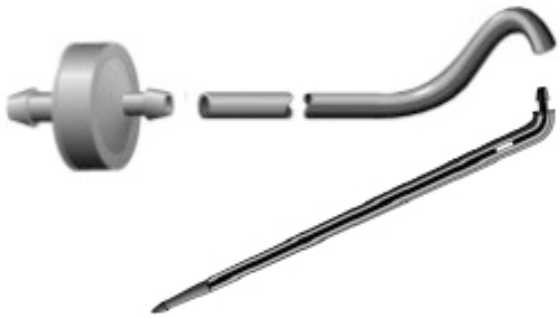
Pressure compensated valves that open/close based on water pressure and ensure even irrigation along the entire drip line.

Drippers, spray stakes, or rings

Point of termination in the pot; positions and directs the flow.

Dripper Assemblies

Save on labor by purchasing pre-assembled drip lines (include the emitter, spaghetti tube and stake or weight)



Item	★	»	Description
DRIP EMITTERS			
5010007	•		Netafim Woodpecker Junior 0.5 gph PC emitter (red)
63235	•		Netafim Woodpecker Junior 1.0 gph PC emitter (grey)
WPCJL8	•		Netafim Woodpecker Junior 2.0 gph PC emitter (green)
DRIP STAKE ASSEMBLIES & 4- WAY MOD'S			
44-800024	•		Netafim 24" PC Dripper Stack Assembly with 0.5 gph Emitter
5013630		•	Netafim 30" PC Dripper Stack Assembly with 0.5 gph Emitter
44-800036	•		Netafim 36" PC Dripper Stack Assembly with 0.5 gph Emitter
5014215	•		Netafim Flat 4-Way (30" & 30") M.O.D.'s w/ arrow dripper stakes
44-5555		•	Dramm 24" Pressure Compensated Dripper Tube 2 liter/hour
44-5557		•	Dramm 36" Pressure Compensated Dripper Tube 2 liter/hour
RINGS			
5010094	•		Netafim Netbow 5" irrigation ring, each
5010093	•		Netafim Netbow 10" irrigation ring, 6o ct case
07DR648	•	•	Dramm DR6-48 Dribble Ring (8.0+10.0 container) #DR6-48
07DR1048	•	•	Dramm DR10-48 Dribble Ring (for 16.0 containers) #DR10-48
POLY TUBING			
5010047	•		Super Flex 1000' UV White 5/3 Tubing
65402			Netafim 16mm 100' UV White Blank Tube .520-.620
5010032	•		Netafim 16mm 500' UV White Blank Tube .520-.620
5010033		•	Netafim 17mm 500' UV White Blank Tube .560-.660
65401			Netafim 20mm 100' UV White Blank Tubing .820-.940
653811	•		Netafim 20mm 500' UV White Blank Tubing .820-.940
1061201W			Netafim 25mm 100' UV White Blank Tubing 1.06-.1.20
1061205W			Netafim 25mm 500' UV White Blank Tubing 1.06-.1.20
TOOLS			
30-12910	•		Jain 3.0 MM Punch .128 Tube WT #12071033
31-3025	•		Kwikcut Pipe Cutter T135

★ = Retail Store Best Seller » = Drop-Ship Item

NETAFIM™
An Orbia business.

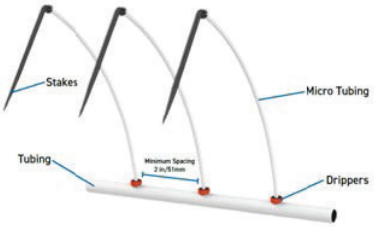
Custom Assembled Drip Tube

Save labor on install! Just roll out the pre-assembled tube and connect to your fittings!









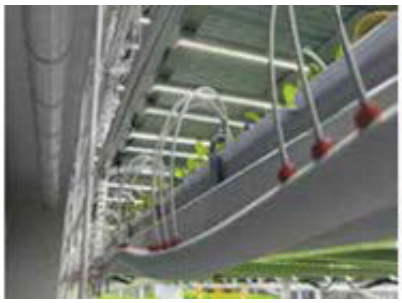
Features & Benefits:

- Completely customized to your facilities specifications.
- Save labor on install!
- All you need to do is roll out the pre-assembled tube and connect to your pre-existing fittings!

Select:

- Tube size
- Emitter spacing
- Flow rate
- Length of spaghetti tube

Choose dripper stakes or slimline weights.







1. **Select size of tube:**
   16mm (0.520 ID – 0.620 OD) 500 Series Fittings 18mm (0.620 ID – 0.710 OD) 600 Series Fittings, 20mm (0.820 ID – 0.920 OD) 800 Series Fittings, 25mm (1.060 ID – 1.200 OD) 1000 Series Fittings
2. **Distance from beginning of tube to 1st Emitter:** Ex: 30” of 16mm tube before 1st emitter.
3. **Emitter Spacing (choose a path):**
   a. Emitters evenly spaced, Ex. 2 inched spacing (minimum available)
   b. Tight grouping with large space in between, Ex. 4 emitters grouped with 24” spacing in between
4. **Select Dripper/ Emitters:** 0.32 GPH, 0.50 GPH, 0.58 GPH, 0.79 GPH, 1.0 GPH
5. **Select Length of Spaghetti Tube:** 18 inch, 24 inch, 30 inch, 36 inch
6. **Distance from last emitter to end of tube:** Ex: 16” of 16mm tube after last emitter.

To receive a quote for this labor saving innovation scan QR code, ask your Griffin sales rep or contact Griffin’s CEA Department.

CEA Irrigation Case Study:

Custom Pre-assembled Drip Tube vs. Irrigation Parts Cost Analysis

Is it almost time to change out your drip emitters?

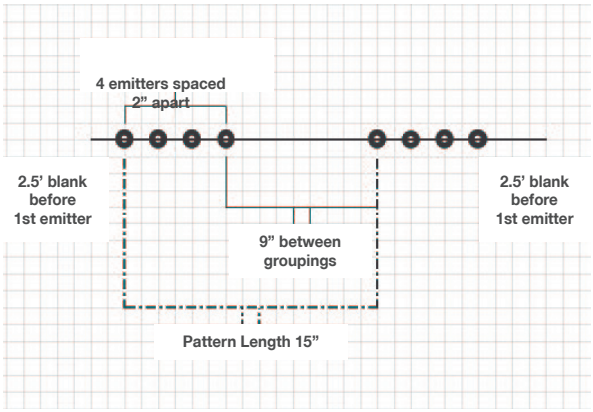
Griffin Greenhouse Supply offers two solutions:

1. Pre-assembled tube with the dripper assemblies already installed custom spaced according to your needs. Your crew just rolls out the pre-assembled tube and connects it to your fittings.
2. Unassembled parts that require your crew to receive and count the product, unwind & cut the tube, punch holes by hand and assemble on site

The labor savings on pre-assembled tube sounds great, right?
What does it cost compared to parts?

Below is a breakdown of a recent cost comparison for a Griffin CEA customer.

Project Specifications: 16 total tables. Each table is 84' long with two runs of tube running down each side with 252 emitters per line. 504 emitter per table. (See emitter pattern below.)



Preassembled Drip Tube: $5,464.19*

Qty	Description
32	84' long pre-punched .520-.620 tube with 252 0.5 GPH 36" dripper assemblies inserted on each line according to pattern above.

Parts: $6,406.27*

Qty	Description
6	Netafim 500' UV BR WhtTube .520-.620
8100	Netafim 36" P/C Dripper Stake Assy .5Gph

**Does not include freight estimate.*

This comparison is for materials only and does not include labor savings.
Grower that bought pre-assembled tubes report 60%-80% less time spent on installation compared to similar past installs!

Plan your next project!
To receive a quote for this labor saving innovation scan QR code on the front of this sheet, ask your Griffin sales rep or contact Griffin's CEA Department.

FILTERS, VALVES, REGULATORS & TUBING



Item	★	»	Description
FITTINGS			
5011015	•		Netafim Insert Male Adapter 3/4" Mpt x 16MM Barb
5011007			Netafim 16MM Insert Tee
5011005			Netafim 16MM Insert Elbow
5011003			Netafim 16MM Insert Coupling
5013078	•		Antelco Greenback Valve for .520(1/2") I.D. Tubing #45505
5013079	•		Antelco Greenback Valve for .820(3/4")I.D. Tubing #45535
5011011		•	Netafim 17mm TechLock Coupling
5011012		•	Netafim 17mm TechLock Elbow
5011013		•	Netafim 17mm TechLock Tee
5011014		•	Netafim 17mm TechLock Male 3/4"
06D31HE55	•		Power-Loc 1/2" Elbow For .520ID #12050004
06D31HE88	•		JAIN PL-80-PELL POWER-LOC 80 ELBOW 12050617
SOLENOID VALVES			
61ET75GH2			Netafim 3/4"FPT 24 Volt AC Solenoid Valve
61ET1GH2			Netafim 1" FPT 24 Volt AC Solenoid #71640-007406
FILTERS			
5012120	•		Arkal 3/4" Disc Filter 120 Mesh 130 MICRON (1-12 GPM)
5012130			Arkal 1" Disc Filter 120 Mesh 130 MICRON (5-26 GPM)
5012145			Arkal 1.5" Superlong Disc Filter 120 Mesh 130 Micron (10-52 GPM)
5012150		•	Arkal 2" Super Disc Filter 120 Mesh 130 Micron (40-110 GPM)
PRESSURE REGULATORS			
5012025	•		Netafim 3/4" 35Psi Low Flow Pressure Regulator .25-4.4Gpm
5012035	•		Netafim 3/4" 35Psi Medium Flow Pressure Regulator 4.5-17.6Gpm
30-2230	•		Senninger 35Psi 3/4"Fpt Low Flow Regulator .5-8Gpm
30-2202	•		Senninger 35Psi 3/4" Fpt Medium Flow Reg 2-20Gpm

★ = Retail Store Best Seller » = Drop-Ship Item

Email your inquiries irrigationdept@griffinmail.com

Filters

Protect downstream components by filtering emitter clogging solids.

Solenoid valves

Low voltage, electric valves wired to a controller to control irrigation events

Pressure regulators

Moderates the pressure to appropriate levels for downstream components

Irrigation tubing

Carries irrigation solution to the emitters

Spaghetti tube

Delivers solution from the irrigation tubing to the pot. Emitter attaches to one end, dripper/stake/ring attaches to the other end.



PRO-MIX®

AGTIV®

Trusted Growing Solutions to Elevate High-Value Crop Production



PREMIER TECH

PROMIXCANNABIS.COM

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EQUIPMENT



SPRAY EQUIPMENT

DRAMM

Spray experts with a full family of products to meet all your needs.







2026
2027

Dramm Foamers

Create a thick, lasting foam to penetrate nooks and cracks for complete coverage. Increases efficacy of sanitation products. Cart mounted foamers come in various tank sizes to match facility needs. Cart units require a separately purchased compressor. **foaming agent required*

Item	»	Description
74-2688		Foam 8L Compression Foamer – hand held unit
74-2689	•	FM20-25 Cart mounted foamer – 20 gal tank on wheeled cart with 25' hose
74-2690	•	FM50-50 Cart mounted foamer – 50 gal tank and 50' hose, optional hose lengths available
74-2691	•	FMST50-50 SprayTrax Foamer – 50 gal tank on highly maneuverable cart with tracking axels that both turn independently. 50' hose, optional hose lengths available
74-2692	•	FMST100-50 SparyTrax Foamer – 100 gal tank on SprayTrax cart. 50' hose, options for additional hose lengths

tank sizes of 20, 50 & 100 Gal. Hose lengths of 25' (5 SCFM @ 60 PSI), 50' (7 SCFM @ 60 PSI) & 75' (9 SCFM @ 60 PSI)

Dramm Autofogs

Industry-leading fogger. Ultra-low volume application with 0.05-10 µm droplets. Automatic, unattended, timer-based operation that dramatically reduces labor costs.

Item	»	Description
41-1205	•	MLVH-10A-SS Mini AutoFog – 8 L tank and stainless steel nozzle, treats up to 3000 sq ft alone or up to 5000 sq ft with HAF fans in operation
62-6003251	•	SLVH20A Medium AutoFog – 7L tank treats up to 12,000 sq ft alone or up to 28,000 sq ft with HAF fans in operation
62-6003201		LVH20A Large AutoFog – 14L tank and stainless steel nozzle, treats up to 30,000 sq ft alone or up to 70,000 sq ft with HAF fans in operation
62-6003255	•	SLVH-20-SS Autofog W/Stainless Steel Nozzle
62-6003210		LVH-20ASS Autofog Large W/Stainless Steel Nozzle 220V

Dramm ColdFoggers

Low volume sprayers create finer droplets than hydraulic sprayers, for directed spray application and better canopy penetration. Labor savings due to extremely fast treatment. 30-60 µm droplets. Chemistry compatibility varies with model. Handheld and carted options.

Item	»	Description
62-6003261	•	Turbo ULV Fogger – hand-held cold fogger for targeted treatment of smaller areas. 5 L tank, 10-100 µm droplets, 110V. Sprays up tp 75ft
41-1488	•	ColdFogger AR – carted fogger with 20 gal tank and 150' hose. Sprays 20-25ft
41-1489	•	ColdFogger AR – carted fogger with 20 gal tank, 150' hose, and pneumatic wheels. Sprays 20-25ft
*call for a quote		ColdFogger AR – carted fogger with 50 gal tank, 150' hose. Sprays 20-25ft
*call for a quote		ColdFogger AR – carted fogger with 50 gal tank, 300' hose. Sprays 20-25ft

» = Drop-Ship Item









DRAMM WHITE PAPER

DRAMM

Dramm Hydraulic Spray Equipment

Three hydraulic options, ranging from the 150 PSI variable pressure, 4 gallon, battery powered BP4 backpack sprayer, to 20 gallon MSO PRO and the more flexible Hydra lineup. The MSO PRO is a great entry level sprayer that now includes 500 PSI, adjustable pressure with stream and mist options along with independent tank agitation system and pressure gauge. The Hydra utilizes a larger tank with agitation, higher flow pump with agitation and attachment options that include variable spray patterns and drenching. Automated rewind options available on Hydra sprayers.

Item	★	»	Description
62-70056	•		BP-4Li Backpack Sprayer, rechargeable Li battery, up to 150 PSI for better coverage
41-1210		•	MSO Sprayer with 33' hose and gun
41-12101		•	MSO Pro Sprayer 100' Package: 100' hose, 20 gal tank, cart and gun
*call for a quote			SS- MSO Pro Sprayer 100' Package: 100' hose, 20 gal tank, cart and gun
41-1210150		•	MSO Sprayer 150' Package: 150' hose, 20 gal tank, cart and gun
41-12101PW		•	MSO Sprayer 100' BF Package: 100' hose, 20 gal tank, cart, gun, Big Foot tires
*call for a quote			SS- MSO Sprayer 100' BF Package: 100' hose, 20 gal tank, cart, gun, Big Foot tires
41-1284		•	Hydra Sprayer with 50 gal tank, 250' hose, corrosion resistant fittings, 115V
41-1255		•	Hydra Sprayer with 50 gal tank, 150' hose and corrosion resistant fittings, 120V
41-1258		•	Hydra Sprayer with 50 gal tank, 150' hose and Big Foot tire package, 120V
41-1254		•	Hydra SprayTrax 50 gal tank, 150' hose on highly maneuverable cart with tracking axels that both turn independently, 5.5 hp Honda

Dramm Drenching Equipment

Apply root zone treatments with ease. Keep nematodes active and healthy, meter your drench applications, and discover why a portable injector is indispensable.

Item	»	Description
74-2686	•	Agitation/Aeration bucket, 100-120V AC
74-2687	•	Agitation/Aeration bucket, 12V DC
41-1235	•	FertiCart with 20 gal tank (purchase Dosatron injector separately)
41-1195	•	ChemDose - cart mounted 20 gal tank, rechargeable battery, 3 wand lengths
41-1196	•	ChemDose 2 – portable, hose-end dosing unit for use with injector or sprayer

Dramm accessories and carrier solution

Item	»	Description
41-1273	•	MS-TG-SS Trigger Gun, corrosion resistant
41-1261	•	L-5E Extension lance with 5 nozzle ring (for use with BP4-LI)
41-1262	•	L-5QC Extension lance with quick connect (for use with HYDRA/MSQ)
41-1276	•	Quick connect Drench adaptor (incl fittings, wand & breaker *Hydra Only)
41-1227	•	MS-R 150' Hose reel for MSO cart

Item	»	Description
41-1264		BlueFlex 100' ¼" spray hose
41-1265		BlueFlex 150' ¼" spray hose
*call for a quote		BlueFlex 150' ¼" spray hose - Stainless Fittings
*call for a quote		BlueFlex 200' ⅜" spray hose - Stainless Fittings
*call for a quote		BlueFlex 250' ⅜" spray hose - Stainless Fittings
41-1266		BlueFlex 33' ¼" spray hose, ¼" ID for MSO
41-12104	•	Stainless steel nozzle for MLVH, SLVH
62-700512		Quick Change replacement lithium battery for BP-4Li
74-2675		Nutri-Fog carrier, 5 gal pail (for use with PulsFOG)

★ = Retail Store Best Seller » = Drop-Ship Item



A



B



C



D

SIEBRING

Mist'r Drench (A)

High or low pressure to mist chemicals, drench, or shade.

- 800 PSI max pressure
- 3 GPM max flow
- 100' 3/8" wire braid hose (standard)
- 60 gallon tank with sump
- Constant agitation
- Towing tongue
- 2 guns, quick coupled with 12" and 18" wands
- Gas or electric options
- Also available in 100 and 200 gallon

Item	Description
41-2025	Electric Mister Drench with hose reel
41-38100	100'-⅜" Replacement Sprayhose

Drop Ship Only

Siebring Sprayers Available, Special Order w/Gas Engines

Fox Sprayer (B)

- 800 PSI max pressure
- 3 GPM max flow
- 100' 3/8" wire braid hose (standard)
- 35 gallon tank with sump
- Constant agitation
- Solid rubber tires
- Highly maneuverable – narrow front steering mechanism for tight turns
- Towing tongue
- 2 guns, quick coupled with 12" and 18" wands
- Gas or electric options

Item	Description
41-2120	Siebring Fox 120V Sprayer with STD Reel/35 gal. Tank/100' Hose
41-38100	100' - ⅜" Replacement Sprayhose

Drop Ship Only

Coyote Sprayer (C)

- 800 PSI max pressure
- 3 GPM max flow
- 100' 3/8" wire braid hose (standard)
- 55 gallon tank with sump
- Constant agitation
- Solid rubber tires
- Towing tongue
- 2 guns, quick coupled with 12" and 18" wands
- Gas or electric options

Item	Description
COYOTESS	Coyote 800 120V stainless 100'hose, reel,1.5HP

Drop Ship Only

Kruser Sprayer (D)

- 750 PSI max pressure
- 1.5 GPM max flow
- 100' 1/4" wire braid hose (standard)
- 25 gallon tank with sump
- Constant agitation
- Solid rubber tires
- Gun and wand, quick coupled
- Gas or electric options

Item	Description
542SF30ES1	750 120v W/100' Spray Hose, 25G Tank, 1.5 gpm, Electric Motor
542SF30GS1H	750 W/100' Spray Hose, Honda Gas Engine

Drop Ship Only

SPRAY TYPE		KRUSER	FOX	COYOTE	MIST'R DRENCH
Brass	Electric	KS750	FOX	COYOTE	MD83BW
	Gas	KS750G	FOX GAS	COYOTE GAS	MD83BWG
Stainless Steel	Electric	KS750SS	FOXSS	COYOTESS	MD83BWSS

WELLMASTER™
Make a Difference.







Transportation Carts

Wellmaster transportation carts are the industry standard for in house transportation and shipping.

- 1 base, 3 shelves, 4 posts, 1 drawbar, and 4 tires (2 swivel, 2 rigid)
- Shelves are adjustable in 2" intervals
- Shelves are galvanized wire mesh
- Overall height of assembled units - 87"
- Carts constructed with drawbar and pin for train make-up with one cart following another around corners when in tow.
- Hot dip galvanized to resist rusting
- Can be collapsed to 20% of original size for storage

Item: 39-7025
Desc: 22" x 59" Wellmaster Rectan. Trans. Cart

Item: 39-7030
Desc: 22" x 59" Wellmaster Wire Mesh Shelf

Grizzly Cart

The Wellmaster Grizzly is a “bear” of a cart. It’s easy-to-assemble design and versatility make it ideal for moving products throughout your environment. 15” flat-free tires at the back and 10” flat-free tires at the front will glide over rough terrains with great ease while the push handle offers both comfort and leverage. Offers a hot dip galvanized finish with the deck being 18” from the ground. This product is a boxed shipment which saves on freight.

Item: 39-7090
Size: 24" Wide x 48" Long x 37" Height

360° Cart

Wellmaster’s 360° Cart features a dynamic design with zero turn radius for close tight turns. Handles on each end of the cart provide ease when maneuvering sharp turns over various terrains whether you are pushing or pulling the unit. 10" swivel tires are placed at each end for load stability while 15" tires are placed at the center to act as a pivot point. This unit is completely compatible with the industry standard 22" x 59" shelves. Two fork guides occupy the underside of the unit for transport via lift truck. This unit also features a hot-dip galvanized finish.

Item: 39-053304 **Size:** 22"x 59"

MIXERS, SHAVERS, POT FILLERS & CONVEYORS

PACK
PACKMFG.COM

PM20 Mixer & Flat Filler

Deciding which jobs to automate and which jobs to do manually can be a challenge for new growers. Pack Manufacturing is making that decision easier with the PM20 Combination Mixer and Flat Filler. This innovative new design combines the functionality of a 1 cubic yard batch mixer with a high volume mobile flat filler. The PM20 features a clear polycarbonate mixer door with safety cutoff switch, adjustable rotary brush and sweep, roller take-offs, soil return to eliminate wasted media, and 15" wide filling conveyor- all on a mobile frame. The PM20 is capable of mixing 1 cubic yard of media every 3- 5 minutes and filling 770 trays or 1,800 1 gallon pots every hour.



PM1002 Double Potter

Made with the largest operations in mind, the PM1002 comes complete with a 4 cubic yard hopper, variable speed control, adjustable hopper gate, independent feed control, excess soil recycling, media vibrator, powered take-off, all sealed bearings, direct drive gearboxes, and 10' filling conveyor. Perfect for transplanting or potting bare roots. The PM1002 adds a layer of media to the bottom of the container and allows for a plant to be inserted before filling the remainder of the container with media- all accomplished in a single efficient production line capable of filling 750 15-gallon pots an hour. Additional options include extended conveyor and custom hopper sizes.



NS1100 Pack Power Seeder™

The Pack Manufacturing NS1100 Pack Power Seeder™ is a fully automated Needle Seeder that delivers full control to the operator with the Touchscreen controller. The Pack Power Seeder™ includes an auto-indexing powered Conveyor Belt, Seed Hopper, Dibbler, Topcoat Hopper, Belt Vibrator, Seed Vacuum to retrieve excess seeds, air clean-off tools, and operates from a 120VAC outlet. The Power Seeder indexes trays to each station, and the operator has full control over the unit and number of seeds delivered per cell. Custom seed manifolds and needle sizes are available for different tray and seed sizes. Fully Pneumatic NS1000 option also available.



PM10C Flat Filler

The Pack Manufacturing PM10C series is an introductory level automated Flat Filler. Capable of filling flats and trays under 6" in height, the PM10C makes an excellent first choice for customers looking to reduce expensive labor costs. The PM10C comes equipped with a 16.2 Cubic Foot Soil Hopper, variable speed conveyor, fully adjustable compacting sweeps, a rotary brush, heavy drag chain soil delivery, and the side chute soil return system to deliver any excess soil media right back to the hopper. The PM10C is available with 12" or 15" belt widths and operates on a standard 120VAC plug. Custom options are available.



Pioneer Filler

The economy Pioneer™ Filler from Pack manufacturing is the perfect entry level machine for any pioneering new grower. The Pioneer™ Filler from Pack Manufacturing provides a grower with the same high-volume capability as the competition for a fraction of the cost. Standard with all essential elements- 1 cubic yard hopper, pot sweep, drag chain, filling conveyor, rotary brush and roller transfers. The Pioneer™ Filler allows for up to 1,400 flats or 950 5-gallon pots an hour. Add-ons to make your Pioneer™ Filler the custom machine for any operation. The Pack Mfg. Pioneer™ Filler also offers the advanced features seen on the most expensive fillers, but you only add the features you need, and skip the features you don't need.



Trailblazer Filler

The Trailblazer Filler™ is the premiere solution for established growers with multiple filling needs. The Trailblazer Filler™ includes all the options of the Pioneer Filler®, along with the fully loaded options package to include low-profile casters, vibrator on belt for soil compaction and elimination of air pockets, powered roller take-off to eliminate tipping, an enhanced auger driven soil return to recycle excess media, and reverse options for easy cleanout and large container filling. All these features and more come standard with the Trailblazer Filler™ to provide growers the ability to fill over 1,500 containers an hour with absolute minimal labor! AUTO options are also available.



COMMERCIAL HORTICULTURE EQUIPMENT

Another great way to reduce labor is to implement automation for media handling and pot filling. As your operation grows, this equipment can even help you reduce your input costs for peat-based media. Use of soil mixers and pot fillers also ensures that compressed bales are properly fluffed, and pots are filled at the perfect density for optimum root growth. Ask your Griffin sales rep for help for your immediate or future needs for affordable, customized equipment from Pack Manufacturing. Custom built equipment drop-ship to the site from the manufacturer.



Griffin Construction Department
Partner with us on you next project.
Call for consultation and quote:
1.800.888.0054 then press 3.

WHY AUTOMATE?

Save on labor costs and minimize the impact of labor shortages by reallocating your staff's time to be more efficient.

HOW CAN AUTOMATION HELP YOU?

Soil handling, container filling, irrigation, product transportation, spacing, transplanting.

WHAT TYPES OF AUTOMATION MACHINES ARE AVAILABLE?

- Mixers
- Potters
- Flat Fillers
- Conveyers
- Bale Shavers
- Baggers
- Watering Solutions
- Custom Equipment

CUSTOM
Equipment

If you don't see what you are looking for, ask!
Pack can build it!





METERS & MONITORS

Irrigation Automation Systems



2026
2027

Automation by Design: Configurable Logic Controllers

Designed for monitoring and remote control of multi-bank valves, fans, etc.

- Allows users to remotely start/stop their systems via phone, laptop or computer
- Saves time and money by alleviating dedicated personnel overseeing manual valve control
- Improve crop yield with consistent irrigation scheduling
- An economical way to oversee your irrigation network from anywhere at any time
- On demand or scheduled irrigation control. Gang zones with similar watering times
- Cascade scheduled start time to maintain pump efficiency
- Package includes: 20W solar panel or 24v AC power source, 1 or 2 RCB's
- Available as AC or DC operation. No 110V AC Power? No problem
- Scalable

Hand Held Soil Meter

A portable and inexpensive way to monitor moisture levels in your fields or greenhouses

- Easy to use, no maintenance sensors
- Produces accurate and repeatable soil moisture measurements
- For use in all types of soil – loam, potting, sand, etc.
- Bury sensors for soil cross section and root zone analysis
- Prevent over or under watering
- Perfect for Garden Centers etc.

Item: 83-4091



Griffin Irrigation Department
Save Water • Save Labor • Grow More
Call 1.800.888.0054 and ask for an Irrigation Specialist.

MEDIA, SOIL, & CONTAINERS



GROWING MEDIA

aurora innovations

Oregon-based producer dedicated to high quality, organic products for cannabis cultivation and consumer gardening. Bags double as growing containers – cut off the top and plant!



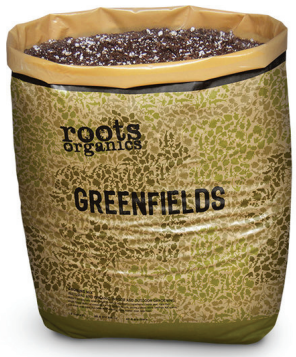
Roots Organics Original ★

Ready to use mix for fast growing, heavy feeding crops. Supports frequent feeding with balanced air to water ratio of porosity. Peat, coco, perlite, compost, pumice, worm castings, bat guano, meal (soybean, alfalfa, fishbone, kelp), greensand and mycorrhizae.



Roots Organics Formula 7o7 ★

Good for large pots. Less heavily amended than Roots Organics Original while affording a higher water holding capacity. Coarse peat, compost, perlite, coco fiber, pumice, earthworm castings, meal (feather, non-GMO soybean, fishbone, kelp), bat guano, greensand, volcanic rock dust, and mycorrhizae.



Roots Organics Greenfields

Roots Organics Green Fields Ocean amendment-based mix designed for outdoor use. Strong water holding capacity, but also well drained. Compost, peat, perlite, coco fiber, pumice, worm castings, meal (crab, feather, fish, non-GMO soybean, fishbone, kelp), bat guano, and mycorrhizae.



Roots Organics Green Lite

Extremely well drained mix for indoor and outdoor cultivation. Highly porous with increased perlite and pumice. Perlite, peat, compost, coco fiber, pumice, worm castings, bat guano, meal (non-GMO soybean, fish, kelp), and mycorrhizae.

★ = Retail Store Best Seller » = Drop-Ship Item



Roots Organics Lush

Loaded with amendments for water-only or low nutrient input cultivation. Achieve up to eight weeks before nutrient application. Peat moss, earthworm castings, pumice, perlite, coco fiber, limestone, bat guano, meal (feather, fishbone, non-GMO soybean, fish, blood, crab, alfalfa, kelp), leonardite, Bacillus, mycorrhizae and more.



Item #	»	Description	Size	CS/UOS
81270002		Roots Organics Original Potting Soil	1.5 cu ft	70/70
81270001		Roots Organics Formula 707 Potting Mix	3 cu ft	36/36
81270173		Roots Organics Formula 707 Potting Mix	1.5 cu ft	70/60

Whittemore
COMPANY, INC.

Vermiculite and Perlite



Whittemore is our primary partner for vermiculite and perlite for the central and eastern parts of the country. A family-owned company based in Lawrence, MA, Whittemore pops the product with their own furnaces for strong quality control of their horticultural products.

Vermiculite has a high water-holding capacity, good buffering characteristics and adequate cation-exchange capacity. It has an absorptive capacity for fertilizer. The mineral itself contains potassium, magnesium, and calcium available as a slow-release supply. Super Coarse Perlite is screened to remove finer particles. The perlite provides aeration and drainage, in addition to moisture retention for superior plant growth.

Location Availability
Central and Eastern States

OMRI LISTED

Item	Description
65-3110	23 lb. Whittemore Vermiculite A2 Fine (African)
65-3215	15 lb. Whittemore Vermiculite A3 Medium (African)
65-3115	23 lb. Whittemore Vermiculite A3 Medium (African)
65-3216	15 lb. Whittemore Vermiculite A4 Coarse (African)
65-3116	23 lb. Whittemore Vermiculite A4 Coarse (African)
65-3220	15 lb. Whittemore Vermiculite D3 Fine (Domestic)
65-3120	23 lb. Whittemore Vermiculite D3 Fine (Domestic)
65-2225	23 lb. Whittemore Perlite Super Coarse
65-2125	15 lb. Whittemore Perlite Super Coarse

SUCCESS STORY

GGSPro and the Griffin sales team are invested in solving your pest problems as quickly and smoothly as possible. Two recent cases demonstrate our approach. First, an outdoor hemp grower approached a Griffin sales representative, with pictures of a mystery pest plaguing their hemp. GGSPro identified the caterpillar as hemp borer and recommended two waves of BCA applications. The first wave cleaned up hot spots; the second wave provided preventative control. BCAs were ordered and received that week, and the grower was able to complete their growing season successfully.

Our second story also involves BCAs. When the industry recently faced a global shortage of beneficial nematodes, our customers ran the risk of increased fungus gnat, shore fly and thrips populations. The CEA team implemented training with GGSPro on strategies for a temporary solution. Our team then worked with our customers to identify viable substitutes, appropriate for each situation. Sometimes the solution involved increased sanitation activities. Sometimes it meant adding an additional BCA. By acting early and addressing unique needs, we were able to help customers through what could have been a challenging situation. GGSPro is ready for your call and question.

Coast of Maine

Stonington Blend™ Organic Grower's Mix ★

Complex "super soil" designed for high performance growing in containers and large pots. Developed for professional growers, incorporates mycorrhizal fungi, kelp, fish bone and alfalfa meal, worm castings, peat, coir and lobster compost.



Item: 81600012
Desc: 1.5 cu ft.

Bar Harbor Blend™ Organic Potting Soil ★

Premium all-purpose potting soil is enriched with salmon, blueberry and other composts, lobster meal, kelp meal, sphagnum peat, and perlite. Compost based dark brown, nutrient rich, potting soil.



Item: 81600011
Desc: 8 qt

Item: 81600007
Desc: 2 cu ft

Item: 81600008
Desc: 1 cu ft

Castine Blend™ Organic Raised Bed Mix ★

Ready to use blend for raised beds to provide a rich and diverse soil for big & healthy vegetables, herbs and more. It has everything your garden bed needs right in the bag; no recipe, no mixing of components and no tilling needed!



Item: 81600084
Desc: 1 cu ft

Item: 81600061
Desc: 2 cu ft

Frey Group Leaf Compost

Composted leaves and grass clippings. Easily crumbled, partially decomposed substance, similar to natural organic matter found in the soil.



Item: 81600064
Desc: 40 lb

*East Coast Only

Frey Group Mushroom Compost

Premium compost sourced in PA , produced by mushroom growers using organic materials such as horse manure, bedding and straw, hay, cocoa hulls, poultry manure, gypsum, and corn cobs. Dark, nutrient infused, organic compost.



Item: 81600065
Desc: 40 lb

*East Coast Only

Sprout Island Blend™ Organic Seed Starter ★

Sprout Island Organic Seed Starter is designed for seed germination & rooting plant cuttings. It is ready-to- use in cell packs or flats and provides natural moisture retention & aeration. Includes mycorrhizae, worm castings, kelp and fully-cured compost.



Item: 81600029
Desc: 16 qt

Item: 81600045
Desc: 2 cu ft

Mount Desert Island Blend™ Cactus & Succulent Mix

Ready-to-use, pH balanced soil for cactus, succulent, tropical palms & citrus plants. Made from sphagnum peat, compost, sand, aged bark, biochar, lime, fishbone & kelp meals. Excellent drainage and sufficient water retention.



Item: 81600086
Desc: 8 qt

Fundy Blend™ Organic Enriching Mulch with Seaweed

Use as a top dressing for field plantings. Humified birch and maple bark with partially humified hemlock bark and a very rich blend of kelp solids and sphagnum moss peat. Almost black humus that is rich in organic matter with all the added benefits of both compost and kelp.



Item: 81600023
Desc: 1 cu ft

Item: 81600022
Desc: 2 cu ft

Penobscot Blend™ Complete Planting Mix

An all-in-one blend; rich, smooth blend of salmon and blueberry compost, tiny mussel shell fragments and peat. The shell fragments help aerate the soil and add texture to your soil.



Item: 81600002
Desc: 1 cu ft

Quoddy Blend™ Organic Lobster Compost Top Seller Star

Best-selling soil, made with chitin and calcium-rich lobster shells, compost and peat humus. The result is a dark-brown, complex soil that drains well.



Item: 81600001
Desc: 1 cu ft

★ = Retail Store Best Seller

Coast of Maine®

Schoodic Blend™ Organic Cow Manure Compost



Dark, rich soil made from carefully composted cow manure blended with peat and peat humus. All-natural, easy-to-use, all-purpose organic soil amendment.

Item: 81600005
Desc: 1 cu ft

Wicasset Blend™ Earthworm Castings ★



Made of 100% earthworm castings. Rich, odorless, coffee ground-like particles, teeming with microbial life. A soil conditioner that naturally encourages root growth & strong stem structure while helping to convert soil nutrients into plant-available forms. Use to top-dress or brew into a quick tea!

Item: 81600014
Desc: 8 qt

Organic & Natural Aeration Formula Potting Soil



A blend of coir and perlite has been a must have for hydroponic growers for years. At Coast of Maine we have developed our own unique blend by adding lobster meal and kelp meal bringing life and energy to this popular growing media.

Item: 81600198
Desc: 1.5 cu ft

Stonington Blend Plant Food - Lobster & Kelp



Coast of Maine Stonington Organic Plant Food (5-2-4) is an exceptional organic granular fertilizer made with lobster, crab, fish and kelp meal plus worm castings and other natural ingredients. It will help super charge the soil "biology" of containers as well as beds and gardens. It is also high in calcium which helps promote plant vigor. Available in 4lb bags.

Item: 81600015
Desc: 4 lb

Lobster Meal Plant Food



Coast of Maine Lobster Meal Organic Plant Food is a unique single-ingredient fertilizer, high in both natural nitrogen and calcium to help promote strong stem growth, healthy green foliage and a vigorous root system. Made of 100% ground, dehydrated lobster (with some crab shell, a by-catch of the lobster harvest), it is ideal for fertilizing outdoor container gardens, vegetable and herb gardens and flower beds. Use it on all of your gardens for great results! Available in 4 lb bags.

Item: 81600017
Desc: 4 lb

Fish Bone Meal



Coast of Maine Fish Bone Meal Organic Plant Food is ideal for budding and blooming plants. Made from Pacific Whiting bones that are dehydrated and ground into meal. An excellent natural source of phosphorus, calcium and nitrogen. It is also preservativefree and a very effective alternative for traditional steamed bone meal. Available in 3 lb bags.

Item: 81600016
Desc: 3 lb

Kelp Meal



Coast of Maine Kelp Meal Organic Plant Food is 100% dehydrated Norwegian Kelp (Ascophyllum nodosum) or common seaweed. Kelp Meal is a source of trace quantities of macro and micro-nutrients and a completely natural sustainable resource. Helps to promote healthier plants and improve crop yields. Use around trees and shrubs, on lawns or add to container gardens and incorporated into garden beds. Available in 4 lb bags.

Item: 81600018
Desc: 4 lb

★ = Retail Store Best Seller

FoxFarm is passionate about producing the finest soil mixes, fertilizers, and micro-brewed liquid plant foods since 1984. Their formulas are greenhouse tested to ensure quality and consistency.



Light Warrior

Seed starter blend for indoor and outdoor cultivation and is designed to promote an environment beneficial to seed germination and root development.

Bush Doctor Coco Loco Potting Mix ★

Less frequent watering than with other mixes. Suitable for hanging baskets, vertical gardens, containers and seeding trays. Restricted in IN.



Happy Frog Potting Soil ★

A richly amended container blend for indoor & outdoor plants. It contains a custom blend of soil microbes that can help improve root efficiency & encourage nutrient uptake.

Ocean Forest Potting Soil ★

FoxFarm's most popular soil, is a powerhouse blend of aged forest products, sphagnum peat moss, earthworm castings, bat guano, fish meal, and crab meal.

Original Planting Mix

Blend of aged forest products, sphagnum peat moss and earthworm castings. Restricted in IN.



Salamander Soil Potting Mix

Enhanced water holding capacity for less frequent watering.

Strawberry Fields Potting Soil

Soil is brought to you directly from the Flower Children of the Sixties and Seventies - the Old School generation. Designed to pump up your blooms, fruits and berries with no hang-ups. Out-A-Sight!

Cultivation Nation 7o/3o ★

Cultivators' favorite blend of buffered coco coir and perlite for exceptional drainage. Great for use with customized feeding schedules in containers indoors and outdoors.

Item #	Description	Size	CS/UOS
82000169	Light Warrior Seed Starter	1.0 cu ft	75/5
82000243	Light Warrior Seed Starter	12 qt	120/10
82000156	Coco Loco Potting Mix	2 cu ft	48/6
82000152	Happy Frog Potting Soil	12 qt	120/10
82000153	Happy Frog Potting Soil ***East Coast**	2 cu ft	60/6
82000224	Happy Frog Potting Soil ***West Coast**	2 cu ft	60/6
82000174	Happy Frog Soil Conditioner ***East Coast**	1.5 cu ft	75/5
82000154	Happy Frog Soil Conditioner ***West Coast**	3 cu ft	35/5

Item #	Description	Size	CS/UOS
82000167	Ocean Forest Potting Soil	12 qt	120/10
82000168	Ocean Forest Potting Soil ***East Coast**	1.5 cu ft	75/5
82000223	Ocean Forest Potting Soil ***West Coast**	1.5 cu ft	75/5
82000164	Ocean Forest Potting Soil	3 cu ft	36/6
82000166	Original Planting Mix	1 cu ft	75/5
82000160	Salamander Soil Potting Mix ***East Coast**	1.5 cu ft	75/5
82000225	Salamander Soil Potting Mix ***West Coast**	1.5 cu ft	75/5
82000220	Cultivation Nation 70/30	2.0 cu ft	48/1

★ = Retail Store Best Seller



Item	Description	Qty/case
82580010	Tupur 1.76CF	5
82580032	Worm Casting 1CF Pallet	10
82580006	Kings Mix 3CF Pallet	6
82580005	Kings Mix 1.76CF Pallet	5
82580003	Coco Fiber 50L Pallet	5
82580029	70/30 1.76CF Pallet	5

Tupur 1.76CF

Royal Gold Tupur is a coco-fiber based, quick-draining soilless medium engineered for high-frequency feeding. Designed with optimized aeration and porosity, it supports up to several irrigation events daily in hydroponic systems. Suitable for automated or hand-watered setups, Tupur also enhances clay soils and serves as a reliable base for custom blends. Trusted by professional cultivators, for greenhouse, indoor, or outdoor use.

Worm Casting 1CF Pallet

Royal Gold Worm Castings are premium, OMRI and CDFA OIM certified for use in organic crop production. Suitable for vegetables, flowers, trees, lawns, and houseplants, they increase soil water retention, improve aeration, and add essential organic matter. With a fine texture for easy incorporation, they are ideal for top-dressing, amending, or compost teas

Kings Mix 3CF Pallet

Royal Gold Kings Mix is a well-aerated, moderately amended coco-peat blend designed for versatility and performance. Featuring coco chips for ideal aeration and water retention, it promotes vigorous root development and rapid growth, for professional & hobby growers alike. Perfect for container gardens, home use, & field applications, this adaptable mix performs exceptionally indoors, in climate controlled & light assisted greenhouse, high-elevation & cool-weather environments, & a wide variety of CEA applications.

Coco Fiber 50L Pallet

Royal Gold Coco Fiber delivers premium, consistent coconut fiber, washed, buffered, and processed in house in the USA. Ready to use and ideal as a Peat-Moss replacement, soil conditioner, standalone hydroponic medium, or as a base for custom soil blends. Coco fiber provides long-lasting performance and encourages beneficial biology while discouraging pathogens. With exceptional quality control and consistency, Royal Gold Coco Fiber is a trusted choice for indoor, outdoor, and greenhouse gardeners!

Kings Mix 1.76CF Pallet

Royal Gold Kings Mix is a well-aerated, moderately amended coco-peat blend designed for versatility and performance. Featuring coco chips for ideal aeration and water retention, it promotes vigorous root development and rapid growth, for professional & hobby growers alike. Perfect for container gardens, home use, & field applications, this adaptable mix performs exceptionally indoors, in climate controlled & light assisted greenhouse, high-elevation & cool-weather environments, & a wide variety of CEA applications.

70/30 1.76CF Pallet

Royal Gold 70/30 is a premium coco-perlite blend offering unmatched consistency and performance. With 70% buffered coco and 30% high spec perlite, it excels in propagation, hydroponics, succulents, and sensitive plants. Rinsed, buffered, and processed in the USA, this peat-free medium provides dependable aeration, drainage, and water-holding balance.

2026
2027

Grodan®

Innovative Growing Media Solutions

Grodan stone wool media products enable precision growing. Made from balsalt rock - Grodan products are favorites for propagation and production for many CEA and other long and short-term crops; including lettuce, tomatoes, peppers, cucumbers, cannabis, hemp, roses and gerbera. Grodan products arrive pathogen free.







Starters

Grodan® Stonewool A-OK Starter Plugs ™ Starters are used for propagation, both seed starting and vegetative propagation. A-OKs ship as a full sheet (sized for a 10x20 tray); individual cubes are separated from the sheet and are suitable for sowing or sticking. The 1" A-OKs are particularly popular for use in NFT systems for lettuce and herb production. 1.5" A-OKs are popular for propagation of many crops, including cannabis. Starters come wrapped (W) or unwrapped (UW) with cellophane. UW are more economical, while W are suitable for retail and/or provide an extra layer of protection against contamination in dusty storage areas.

Item	Description	Qty/case
51-9022	Grodan Starters 1" AOK UW, 1.0x1.57 (25/40)	6000
51-9101	Starters 1.5" AOK UW, 1.4x1.57 (36/40)	2940
51-9002	Starters 1.5" AOK W, 1.4x1.57 (36/40)	2940
51-9106	Grodan Starters 1.5 AOK , Pre-cut	2310 plugs loose in box
51-9105	Grodan Starters 1.5 AOK, Pre-cut, pre-filled trays	50 cubes/tray, 30 trays/box
51-9023	Starters 2" AOK W, 2x1.57 (50/40)	1500
51-9035	Starters 2" AOK UW, 2x1.57 (50/40)	1500
51-9025	Macroplugs, loose, V-cut, 1.5x1.57 (36/40)	2000
51-9052	Gro-Block Imp Mini Block UW 1.5" (40/40)	2250/cs



Gro-Blocks Improved

Optimized for cannabis and hemp, Improved Gro-Blocks bring optimal density and new hydrophilic technology for superior moisture management to support these fast-growing crops. Improved water distribution in the blocks results in more even root distribution with more branched roots and better water/nutrient uptake.

Item	Description	Qty
51-9165	Gro-Block Imp GR4 UW Sm 3x3x2.6 w/Hole, 8/strip	384/cs
51-9166	Gro-Block Imp GR4 W Sm 3x3x2.6 w/Hole, 8/strip	384/cs
51-9167	Gro-Block Imp GR5.6 UW Lg 3x3x4 w/Hole, 8/Strip	256/cs
51-9168	Gro-Block Imp GR6.5 UW Sm 4x4x2.6, 6/Strip	216/cs
51-9169	Gro-Block Imp GR6.5 W Sm 4x4x2.6, 6/Strip	216/cs
51-9170	Gro-Block Imp GR7.5 W Med 4x4x3, 6/Strip	216/cs
51-9160	Gro-Block Imp GR 10 UW Large, Loose, 4x4x4	1584/plt
51-9171	Gro-Block Imp GR10 UW Lg 4x4x4, 6/Strip	144/cs
51-9172	Gro-Block Imp GR10 W Lg 4x4x4, 6/Strip	144/cs
51-9161	Gro-Block Imp Jumbo, GR 22, 6x6x4	64/cs
51-9162	Gro-Block Imp Hugo, GR 32, 6x6x6	64/cs
51-9163	Gro-Block Imp Hugo Loose, GR 32, 6x6x6	512/plt
51-9173	Gro-Block Imp Uni-Block 8x8x4	36/cs
51-9052	Gro-Block Imp Mini Block 1.5"2250 cubes	1/cs
51-9199	Imp GroSlab 36x8x3 w/3 10x10 Pre-Cut Holes	12/ctn
51-9186	Pargro PAR22.5 Jumbo, 6x6x4 w/hole	768/plt
51-9174	Gro-Block Imp Big Mama, 8x8x8	18/cs
51-9205	Unislab 2024 4x4 HOLE, 9.4x7.6x3.9	16/ctn
51-9207	Gro-Block Imp Sm, 4x4x2.6 6/Strip GR6.5	2448/plt
51-9198	Imp GroSlab 36x6x4 w/3 10x10 Pre-Cut Holes	12/ctn

Grodan®



Improved Gro-Slabs

Slabs are the final step in a slab production system. The new Improved Gro-Slabs are optimzed for production of cannabis and hemp with Advanced Wetting Agent for more even water distribution and better wettability. Start with A-OK cubes, then set rooted cubes into Gro-Blocks. When plants are fully rooted in the Gro-Blocks, simply set on top of the slabs for the remainder of production. Utilize drip irrigation (inserted into the Gro-Block.)

Item	Description	Qty/case
51-9015	Grodan Uni-SLAB 9.5" x 8" x 4"	16
51-9177	Gro-Slab Imp 6", 36x6x3	12



Gro-Smart Tray

Heavy-duty, double-sided, reusable tray holds starters during propagation. Perfectly fits in any standard 10x20 flat. Elevates starters from bottom of tray for better moisture management.

Item	Description	Qty/case
51-9017	Gro-Smart Tray - 9.25" x 20"x 2"	5



Loose

Loose rockwool products are used with pots. Get the same great water holding capacity and air porosity as in blocks, but for use with any size container.

Item	Description	Qty/case
51-9031	Grow Cubes L, 1x1, 3 bags/box	2.0 cf
51-9033	Grow Cubes,1x1, loose pack	5.0 cf
51-9034	Grow Chunks, 2x2, 3 bags/box	2.0 cf
51-9030	Gro-Wool bag	45 lb bag

Grodan® Stonewool A-OK Starter Plugs™ Loose in Carton

A-OK Starter Plugs™ for starting seeds and rooting of cuttings prior to plugging into the larger Grodan Gro-Blocks. A-OK Starter Plugs™ come loose in a carton for those who prefer to saturate as individual plugs. Easy to use with propagation trays such as the Grow Smart Tray. Note: the AOK plugs are shipped as 2,310 individual loose plugs, bulk in the carton. There is no shrink-wrap.

Item	Description	Qty/case
51-9105	Grodan Starters 1.5 AOK, Pre-cut, pre-filled trays	50 cubes/tray, 30 trays/box



Pre-Cut AOKs!

Get your AOKs pre-cut, loose in a box or prefilled in a tray.

Grodan® Stonewool A-OK Starter Plugs ™ in Prefilled tray

The Grodan tray comes prefilled with Grodan A-OK Starter Plugs™ for fast and easy propagation from seeds or cuttings prior to transplanting to Grodan Gro-Blocks. The tray fits perfectly in all standard propagation dome kits. These trays are designed with a unique and convenient thumb slot to make tray removal easy and comfortable. 50 plugs per tray, 30 trays per carton.

Item	Description	Qty/case
51-9106	Grodan Starters 1.5 AOK , Pre-cut	2310 plugs loose in box

Grodan®

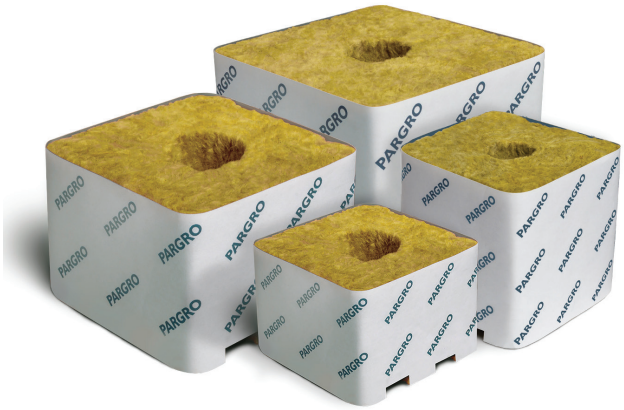
Pargro

The Pargro line of stone wool media products from Grodan brings excellent value to cannabis growers using basic irrigation strategies. With a moderate water holding capacity, Pargro blocks are more forgiving of heavier irrigation events. Growers using more technical crop steering methods will appreciate the additional water holding capacity offered by the Grodan Improved line.



2026
2027

Item	Description	Qty/case
51-9183	Pargro PAR6.5 Block Sm	216
51-9185	Pargro PAR10 Block Lg	144
51-9189	Pargro PAR32 Biggie	64
51-9191	Pargro Slab 6" w/holes	12
51-9188	Pargro PAR32 Biggie, 6x6x6 w/hole	512/plt
51-9206	Pargro PAR6.5 Block Sm, 4x4x2.6 w/ hole	2448/plt







HYDRODYNAMICS INTERNATIONAL



Clonex Mist

Clonex Mist is formulated to boost the health and vigor of both mother plants and clones while promoting robust root development and the elongation of root hairs.

Sizes - 100ml (20/cs), 300ml (6/cs), 750ml (6/cs), Concentrate Quart (6/cs), Concentrate Gallon (4/cs)



Root Riot

Root Riot Plant Starter Cubes are ideal for rooting plant cuttings and starting seeds! Made from naturally composted and finely milled Canadian peat moss, Root Riot cubes are pH balanced and pre-moistened, so they are ready to use right out of the bag or in the tray. The spongy texture of a Root Riot cube retains the perfect air/water ratio for healthy, rapid root growth, and they are stable and hold their shape, which takes a lot of the stress out of handling and transplanting tender, newly rooted cuttings or seedlings.

Sizes - 50-ct Tray (12/cs), 25-ct Bag (12/cs), 50-ct Bag (20/cs), 100-ct Bag (12/cs), 1,500 Bulk (1/cs)







Clonex Gel

Clonex Rooting Gel is a high-performance, water-based, rooting gel developed by Growth Technology™ Ltd. It is a tenacious gel that will remain in contact around the stem, actually sealing the cut tissue and then supplying the hormones needed to promote root cell development. It is manufactured under strict pharmaceutical laboratory conditions and is, consequently, years ahead of old -fashioned hormones and powders.

Registered with the Environmental Protection Agency (EPA) and approved for use on all crops, including food crops. As a matter of fact, you can use Clonex Rooting Gel on all types of plant cuttings, including woody, herbaceous, and flowering ornamental species, vegetables, fruit trees and small fruits.

Sizes - 15ml Packet (108/cs), 100ml (12/cs), 250ml (12/cs), Pint (6/cs), Quart (4/cs), Gallon (2/cs)



Clonex Clone Solution

Clonex Clone Solution is a plant nutrient specifically formulated for clones and seedlings that provides an appropriate level of nutrient for a young plant while also encouraging rapid root development.

Clonex Clone Solution can be used in aeroponic cloners, fed directly to seedlings and developing clones as part of your watering regiment.

Sizes - 20ml Packet (108/cs), Quart (12/cs), Gallon (4/cs), 2.5 Gallon (2/cs), 5 Gallon (1/cs), 55 Gallon (1/cs)



Jiffy GROWING SOLUTIONS

- BETTER, FASTER GERMINATION
- LABORSAVING
- STRONGER ROOTS
- FOOD SAFE
- SUSTAINABLE
- ORGANIC

Jiffy Pellets

OMRI LISTED

Jiffy-7 Pellets

The Jiffy-7 Pellets is a unique concept packing amazing cost saving advantages for the grower on the lookout to minimize input costs. Jiffy-7 Pellets, media and container in one, comes compressed, saving on freight and logistics. Jiffy-7 Pellets is available in many sizes and tray configurations and suited to be used in fully automated sticking lines.

Item	Vendor	Description	Pellets/cs
	70001435	J7 Organic Peat Pel 36x41 PLA Net Stacked	2,000
60-2330	70001476	J7 Organic Peat Pel 42x43 PLA Net Stacked	1,000
60-2519	70001478	J7 Hort Peat Pel 42x63-1 PLA Net Stacked	520
60-2338	70000107	J7 Hort Peat Pel 50x95-PLA Net, 50x95mm	486
Options for CEA			
60-2541	70001203	J7 Organic Peat Pel 23x45WH-162 11 Ind PLA Net	2592
60-2542	70001674	J7 Organic Peat Pel 30x40-105 11i WH PLA Net	1995



What is PLA netting?

PLA netting is a lightweight fine-fiber web made of polylactic acid (PLA). This natural plant based material is 100% fossil plastic free, renewable and sustainable. PLA has a 65% lower production carbon footprint compared to polypropylene plastic.

Jiffy Peat Pots

The Jiffy peat pot appeared on the horticultural scene in the 1950s making it the first earth friendly certified home compostable container. Available in many different versions and sizes, a Jiffypot can potentially offer a 'bio' solution for almost every job. Today's Jiffypots are well suited to work in many of the automation solutions found at modern nurseries. Jiffy pots, even though it has 60 years of offering an environmental friendly alternative to plastic pots under its belt, still is very relevant in today's market looking for bio solutions.

Item	Vendor	Description	Pots/cs
60-2021	70000357	2" rd. x 2" dp. pot with slits	3564
60-2026	70000500	21/4" rd. x 21/4" dp.	2816



Preforma: Options for all propagators

Propagation is easier with Preforma plugs, whether you're using seed, cuttings or tissue culture. Growers in horticulture, forestry, nursery, and CEA trust Preforma to cultivate healthy roots ensuring the optimal plant growth. Preforma offers the options you need to stay in control of the critical aspects of your plant propagation. The substrate blend, the dibble hole, and the tray configuration can all be tailored to your production and crop needs.







Better Roots, Faster, Easier

Manufactured from the highest quality substrates and held together with a unique binding agent, Preforma offers unique benefits to growers. There is no substrate compaction during transport, irrigation, or growing. The Preforma plugs hold and conserve water well while maintaining excellent drainage properties, thereby improving and hastening rooting.

Your Efficiency, Maximized

Our prefilled trays provide significant cost and labor savings. Experience faster turn times, maximize bench space efficiency and minimize losses. With Preforma, there's no need to tie up cash and space while inventorying trays and media— it arrives pre-moistened and ready to use. Preforma is a perfect solution for either highly automated or traditional production processes.

Preforma means quality. Preforma means success

Preforma meets rigorous quality standard as an RHP-certified substrate, guaranteeing optimal water absorption, air content, pH balance, and nutrient levels, so growers achieve outstanding results.

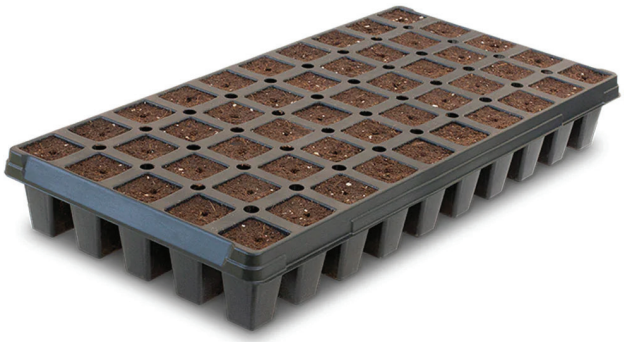
Our manufacturing processes also adhere to ISO 9001 standards for quality management and ISO 22000 Food Safety standards, maintaining the highest levels of cleanliness, hygiene, and temperature control.

Tray Options

Cell #	Brand	Cell Shape	Type	Tray Size Inch	Cell Depth	Cell Top Dia.	Trays/ Case	Trays/ Pallet
36	TO	Star	Tray	10.94 x 21.44	3.00	2.12	3	160
50	Landmark	Square	Tray	10.00 x 20.00	1.63	1.45	5	300
50	TO	Star	Tray	11.00 x 21.50	2.35	1.77	6	208
50	Jiffy	Round	5 x 10 Strip Tray	11.00 x 21.00	1.50	1.65	6	256
72	TO	Star	Tray	11.00 x 21.50	2.25	1.56	6	208
72	TO	Star	Tray	11.00 x 21.50	3.00	1.56	5	160
72	Landmark	Round	Sheet	10.42 x 20.85	2.25	1.49	6	208
78	Jiffy	Oct	3 x 26 Strip Tray	10.63 x 20.20	1.46	1.46	6	288
102	Landmark	Hex	Tray	10.67 x 20.99	1.63	1.34	6	248
105	TO	Star	Tray	11.00 x 21.50	1.50	1.24	6	272
162	TO	Square	Tray	11.00 x 21.22	1.75	1.07	6	240
200	Dongjin	Square	Tray	11.02 x 21.26	1.65	1.02	6	256
288	Landmark	Square	Tray	11.05 x 21.38	1.75	0.75	6	232

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50 Deep Prefilled Excel Plug Tray

The 50 Deep Excel Plug is a true 10"x20" tray which means it will fit perfectly inside a carrying tray and under a humidity dome. The 50 Deep Excel Plug features a taller cell to allow more time in the tray and a stronger root structure. Your nursery's reputation relies on your final product, set your customers up for success with our 50 Deep Excel Plug.

Item	Description	Qty/case
61-9040	X10 EJ 50 Deep	200



72 Star Open Bottom Excel Plug Tray

The Excel Plug is a softer and less bound plug offering. Designed to mimic loose soil but still held together enough to maintain its shape outside of the tray. Put our 72 Star Open Bottom Excel Plug Tray to work and experience the difference a tray with true air pruning capabilities can make for your crop.

Item	Description	Qty/case
61-9042	72 Star Open Bottom Excel Plug	224

Q-PLUG

QPlugs aerated, water-holding texture was designed to start clones and seedlings in propagation trays. QPlugs are engineered to be transplanted into soil, rockwool, coco, or other standard growing substrates. These propagation plugs are ideal for commercial growers and also offer ease of use for home gardeners. Proven to stimulate more root growth!



Item	Description	Qty/case
61-9014	Qplug, 1.25"	50
61-9043	Qplug, 40/40 1/8" GMIX	2100

Grow Block With 40/40 Hole

The Grow Block Plug works as a stepping stone system out of propagation and can later be transplanted into a larger container.



Item	Description	Qty/case
61-9000	4x4 Grow Block, 40-40 hole, 4x4x4	90





Item	Description	Size
149-0008	LM-1 Germination	3.8 cu. ft.
149-0018	LM-18 Germination (Available in Organic)	3.8 cu. ft.
149-0023	LM-19 Germination (Available in Organic)	3.8 cu. ft.
149-0013	LM-2 Germination	3.8 cu. ft.
149-0028	AFM-3 All Purpose (Available in Organic)	3.8 cu. ft.

Item	Description	Size
149-0046	EPM-20 All Purpose	3 cu. ft.
149-0535	LM-191 All Purpose (Available in Organic)	3 cu. ft.
149-0106	LM-111 All Purpose (Available in Organic)	3.8 cu. ft.
149-0091	LM-6 High Porosity (Available in Organic)	3.8 cu. ft.
149-0071	EPM-50 High Porosity	3.8 cu. ft.

LM-18 Germination Mix

Fine textured peat and fine perlite for germination, plugs and cutting propagation. Low drainage and medium water retention. Use in 128 cell plug trays. 80-90% peat. Also available in organic version.

LM-19 Germination Mix

Fine textured peat and coarse perlite for germination, plugs and cutting propagation. Low drainage and medium water retention. For growers working with 50/72 cavities trays and small pots. 75-85% peat. Also available in organic version.

LM-2

Germination Mix is made of fine Canadian sphagnum peat moss mixed with fine vermiculite to increase water retention. LM-2 is formulated for plugs and transplants.

AFM-3

Made up of a very coarse-fibered Canadian sphagnum peat moss that provides excellent water holding capacity. The coarseness of this media provides ideal air space with the added benefit of reduced media shrinkage. Also available in organic version.

EPM-20 All Purpose Mix

Composed of Canadian sphagnum peat moss, EcoPeatPlus+®, and coarse perlite. Provides medium drainage and water retention. Ideal general-purpose mix, 4” pots and larger. Works great with hanging baskets. 70-80% peat.

LM-191

Slightly less coarse version of our best-selling all-purpose blend, the LM-111. This new mix is blended with specially selected grade of sphagnum peat moss and coarse perlite. An additional step in the screening process of the peat was done to allow this all-purpose mix to be more widely adaptable, including the utilization in six pack, 50 and 72 cavity trays. Also available in organic version.

LM-111 All Purpose Mix

Composed of Canadian sphagnum peat moss, peat chunks, and coarse perlite. Provides medium drainage and water retention. Well-suited for pots of all sizes. Also available in an organic version. A classic all-purpose mix! 80-90% peat.

LM-6 High Porosity Mix

Long fiber peat, peat chunks and coarse perlite. High drainage and low water retention. For plant production that requires higher drainage, 4 inches and larger. Also available in organic version. 75-85% peat.

EPM 50 High Porosity Mix

High porosity mix made with extra coarse peat, EcoPeatPlus+® and coarse perlite. High drainage and low water retention. The perfect option for nursery stocks. Ideal for large containers (> 1 gal). 45-55% peat.

NOR·CAL PERLITE INC



Griffin is pleased to add NorCal Perlite to our assortment as our primary partner for our customers in the mountain, desert southwest, and west coast states. Privately held, NorCal is vertically integrated, from mine to bag. NorCal ships from plants in Richmond, CA and Bakersfield, CA.

NorCal grades range from fine to extra coarse and descriptions may differ from other manufacturers. See descriptions or ask your Griffin sales rep for more information.

Location Availability
Mountain and Western States



Item	Description	Bags/ pallet
65-1600	NorCal Perlite Standard #2 4 cf bag	33
65-1602	NorCal Perlite Premium #3 2 cf bag	70
65-1603	NorCal Perlite Premium #3 4 cf bag	33
65-1605	NorCal Perlite Hydro 4+ Plus 4 cf bag	33
65-1608	NorCal Vermiculite Med 4 cf bag	36
65-1610	NorCal Vermiculite Coarse 4 cf bag	36

*62cf totes via drop ship only

NorCal Perlite Grades

US mesh size and sieve retain rates

Grade	4	6	8	16	20	Granular Size
#2 (medium)	17%	40%	65%	88%	95%	1/16" - 5/8"
#3 (medium)	23%	45%	68%	92%	97%	1/8" - 5/8"
#4+ (chunky)	50%	90%	98%	99%	100%	1/8" - 5/8"

NorCal Vermiculite Grades

Grade	Particle size	Typical loose bulk density	Lbs/cu ft
Fine	0.7-3 mm	75-85	6-7
Medium	1-8 mm	70-85	5-6
Coarse/Extra Coarse	3-15 mm	60-75	4-6

PREMIER TECH
PRO-MIX



AGTIV REACH® - MYCORRHIZAL INOCULANTS

AGTIV REACH® is a line of mycorrhizal inoculants designed for transplanting cannabis plants. Available in powder and granular formats, it acts in the root zone to help plants better absorb water and nutrients, promoting stronger, healthier, and more vigorous growth.

AGTIV REACH® P - Powdered mycorrhizae, 8000 viable spores/g - 4 x 800 g

AGTIV REACH® G - Granular mycorrhizae, 178 viable spores/g - 6 kg

PRO-MIX® HP® AGTIV REACH® OPEN TOP GROW BAG



The PRO-MIX® HP® AGTIV REACH® Open Top Grow Bags are designed to support optimal root-zone conditions for cannabis production. The substrate offers high porosity to promote oxygenation and efficient water management, helping roots develop in a well-balanced environment. Featuring tear-off openings and eight drip holes, the bags simplify setup while reducing the risk of excess moisture. Equivalent pot sizes 0.5 cu. ft. bag = 3.5-gallon pot, 1.0 cu. ft. bag = 7-gallon pot.

Item: 94-1301	**Size:** 0.5 cu.ft.	**Qty/plt:** 294
Item: 94-1300	**Size:** 1.0 cu.ft.	**Qty/plt:** 135
Item: 00-0000	**Size:** 0.1 cu.ft. 1 gal.	**Qty/plt:** 000
Item: 94-1302	**Size:** 0.2 cu.ft. 2 gal.	**Qty/plt:** 400





PRO-MIX® HP® Mixes - High Porosity

Features and Benefits

- High perlite content, peat-perlite based growing medium
- Low water retention
- Designed for water sensitive crops
- Ideal for cultural conditions with low-light and excess moisture/humidity
- Dries out more frequently than general purpose, peat-based mixes
- Well suited for low-light growing conditions and high humidity
- Difficult to overwater crops
- Reduces incidence of water related problems (root diseases, algae and fungus gnats)
- Holds less water for improved leaching of fertilizer salts during crop cycle

Contact our office for direct ship truckloads. Most mixes are available in Mini-bulk & Mega-bale deliveries. Contact our office for details.

PRO-MIX® HP® AGTIV REACH®

With a high percent of quality perlite, PRO-MIX® HP® provides a porous environment for growers wanting a growing medium with high air porosity, low water retention and good drainage.

The added benefit of Mycorrhizae allows plants better access to nutrients and water for overall improved plant growth. Mycorrhizae expand root system growth, enhance nutrient & water uptake and increase tolerance to abiotic stresses.

Item: 94-1154	**Size:** 2.8 cu. ft. Loose	**Qty/plt:** 57
Item: 65-2040	**Size:** 3.8 cu. ft. Comp.	**Qty/plt:** 30
Item: 65-2085	**Size:** 135 cu. ft.	**Qty/plt:** 1
Item: 94-1304	**Size:** 50 l	**Qty/plt:** 96
Item: 94-1303	**Size:** 50 l	**Qty/plt:** 88
Item: 94-1302	**Size:** 3.8 cu. ft. Comp.	**Qty/plt:** 400

**65-2085 full trailer load of 22 pallets minimum order quantity, coming directly from the manufacturer*

PRO-MIX HP® BIOFUNGICIDE™ + MYCORRHIZAE™

Combining BIOFUNGICIDE™ and Mycorrhizae provides plants the benefits of reducing incidence of certain plant root diseases (Fusarium, Pythium and Rhizoctonia) and risk of pathogens developing resistance to chemical fungicides. It also expands root system growth, enhances nutrient & water uptake for overall improved plant growth.

Item: 94-1170	**Size:** 2.8 cu. ft. Loose	**Qty/plt:** 57
Item: 65-2044	**Size:** 3.8 cu.ft Comp.	**Qty/plt:** 30
Item: 94-1176	**Size:** 2.8 cu. ft.	**Qty/plt:** 48
Item: 94-1161	**Size:** 2.8 cu. ft.	**Qty/plt:** 57
Item: 65-2060	**Size:** 3.8 cu. ft. Comp.	**Qty/plt:** 30





PRO-MIX

PRO-MIX® HPCC Mixes - High Porosity & Chunk Coir

Features and Benefits

- Small to medium particle range consisting of short-fibered peat and horticultural grade perlite
- High moisture retention
- For plug trays (512 and larger cells) and open-seeded trays
- Easy filling of plug trays
- Require less frequent watering than peat/perlite plug mixes
- Contains slightly higher fertilizer than FPX for growers wanting high fertilizer content
- Seedling rootball holds together better at transplanting than peat/perlite germination mixes
- Greater frequency of dry-down periods (compared to general purpose peat-based mixes)
- Grower can more easily leach fertilizer salts during crop cycle
- Difficult to over-water
- Well suited for undesirable, year-round weather conditions

PRO-MIX® BX Mixes - General Purpose

Features and Benefits

- Traditional peat-based growing medium with perlite
- Contains starter nutrients and pH adjuster
- Multi-purpose, general-purpose mix for transplanting a wide variety of plants species
- Ideal for the production of vegetable transplants in large cell trays
- This product answers the needs of most growing applications
- Light-weight, low bulk-density
- High water-holding capacity

Contact our office for direct ship truckloads. Most mixes are available in Mini-bulk & Mega-bale deliveries. Contact our office for details.

PRO-MIX® HPCC AGTIV REACH®

Lightweight, high-porosity peat-based growing medium that contains chunk coir and perlite. It ensures optimum growth, especially when high air capacity and extra drainage are required. It is ideal for water-sensitive crops, rooting cuttings and/or low-light growing conditions. The added benefit of Mycorrhizae allows plants better access to nutrients and water for overall improved plant growth. Mycorrhizae expand root system growth, enhance nutrient & water uptake and increase tolerance to abiotic stresses.

Item: 94-1160 **Size:** 2.8 cu. ft. Loose **Qty/plt:** 57
Item: 65-2050 **Size:** 3.8 cu. ft. Comp. **Qty/plt:** 30

PRO-MIX® HPCC BIOFUNGICIDE™ + MYCORRHIZAE™

Combining BIOFUNGICIDE™ and Mycorrhizae provides plants the benefits of reducing incidence of plant root diseases (Fusarium, Pythium and Rhizoctonia) and risk of pathogens that developing resistance to chemical fungicides. It also expands root system growth, enhances nutrient & water uptake for overall improved plant growth.

Item: 94-1165 **Size:** 2.8 cu. ft. Loose **Qty/plt:** 57
Item: 65-2080 **Size:** 3.8 cu. ft. Comp. **Qty/plt:** 30

PRO-MIX® BX

PRO-MIX® BX is the solution for growers seeking to benefit from perlite's drainage and aeration properties. Combined with high-quality fibrous peat moss, this formulation is ideal for growers looking for a general purpose medium which creates a well-balanced root environment.

Item: 710B3 **Size:** 2.8 cu. ft. Loose **Qty/plt:** 57
Item: 65-2005 **Size:** 3.8 cu. ft. Comp. **Qty/plt:** 30

PRO-MIX® BX AGTIV REACH®

The added benefit of Mycorrhizae allows plants better access to nutrients and water for overall improved plant growth. Mycorrhizae expand root system growth, enhance nutrient & water uptake and increase tolerance to abiotic stresses.

Item: 94-1152 **Size:** 2.8 cu. ft. Loose **Qty/plt:** 57
Item: 65-2015 **Size:** 3.8 cu. ft. Comp. **Qty/plt:** 30

PRO-MIX® BX BIOFUNGICIDE™ + MYCORRHIZAE™

Combining BIOFUNGICIDE™ and Mycorrhizae provides the benefits of reducing incidence of certain plant root diseases (Fusarium, Pythium and Rhizoctonia) and the risk of pathogens developing resistance to chemical fungicides. It also expands root system growth, enhances nutrient & water uptake for overall improved plant growth.

Item: 94-1140 **Size:** 2.8 cu. ft. Loose **Qty/plt:** 57
Item: 65-2017 **Size:** 3.8 cu. ft. Comp. **Qty/plt:** 30

PRO-MIX

eco one®

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PRO-MIX® CX

PRO-MIX® CX is a 100% coco-based growing media. With a unique blend of coir fiber and coir pith, it offers optimal water-holding capacity and porosity. Tailored for growers seeking precise control, its specialized formulation ensures an ideal environment for crop development.

Also available in plant-based packaging, offering increased breathability compared to traditional plastic.

Features and Benefits

- OMRI listed
- Special blend of coir pith and coir chunk
- Air-filled porosity for your high-value crops.
- Precut holes on each corner to easily insert your dripping system resulting in a quicker expansion and more effective watering.
- Preformed center hole creates an opening upon expansion for easier and faster transplantation.
- pH Range: 5.5 - 7.0
- EC: < 0.5 mmhos/cm
- Water Holding Capacity: 50 - 70%* (5.5 - 6.5 l/kg)

Item #	Volume	Compressed Size	Expanded Size	Per Pallet
94-1310	1 gal.	CM: 14.3 x 14.3 x 2.8 Inches: 5.6 x 5.6 x 1.1	CM: 15 x 15 x 15 Inches: 5.9 x 5.9 x 5.9	2721
94-1311	2 gal.	CM: 19.5 x 19.5 x 4 Inches: 7.7 x 7.7 x 1.6	CM: 21 x 21 x 17 Inches: 8.3 x 8.3 x 6.7	1240
94-1312	3 gal.	CM: 23.5 x 23.5 x 4.5 Inches: 9.3 x 9.3 x 1.8	CM: 25 x 25 x 18 Inches: 9.8 x 9.8 x 7.1	800
94-1313	5 gal.	CM: 27.5 x 27.5 x 5.5 Inches: 10.8 x 10.8 x 2.2	CM: 30 x 30 x 21 Inches: 11.8 x 11.8 x 8.3	524

Coco Fiber Based Bag

A innovative plant-based packaging solution made from coco fiber, natural latex and plant-based ink, providing greater breathability than traditional plastic.

Item #	Volume	Compressed Size	Expanded Size	Per Pallet
94-1318	1 gal.	CM: 14.3 x 14.3 x 2.8 Inches: 5.6 x 5.6 x 1.1	CM: 15 x 15 x 15 Inches: 5.9 x 5.9 x 5.9	2721
94-1319	2 gal.	CM: 19.5 x 19.5 x 4 Inches: 7.7 x 7.7 x 1.6	CM: 21 x 21 x 17 Inches: 8.3 x 8.3 x 6.7	1240



PRO-MIX® CCX AGTIV REACH®

PRO-MIX® CCX AGTIV REACH® is a 100% coco-coir-based growing media. This blend combines premium coir pith and coir chunks, offering a solution that excels in both water retention and air porosity. This formulation is the ideal choice for cultivating a wide array of plants. It is ideal for water-sensite crops, rooting cutting and/or low-light growing conditions. PRO-MIX® CCX AGTIV REACH® contains a beneficial endomycorrhizae that improves plant growth.

Features and Benefits

- Suitable for organic use
- Stable pH (5.5 - 7.0)
- Low EC (0.7 <mmhos/cm)
- Optimizes crop growth and minimizes nutrient and water loss.
- Ensures that plants have a consistent water supply, which is essential for robust plant development

Item: 94-1303 **Size:** 50L **Qty/plt:** 88



PRO-MIX® CPX AGTIV REACH®

PRO-MIX® CPX AGTIV REACH® is a 70/30 coco coir and perlite growing media. This blend combines premium coir pith and coir chunks with horticultural-grade perlite, creating a lightweight solution with high porosity properties. The integration of perlite facilitates rapid dry back, allowing frequent watering and feeding without risking root-zone oversaturation. This formulation is ideal for water-sensitive crops, rooting cuttings and/or low-light growing conditions. PRO-MIX® CPX AGTIV REACH® contains a beneficial endomycorrhizae that improves plant growth.

Features and Benefits

- Suitable for organic use
- Stable pH (5.5 - 7.0)
- Low EC (0.7 <mmhos/cm)
- Promote root system health by increasing aeration and drainage.
- Allows for heavy feeding without the risk of overwatering, ensuring optimal nutrient availability and promoting robust root growth

Item: 94-1304 **Size:** 50L **Qty/plt:** 88


FOXFARM
SOIL & FERTILIZER COMPANY
POTTING SOILS
ENJOY THE PROCESS
LOVE YOUR PLANTS
REAP THE HARVEST
– SINCE 1984 –
FOXFARM
SOIL & FERTILIZER COMPANY
OCEAN FOREST
READY TO USE
"A UNIQUE BLEND OF GOOD THINGS FROM THE EARTH & SEA"
POTTING SOIL
— CONTAINS —
EARTHWORM CASTINGS AND BAT GUANO
Bring Your Plants to Life!
1.5 CUBIC FT (38.5 DRY QUARTS) 42.4 LITERS
FOXFARM
SOIL & FERTILIZER COMPANY
HAPPY FROG
POTTING SOIL
Contains Mycorrhizae and Humic Acids
READY TO USE
FOR
INDOOR & OUTDOOR PLANTS
Jump Start Your Garden!
2 CU FT (51.4 DRY QT) 56.6 L
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RIOCOCO WORLDWIDE

Riococo is the world's largest single-origin coco coir manufacturer, vertically integrated from farm to door and trusted in over 65 countries. With over 21 years in business, we serve leading growers across the CEA industry with consistent, high-performance coco coir solutions from propagation to final flower through our full range of bags, slabs, blocks, planks, discs, and loose fill products.





PCM OPEN TOP BAG

Higher Aeriation - Uniform WHC - Optimal pH
Super Washed & Heat Sterilized

Item #	Description	Size
150-1301	PCMX 1 Gal OTB Bulk	2928/plt
150-1302	PCMX 2 Gal OTB Bulk	1300/plt



STARTER BLOCKS

Higher Aeriation - Uniform
WHC - Optimal pH
Super Washed &
Heat Sterilized

Item #	Description	Size
150-1503	Starter Blocks 10cmx10cmx10cm (4inx4inx4in)	160/cs



PLANT!T OPEN TOP BAG

Higher WHC - Perfect pH Range
Washed

Item #	Description	Size
150-1303	Plant!t Yelloe 1 Gal OTB Bulk	2928/plt
150-1304	Plant!t Yelloe 2 Gal OTB Bulk	1300/plt







pH Pen (A)

The Bluelab hand held pH pen provides a compact, quick and handy way to manage the success of your crop to ensure maximum uptake of nutrients.

Item: 83-2701

Conductivity (EC/PPM) Pen (B)

The Bluelab Conductivity Pen can read EC, PPM and temperature of water solutions.

Item: 83-2702

Multimedia pH Meter (C)

Accurately measure and monitor pH levels in solution or in a wide range of media. Combine the Multimedia pH Meter and Leap™ pH Probe to take fast accurate measurements.

Item	Description
83-2774	Multimedia pH Meter
83-2776	Leap™ Replacement Probe

Combo Meter Plus (D)

Measures pH, conductivity and temperature in one portable handheld meter. This all-in-one, convenient portable solution for accurate measurement of pH in soil or nutrient solutions. Conductivity (EC) and temperature of solutions. This battery-powered, lightweight unit can be used anywhere, anytime to measure critical parameters related to healthy plant growth. The new Bluelab Leap pH probe included, also allows fast and accurate pH measurements direct from the root zone in a wide range of growing media including soil, coco coir, potting mixes and nutrient solution - no more pH slurries or extraction mixes.

Item	Description
83-2777	Combo Plus Meter
83-2776	Leap Spear-Tip Probe

Guardian Monitor (E)

Provides 24 hour continuous reading for pH, conductivity (EC/PPM) and temperature within a nutrient solution in hydroponics and other systems. Connect monitors has alarm notification and wireless data logging.

Item	Description
83-2772	Guardian Inline pH Probe

Combo Meter EC (F)

Measures pH, conductivity (EC) and temperature on the go. Brilliantly simple design that's easy to use, clean and calibrate for solution measurements. Backlit display to capture every measurement with ease. Includes a pH Probe and Conductivity Probe to cover all your nutrient uptake fundamentals. 2-meter cable for measuring in hard-to-reach locations. Customise scales to your preference - conductivity in EC, CF, PPM 500 (TDS) or PPM 700; temperature in °C or °F.

Item: 83-2709

OnePen (G)

The Bluelab OnePen is a robust 3-in-1 tool for measuring pH, conductivity (EC/PPM), and temperature, optimizing nutrient uptake. Connect via Bluetooth for real-time sharing, updates, and comprehensive data management.

Item: 83-2707

Commercial Truncheon Meter

An EC meter built to last a lifetime – now on a bigger scale. Robust and reliable construction for long-lasting value. Fully waterproof; splash, submerge or sink - we've got you covered. Automatically detects liquids and bright LEDS indicate measurement for brilliantly simple functionality. Long-format design for mixing and measuring nutrient reservoirs simultaneously. No calibration required and easy to clean and disinfect. All conductivity scales included – EC, CF, PPM 500 (TDS), PPM 700. Industry-leading five-year warranty for peace of mind. Ideal for hydroponics.



Item: 83-2706

Pulse 3-1 Multimedia Meter

Allows growers to get fast, accurate temperature, moisture, and EC measurements directly from the root zone sent direct-to-mobile. Quickly and accurately spot-check moisture, conductivity and temperature. Wireless smartphone syncing meter.



Item: 83-2778

Calibration Solutions and Probe Care Kits pH & Conductivity



All the tools you need to care for Bluelab probes. The probe surface is where the instrument takes the reading of the solution or soil/media. If the probe face is dirty or contaminated, then the reading will be inaccurate. Accurate readings simplify crop management and provide improved growth.

Item #	BlueLab Calibration Solutions	Amt.
83-2751	pH 7.0 Calibration Solution	500 ml /16.9 fl oz.
83-2754	pH 7.0 Calibration Solution	250 ml /8.45 fl oz.
83-2752	pH 4.0 Calibration Solution	500 ml /16.9 fl oz.
83-2755	pH 4.0 Calibration Solution	250 ml /8.45 fl oz.
83-2753	EC 2.77 Conductivity Solution	500 ml /16.9 fl oz.
83-2756	EC 2.77 Conductivity Solution	250 ml /8.45 fl oz.
83-2758	KCL Storage Solution	120ml/4.05 fl oz.
83-2734	Probe Care Kit – Conductivity 2 sachet – EC 2.77, 1 plastic cups, conductivity probe cleaner, chamois	Each single use sachet – 20 ml /0.67 fl oz.
83-2736	Probe Care Kit – pH & Conductivity 2 sachet – pH 7.0, pH 4.0, KCL, EC 2.77 3 plastic cups, pH probe cleaner, conductivity probe cleaner, pH probe brush, chamois	Each single use sachet – 20 ml /0.67 fl oz.
83-2735	Probe Care Kit – pH 2 sachet – pH 7.0, pH 4.0, KCL , 3 plastic cups, pH probe clean-er, pH probe brush	Each single use sachet – 20 ml /0.67 fl oz.

SOLUTION SPOTLIGHT

BLUELAB ONEPEN

Accurate nutrient management starts with accurate measurements. The Bluelab OnePen combines pH, EC, and temperature monitoring into a single handheld device, allowing growers to quickly evaluate nutrient solutions, irrigation water, and runoff. Built with a replaceable probe, titanium electrodes, Bluetooth connectivity, and an IP68 waterproof design, the OnePen is engineered for the demands of commercial CEA production. Real-time data sharing through the Edenic app helps growers make informed decisions that optimize nutrient uptake, crop performance, and consistency.

CONTAINERS



Growscape produces high quality, plastic pots using different manufacturing methods to meet the needs of cannabis and hemp growers. With options for outdoor production to full-scale automation, your Griffin salesperson can help you choose the perfect pot to bring you the features to keep your team moving and maintain your profitability. Choose from injection molded, thermoformed, co-extruded, or blow molded options in sizes ranging from 4” to 20 gallons.

2026
2027





GROWSCAPE

Injection molded

Injection molded pots are considered a premium container, generally providing more strength and durability. Injection containers are manufactured with thick walls and heavy bottom construction, featuring large bottom or side drain holes ideal for outdoor irrigation. Injection containers are automation friendly for pot filling and pot handling equipment. These pots are durable enough for reuse.

Blow molded

Blow mold pots are more economical than injection molded pots and present an easy way to reduce input costs. Many feature ribbed sides for additional strength, sturdy corners to avoid cracking, and a wide base for additional stability when relocating plants in your operation. They feature bottom or high/low side drainage, – depending on your irrigation practices. Blow molded are not suited for automated equipment because they don’t de-nest well. One big advantage of blow molded pots over injection molded pots is size options – these are available in sizes up to 65 gallons. Blow molded pots may be reused.

Thermoformed and co-extruded

Thermoformed and co-extruded pots are single use containers and the most economical choice. Best suited for shorter crop cycles, these pots do offer adequate strength for crops that do not require frequent handling. These pots are automation friendly and available in different colors. Co-extruded pots can be produced with black on the inside and a different color on the outside. White/black pots are a popular choice to reduce heat load on the root zone, while still protecting the root zone from heat. These are smaller pots, generally from 3-6 inch.



Item #	Description	★	»	Type	Vendor #	Volume	Top diameter (in)	Height (in)	Qty
51-10120	ITML 1001 2.00 G Trade			BM	AMK10010	1.90 g	9.50	8.62	50/slv 5,400/plt
51-10116	ITML 1200 3 G True			BM	AMK12000	3.00 gal	11.00	9.62	50/slv 3,000/plt
51-10092	ITML Elite 300 1.0 G Trade			BM	BM.03000	3.00 qt	6.50	7.00	65/slv 10,920/plt
51-10090	ITML Elite 400 1 G True			BM	BM.04000	1.00 gal	7.50	7.25	75/slv 10,125/plt
51-10119	ITML Whiteridge 7 G Trade			BM	BW.00075	6.49 gal	13.75	12.00	28/sleeve 1,008/plt
IBW008	ITML Whiteridge 7 G Trade		•	BM	BW.00075	6.49 gal	13.75	12.00	1,008/plt
51-10118	ITML Whiteridge 5.0 G True Whiteridge Squat, Side drain			BM	BWS00055	5.01 gal	14.00	9.30	28/sleeve 1,008/plt
45-8619TB	Dillen 19CM Tall Euro Black			COEX	EU190T51	1.00 gal	7.50	7.37	7,560/plt
51-10127	1.0 G Trade Squat, Bottom drain			INJ	NRS0T1G0	2.50 qt	6.50	6.13	8,850
51-10128	1.0 G Trade, Bottom drain			INJ	NRT0T1G3	2.88 qt	6.50	7.00	8,000
51-10122	2.0 G Trade, Bottom drain			INJ	NSB002G0	1.72 gal	9.00	8.56	50/sleeve 2,700/plt
51-10121	1.0 G Trade, Side drain			INJ	NSR001G0	2.90 qt	6.50	7.00	25/sleeve 1475/plt
51-10131	1.0 G Trade Side Drain			INJ	NSR001G0	2.90 qt	6.50	7.00	6,500/plt
51-10133	3.0 G Trade, Side Drain			INJ	NSR003G0	2.62 gal	10.50	8.87	1,400/bulk plt
51-10123	3.0 G Trade, Side drain	•		INJ	NSR003G0	2.62 gal	10.5	8.87	25/sleeve 1,400/bulk plt
51-10125	5.0 G Squat, Side drain	•		INJ	NSS005G2	3.75 gal	11.88	10.00	30/sleeve 960/plt
51-10135	5.0 G Squat, Side Drain			INJ	NSS005G2	3.75 gal	11.88	10.00	960/plt
51-10126	7.0 G Trade Squat, Side Drain			INJ	NSS007G0	7.28 gal	15.00	11.75	50/sleeve 540/plt
51-10136	7.0 G Squat, Side Drain			INJ	NSS007G0	7.28 gal	15.00	11.75	540
51-10102	1.0 G True Thermo		•	TF	TFT001G0	1.00 gal	7.87	7.25	5,250
51-10105	2.0 G True Thermo		•	TF	TFT002G0	2.00 gal	9.50	9.25	3,500
53-2012	Dillen 3.25" Square Deep			VF	SVP03250	1.0 pt	3.25	3.62	1,200/cs
53-2018	Dillen 4.5 Square Deep			VF	SVP0450D	1.2 qt	4.12	5.0	375/cs

BM = blow molded, **COEX** = coextruded, **INJ** = injection molded, **TF** = thermoformed, **VF** = vacuum formed

★ = Retail Store Best Seller » = Drop-Ship Item





Nursery Supplies®
A CREO COMPANY

Nursery Supplies – Leading manufacturer of large containers used for larger crops with longer crop times (perennials, shrubs and trees) with products extremely well suited to cannabis and hemp. Full assortment of pot sizes (up to 260 gal) and styles (blow molded, injection molded, thermoformed) with features that make handling large pots easier (Grip-Lip, Econo-Grip, rope handles). Pot-in-Pot and Above-Ground-Systems prevent pots from tipping when grown in the field.

True, trade or squat?

Nursery pots use a language all their own. Over time, growers have become more effective and efficient, learning that slightly smaller pots will still provide the support plants need, but afford a higher density of production when crops are pot tight, and pot volumes evolved to fit the market needs.

True – the pot volume matches the description, i.e., a 3-gal true pot holds 3 gallons of media

Trade – these pots hold smaller volumes of media compared to true counterparts

Squat – these pots are shorter than true counterparts and are less likely to tip. They often hold a smaller volume of media than a true style pot.

Always ask for the pot volume and dimensions of nursery containers so that you understand the pot you are purchasing.

Carry trays

Efficiency is key when it comes to being profitable. Any crop grown in a pot will eventually need to be moved. Carry trays speed handing, generally allowing six or more pots to be handled at once. Carry trays can also help staff properly space pots in production, and they are essential for cultivators selling hemp or cannabis teens.

Press-Fill

Streamline loading smaller pots into trays with the Press-Fill system. Specially designed trays are simply inverted over the cased pots. Apply pressure to lock pots in place. Saves up to 75% in labor time and costs.

Above-Ground-System

Dual pot system for above ground growing. AGS pot provides a stable base to hold the potted plant to prevent tipping in the field.

Pot-in-Pot

For in ground growing, pair up an NSI Grip-Lip pot for the outside, socket pot with an NSI Econo-Grip pot as a liner pot. Dual pot use saves time, saves money, and prevents blow downs. Since the pots are in the ground, the temperature of the root system is moderated, while the fertility and moisture levels are managed by the grower.

Nursery Supplies®
A CREO COMPANY

ROUND POTS







Item #	Type	★	»	Description
41PT300C	BM			NSI 300C Trade 1 gal, 6.5”x7.25”, 0.75 gal, 100/stk
41PT300SCN2	BM			NSI 300SC Trade 1 gal squat, 6.5”x6.5”, 0.63 gal, 106/stk
41PT400CN2	BM	•		NSI 400C True 1 gal, 7.75x7”, 1 gal, 92/stk
41600CN2	BM			NSI 600C Trade 2 gal, 9”x8.5”, 1.5 gal, 105/stk
52-3565	PF			NSI PF600 Trade 2 gal, 8.5”x8.5”, 1.5 gal, 90/stk
41PT900CN2	BM			NSI 900C Trade 2 gal, 9.5”x9.1”, 1.94 gal, 83/stk
52-1577	BM			NSI 1000C Trade 2 gal squat, 10.1”x7.5”, 1.95 gal, 75/stk
52-2102S	IM			NSI PC-2 Trade 2 gal, 8.4”x8.4”, 1.8 gal, 61/stk
52-2102T	IM		•	NSI PC-2 Trade 2 gal, 8.4”x8.4”, 1.8 gal, 3660/tower
41PT1200CN3	BM	•		NSI 1200C True 3 gal, 11”x9.5”, 3 gal, 56/stk
41PT1200CTN2	BM			NSI 1200C True 3 gal, 11”x9.5”, 3 gal, 1792/tower
41PT1200GL	BM			NSI GL1200 Trade 3 gal Grip Lip, 9.6”x9.5”, 2.7 gal, 44/stk
41PT1200EG	BM			NSI EG1200 Trade 3 gal Econo Grip, 9/6”x9.5”, 2.7 gal, 44/stk
52-11651	IM			NSI Polytainer Trade 5 gal squat, 11”x9.9”, 3.6 gal, 35/stk
52-35810	IM		•	NSI NS 5S Trade 5 gal squat, 11.25”x9.9”, 3.6 gal, 41/stk
52-35801	BM	•		NSI 2000C Trade 5 gal, 11.9”x11”, 3.8 gal, 44/stk
41PT2100CN	BM			NSI 2100C Trade 5 gal squat, 14”x9.9”, 5.2 gal, 31/stk
52-2106S	IM			NSI PC-5S Trade 5 gal squat, 10.75”x10.5”, 4.1 gal, 42/stk
41PT2800CN	BM			NSI 2800C Trade 7 gal, 14”x11.5”, 6.1 gal, 31/stk
52-1290	BM			NSI GL2800 Trade 7 gal Grip Lip, 13.75”x12”, 6.1 gal, 40/stk
52-1689	BM			NSI EG2800 Trade 7 gal Econo Grip, 13.75”x12”, 6.1 gal, 20/stk
41PT6900BN2	BM			NSI GL6900 Trade 15 gal Grip Lip, 17.25”x15.1”, 13.2 gal, 17/stk
41PT6900EGN2	BM			NSI EG6900 Trade 15 gal Econo Grip, 17.25”x15.1”, 13.2 gal, 17/stk
41PT10000BT	BM			NIS GL10000 Trade 25 gal Grip Lip, 22.75”x18.1”, 27.6 gal, 150/tower
41PT1000EGT	BM			NSI EG10000 Trade 25 gal Econo Grip, 22.75”x18.1”, 27.6 gal, 150/tower
52-1010	BM			NSI Above Ground System AGS2800, for Trade 7 gal, 9/stk
52-1015	BM			NSI Above Ground System AGS6900, for Trade 15 gal, 6/stk

BM = blow molded, **PF** = pressure formed, **IM** = injection molded



★ = Retail Store Best Seller » = Drop-Ship Item





T.O. PLASTICS
HORTICULTURE

Choosing a propagation tray

Many factors influence the choice of a propagation tray. Three important considerations are the propagation method being used (seed vs. cutting), the type of root system (fibrous vs taproot), and where the transplant will go (greenhouse, warehouse, or field). Lettuce and herbs have more fibrous root systems and do well in smaller, shallower cells. On the other hand, hemp and cannabis grown from seed will produce a tap root that requires a deep cell for proper development. Young plants going into a 4" or smaller pot can start life in smaller cells, such as a 128-count tray. Field transplants will benefit from larger root volumes offered by deeper trays with smaller tray counts. 72 and 50 count trays are popular choices can also work for both applications, with deeper versions for field transplants. Consider a 38 or lower count tray for field transplants, too.

Choosing a flat

Tiered production without solid shelving or ebb-flo inserts calls for a no-hole flat to avoid drips onto the tier below. Whenever possible, choose a flat with drain holes to avoid keeping the media saturated during propagation. New roots need oxygen, which is not available to plants when media is saturated.



CEA SOLUTION SPOTLIGHT

Item #	★	»	Description
Propagation Trays			
59-50701			TO Plastics 200 cell plug tray, 2.1", 50/cs
59-5040			TO Plastics 128 cell plug tray, 2", 100/cs
59-5035			TO Plastics 98 cell plug tray, 2", 100/cs
59-5030	•		TO Plastics 72 cell plug tray, sq, 2.25", 100/cs
59-5091			TO Plastics 72 Star 3.0 Deep Plug Tray, vent holes, 50/cs
59-5090			TO Plastics 105 Hex Plug Tray, 100/cs
59-5232			TO Plastics 32 Star Deep Plug Tray, 50/cs
59-50551			TO Plastics 288 Plug Tray, 1.25" deep, 50/cs
59-5025	•		TO Plastics 50 cell plug tray, sq, 2.37", 100/cs
59-720700			TO Plastics 50 cell Deep SureRoots plug tray, 5", 25/cs
59-720720			TO Plastics 15 cell SureRoots plug tray, 4.59", 25/cs
59-720715			TO Plastics 15 cell heavy weight SureRoots tray, 11.66", 25/cs
Flats and Carry Trays			
59-3170			TO Plastics 1020 standard vacuum flat, 100/cs
59-3175	•		TO Plastics 1020 no hole vacuum flat, 100/cs
53-1310			ITML 1020 no hole flat, 100/cs
59-3330			TO Plastics Germination Flat, Black, 100/cs
59-3331			TO Plastics Germination Flat, no holes, 100/cs
59-3195	•		TO Plastics 1020 no hole triple weight, 50/cs
53-3325			Dillen 1020 Light weight web flat, 50/cs
73S1020ID		•	ITML Daisy 1020 Web flat, 50/bdl
53-3335			Dllen 1020 Heavy weight web flat, 50/cs
53-3277			Dillen 6.5" Carryall tray, 25/cs
Inserts			
59-3135			TO Plastics 1801 Deep Sheet pots, 3.5", 50/cs
53-9055		•	Dillen D801 microgreen insert, 7200/plt
Humidity Dome			
80880141			Mondi dome , 7" mini greenhouse
59-5136			TO Plastics 1020 Tall Clear Dome, 25/cs
59-5135			TO Plastics 1020 Clear Dome, 50/cs

★ = Retail Store Best Seller » = Drop-Ship Item

NUTRIENTS & FERTILIZERS



SLOW RELEASE NUTRIENTS



2026
2027

Suståne 4-6-4 All-Purpose Slow Release Fertilizer

All-purpose, non-coated slow release granular fertilizer. Suståne 4-6-4 is a natural organic starter and maintenance fertilizer that works by replenishing the soil with a rich supply of humus and the essential nutrients required for sound, long-term fertility programs.

Suståne 8-2-4 All Natural Slow Release Nitrogen Fertilizer

All natural, non-coated, slow release granular nitrogen fertilizer. Suståne 8-2-4 provides 6 - 12 weeks of nitrogen in the organic slow release form. Suståne replenishes the soil with a rich supply of humus (stabilized organic matter) and all of the essential nutrients required for quality growth. Suståne 8-2-4 All Natural provides a combination of plant nutrients and organic substances derived from biologically stable compost plus natural sulfate of potash and feather meal.

Suståne 8-4-4 All Natural

All natural, non-coated slow release granular fertilizer Suståne 8-4-4 is ideal for the production of herbs and vegetables and is an effective foundation for cannabis and hemp. When used in containers, the nutrient release profile is 45 days. Suståne 8-4-4 is composed of aerobically composted turkey litter, hydrolyzed feather meal, and sulfate of potash.

Suståne 12-0-1 Hi N WDF

High nitrogen content in an organic, water dispersible formulation. Suitable for use in hydroponic systems and greenhouse fertigation. Additional uses as in furrow starter fertilizer, foliar feed, and turf fertilizer. May require pre-filtering to prevent clogging of small-bore emitters. Rates: 1-3 lb per 100 gal.

Suståne 16-4-8

Suståne's 16-4-8 was developed as a combination of slow release and controlled release fertilizer to provide longer crops with a time released nutrient package. Suståne 16-4-8 is a good choice for production of cannabis and hemp. Suståne 16-4-8 Nursery Fertilizer is derived from aerobically composted turkey litter, polymer coated urea, polymer coated MAP, and polymer coated potassium nitrate.

Suståne All-Organic 21-gram Feeder Paks & Compost Tea Bags

Suståne 4-6-4 in water permeable sachets. Steep overnight, 1 sachet per gallon water, to create a compost tea to provide nutrition and beneficial microbes.

Item	Description	Qty
67-30201	4-6-4 All-Purpose 50 lb. Granular Medium Grade OMRI	1
67-30565	8-2-4 All-Natural Organic 50 lb. Granular Medium Grade OMRI	1
67-50551	16-4-8, 120 Day, 50 lb. Granular Organic Fertilizer & CRF	1
80950005	Compost Tea Bag 4-6-4 (21 GM) OMRI	12
67-30569	8-4-4, 45 Day 50 lb. Container Grade, Med/Fine OMRI	1
67-552001	12-0-1 Hi N WDF 1 lb. Jar OMRI	1
67-552003	12-0-1 Hi N WDF 6 lb. Jar OMRI	1
67-552011	12-0-1 Hi N WDF 20 lb. Pail OMRI	1











All Purpose Dry Fertilizer

Happy Frog All-Purpose Fertilizer is a ready-to-use blend of natural fertilizers and microorganisms that deliver nutrition where your plants need it most. Highly recommended for vegetable gardens, annual and perennial flower gardens, ornamental plantings, and all types of container gardening.

Tomato & Vegetable Dry Fertilizer

This fertilizer also contains calcium which helps prevent blossom end rot and builds stronger cell walls, boosting the plants ability to resist disease. Mycorrhizal fungi are included to help increase root efficiency, which may enhance nutrient uptake and water absorption.

Big Bloom Liquid Concentrate

Big Bloom® Liquid Plant Food is a carefully selected blend of fertilizers formulated to support multiple blooms and seed formations. This liquid plant food supplies nutrients that your plants can access immediately. Big Bloom® contains bat guano and earthworm castings. Bat guano has been used for centuries as a fertilizer for all kinds of plants. Combined with earthworm castings they create a nutrient-rich mix that can help your plants thrive.

Grow Big Liquid Concentrate

Get your garden going with Grow Big®, our liquid concentrate fertilizer for lush vegetative growth. Our special brew is designed to enhance plant size and structure, allowing for more abundant fruit, flower and bud development. It is formulated with a low pH to maintain stability in storage and keep micronutrients available.

Tiger Bloom Liquid Concentrate

Tiger Bloom Fertilizer uses a powerful mix of key nutrients to encourage abundant fruit, flower, and bud development.This concentrated liquid fertilizer is formulated with high phosphorus and plenty of nitrogen, as well as low pH to maintain micro-nutrients and longevity in storage. For use in both hydroponic and soil applications, start using 2-3 teaspoons mixed with a gallon of water at the first signs of flowering.

Dirty Dozen® Starter Kit

The Dirty Dozen® Starter Kit includes twelve liquid nutrients and soluble fertilizers. Nine pints of nutrients from their base series and their industry-favorite Bush Doctor line and three 6oz tubs of their organic granulated growth-enhancing amendments, all in one place!

Trio Pack - Big Bloom Grow Big Tiger Bloom

Put it all together! Our customers asked for a three-pack of their favorite liquid fertilizers, and here it is: Big Bloom, Grow Big, and Tiger Bloom, together at last. Designed to work together to support vigorous growth, multiple bud development and abundant fruit.

Item #	Description	Size	CS/UOS
82000066	Happy Frog All Purpose	50 lb	1/1
82000064	Happy Frog Tomato & Vegetable	50 lb	1/1
82000108	Big Bloom Liquid Concentrate	1 pt	120/12
82000068	Big Bloom Liquid Concentrate	1 qt	48/12
82000095	Big Bloom Liquid Concentrate	1 gal	45/4
82000109	Grow Big Liquid Concentrate	1 pt	120/12
82000069	Grow Big Liquid Concentrate	1 qt	48/12
82000075	Grow Big Liquid Concentrate	1 gal	45/4
82000111	Tiger Bloom Liquid Concentrate	1 pt	120/12
82000071	Tiger Bloom Liquid Concentrate	1 qt	48/12
8200077	Tiger Bloom Liquid Concentrate	1 gal	4/4
82000080	Tiger Bloom Liquid Concentrate	5 gal	1/1
82000110	Grow Big Hydroponic Liquid Concentrate	1 pt	120/12
82000039	Dirty Dozen Starter Kit (3 - 6 oz solubles)	9 pt	48/2
82000212	Bushdoctor Cal-Mag	1 qt	48/12

Item #	Description	Size	CS/UOS
82000100	Big Bloom Grow Big Tiger Bloom (Trio Pack)	1 qt	48/4
82000107	Big Bloom Grow Big Hydro Tiger Bloom (Trio Pack)	1 qt	48/4
82000008	Open Sesame Soluble Pail	15 lb	1/1
82000054	Cha Ching Soluble Pail	15 lb	1/1
82000055	Beastie Bloomz Soluble Pail	15 lb	1/1

Crown Jewels® Bloom 1-4-2

Crown Jewels Bloom with 11% Calcium delivers a 1-4-2 nutrient blend designed to support strong flowering and fruiting in home and landscape applications. Crafted with a mix of unique and traditional fertilizing ingredients, micronized to ensure fast, even nutrient distribution and consistent results. Ideal for top-dressing, soil amending, or brewing actively aerated teas. OMRI listed and CDFA OIM approved for organic crop production.



Crown Jewels® Grow 3-2-2

Crown Jewels Grow delivers a 3-2-2 nutrient blend with 8% Calcium formulated to promote vigorous vegetative growth. Crafted with a micronized mix of unique and traditional fertilizing ingredients, it supports strong plant structure and vibrant foliage in houseplants and home gardens. Ideal for soil amending, top-dressing, or brewing actively aerated teas. OMRI listed and CDFA OIM approved for organic crop production.





Crown Jewels® Imperial Boost 0-15-11

Crown Jewels Imperial Boost 0-15-11 is a truly unique, next-generation bloom booster formulated with high phosphorus, potassium, and 17% Calcium formulated to enhance flower size, density, and quality. Featuring a fine texture for excellent solubility, it can be top-dressed or brewed into nutrient teas. OMRI listed and CDFA OIM approved for organic crop production, a perfect supplement for all types of nutrient programs.

Item	Description	Qty/case
82580012	Crown Jewels Grow 5LB Case	8
82580015	Crown Jewels Grow 40LB Bag	1
82580017	Crown Jewels Bloom 5LB Case	8
82580018	Crown Jewels Bloom 10LB Case	4
82580020	Crown Jewels Bloom 40LB Bag	1
82580022	Crown Jewels Imperial Boost 5LB Case	8
82580023	Crown Jewels Imperial Boost 10LB Case	4
82580024	Crown Jewels Imperial Boost 20LB Case	2
82580025	Crown Jewels All Purpose 5LB Case	8
82580026	Crown Jewels All Purpose 10LB Case	4
82580028	Crown Jewels 40LB Bag	1
82580070	Crown Jewels Grow 1LB	30
82580071	Crown Jewels Bloom 1LB	30
82580072	Crown Jewels Imperial Boost 1LB	30



BIOTA® NUTRI

Biota Nutri develops, produces, and distributes organic fertilizers for agriculture and horticulture. They are constantly conducting research and development in the field of recovering nutrients from plant-based residual streams. This helps create a world in which circular and organic cultivation is accessible to everyone.



BIOTA NITRO V2

A 10% ammoniacal nitrogen fertilizer in organic form that feeds both the plant and soil life. The nitrogen in Biota consists mainly of peptides and amino acids. Biota Nitro is a high-nitrogen organic solution to meet the demands of high-quality CEA crops.

Biota Phos 8%

Biota Phos 8% is unique because it is the highest concentration liquid organic single nutrient fertilizer on the market. Due to the unique production process, the nutrients are 100% present in solution and can therefore be taken up directly by the plant. The product is fully made from plant-based materials and approved for use in organic agri- and horticulture. The ingredients are partly sourced from agricultural waste. Due to the natural origin the nutrient content may vary.

Biota Kalium 15%

Biota Kalium 15% is unique because it is the highest concentration liquid organic sole potassium fertilizer on the market. Due to the unique production process, the nutrients are 100% present in solution and can therefore be taken up directly by the plant. The product is fully made from plant-based materials and approved for use in organic agri- and horticulture.

Biota Calcium 8%

Biota Calcium is unique because it is highly concentrated and suitable for use in organic production. It prevents and corrects calcium deficiencies in a wide range of crops. Due to the unique production process, the nutrients are 100% present in solution and can therefore be taken up directly by the plant through foliar application as well as irrigation.

Biota NK 3-0-9

Biota NK 3-0-9 provides its nitrogen 100% in the form of nitrate. It's derived from mined substances, which means it contains no animal content. The high potassium concentration gives your crops a higher fruit quality, while the nitrate source improves yield and gives the crop an extra boost.

Biota Trace

Biota Trace contains all the necessary trace elements for a good basis for every crop.For sensitive plants Biota Trace prevents a shortage of trace elements in the soil, which helps preventing defects. Because of its composition, Biota Trace can be used in combination with almost all other fertilizers. In case of foliar fertilization, test spraying is recommended.

Biota Iron Powder 13%

Biota Iron Powder is an iron micronutrient supplement. It is organically stabilized and is a great iron source for any crop. The product is easily soluble, very stable in solution across a wide range of pHs, easily absorbable by the plant, and suitable for all modern irrigation systems.

Item	Description
Single Element Fertilizers	
68-0000	Biota Nitro 2021 V2 20L Can
68-0001	Biota Nitro 2021 V2 200L Drum
68-0002	Biota Nitro 2021 V2 1000L IBC Tote
68-0003	Biota Phos 8% 20L Can
68-0004	Biota Phos 8% Fertilizer 220L Drum
68-0005	Biota Phos 8% Fertilizer 1000L IBC Tote
68-0006	Biota Kalium 15% Fertilizer 20L Can
68-0007	Biota Kalium 15% Fertilizer 220L Drum
68-0008	Biota Kalium 15% Fertilizer 1000L IBC Tote
68-0009	Biota Calcium 8% Fertilizer 20L Can
68-0010	Biota Calcium 8% Fertilizer 220L Drum
68-0011	Biota Calcium 8% Fertilizer 1000L IBC Tote
Low Organic NPK's	
68-0012	Biota NK 3-0-9 Fertilizer 20L Can
68-0013	Biota NK 3-0-9 Fertilizer 220L Drum
68-0014	Biota NK 3-0-9 Fertilizer 1000L IBC Tote
Trace Elements	
68-0015	Biota Trace 20L Can
68-0018	Biota Iron Powder 13% 5kg

CROP NUTRITION -WSF

Jack's Nutrients Line



Soluble. Available. Consistent. Since 1947, these are the three words that you have come to expect when you open a bag of fertilizer made by the Peters' Family — and now, the master-crafters at Jack's introduce our small batch blends, Jack's Nutrients: Formulated to deliver complete nutrition, including highly available micronutrients perfectly proportioned for CEA crops.

FeED

The Jack's FeED line is comprised of complete nutrient formulations. Everything your plants need for each stage, from start to finish.

Part A 5-12-26

Improved "Part A" formula for general vegetative growing. Purely soluble and available nutrients to allow maximum flexibility. Specific balance of macro, secondary and micronutrients delivers an efficient combination of nutrients suitable for many different growing environments and crop types.

Clone 15-6-17

Like hitting the accelerator for your new plants - this formula will help promote strong and fast root growth and expansion. Best used for fertilizing young seedlings, transplants, clones and newly set rooted cuttings.

12-4-16

For the Purest in you. One part blend designed for crops grown in very low alkalinity waters, including reverse osmosis (RO). Formulated utilizing innovative raw materials to reduce pH crash while delivering all the nutrients essential for vigorous plant growth.

15-5-20

Prefer Tap Water? Allow your plants to drink up this formula designed to provide all the macro, secondary and micro nutrients in a one-part system. Specifically formulated for tap, city or well water types with low to moderate alkalinity. Includes extra soluble calcium, magnesium and the right balance of micronutrients.

Outdoor 18-8-23

Yep that's right, a nutrient blend specifically tailored for outdoor production. Potentially acidic formulation is designed to keep your pH in the desired range for optimum nutrient uptake. Plus, we've perfected the N:K_2O ratio and added a kick on Mg and S to hit the right balance so that your plants can thrive in the outdoor, sunlight rich environment.

UltraViolet 5-50-18

Get ready for a serious boost of available phosphorus. The primary goal of this formula is to assist in shutting down the strong vegetative growth stage of the plant and support a switch to the reproductive or flowering phase of plant and flower development.

Bloom 10-30-20

Need a Boost of Flower Power? Our 1:3:2 major nutrient ratio has been trusted by growers for over 70 years. This soluble and available nutrient combination stimulates blooming, resulting in heavy bud and fruit set.

Finish 7-15-30

You've always been told to finish strong. Formulated with very low nitrogen, high phosphorus and very high potassium to keep the whole plant happy to the end of its crop cycle.

Part A 0-12-26

Zero nitrogen formula delivers a proven ratio of P and K to achieve harvest goals. Designed to follow the Part A system of nutrient delivery. This purely soluble and available formula keeps secondary and micronutrients consistent at each feeding.

Low Phos Part A 6-6-26

A unique formula designed to deliver lower phosphorus levels into any growing program. Jack's Part A 6-6-26 will replace and/or complement any two part growing system paired with typical calcium content from our Jack's Part B by ensuring consistent N, K and micronutrient levels as you expect in our typical Part A 5-12-26.

Strawberry Part A 8-10-26

Designed to deliver targeted nutrition specific for Strawberry production. This unique formula combines specific macro, secondary and micro nutrients at a low constant feed rate in complement with our Jack's Part B for the calcium source to achieve a complete two part system!

BOOST

The Jack's Boost line is all the little extras your plants may need. Do you need calcium, extra micros, or extra iron? These and more are found in the Jack's Boost Line.

Cal Nit Part B 15-0-0

An essential "Part B" provides a very soluble and available source of calcium in a two-part nutrient system. Contains very pure and completely available calcium and nitrate nitrogen nutrient sources.

Cal-Trate 15-0-0

A great formula for providing a boost of potassium and nitrogen along with a balanced micronutrient package. This formula can be used on all crops and is especially good for finishing crops off by providing elevated levels of potassium while keeping micronutrients on target at the end of a crop cycle.

K-Trate 14-5-38

A great formula for providing a boost of potassium and nitrogen along with a balanced micronutrient package. This formula can be used on all crops and is especially good for finishing crops off by providing elevated levels of potassium while keeping micronutrients on target at the end of a crop cycle.

Mag-Trate 10-0-0

Jack's 10-0-0 Mag-Trate LX is formulated to provide an extra boost of magnesium while supplying a balanced supply of micronutrients to almost any crop or nutrition program. Using Jack's Mag-Trate as a booster or as part of a regular fertility plan will provide the highest quality most soluble magnesium available in water solubles.

Jack's PROFESSIONAL®

High quality favorites for commercial growers.
Blended with micronutrients and made in the USA.

Jack's Nutrients Grower Products

Item	Description	Size
33-51226	Jacks Nutrients Part A 5-12-26	25 lb
33-15617	Jacks Nutrients Clone 15-6-17	25 lb
33-12416	Jacks Nutrients 12-4-16	25 lb
33-15520	Jacks Nutrients 15-5-20	25 lb
33-18823	Jacks Nutrients Outdoor 18-8-23	25 lb
33-103020	Jacks Nutrients Bloom 10-30-20	25 lb
33-55018	Jacks Nutrients UltraViolet 5-50-18	25 lb
33-71530	Jacks Nutrients Finish 7-15-30	25 lb
33-79080	Jacks Nutrients Part B 15-0-0	25 lb
33-79170	Jack's Cal-Trate 15-0-0	25 lb
JP14538	Jack's K-Trate 14-5-38	25 lb
JP1000	Jack's Mag-Trate 10-0-0	25 lb
33-51226C	Jacks Nutrients 5-12-26 Part A No Dye	25 lb
33-79230	Jacks Nutrients 0-12-26 Part A	25 lb
33-79210	Jacks Strawberry Part A 8-10-26	25 lb
91-21950	Jacks Elementals Potassium Bicarbonate	50 lb
33612	Jacks WSF 20-20-20 General Purpose Bag	25 lb
33-79220	Jacks Low Phos Part A 6-6-26	25 lb
J74621	Jacks Elementals Manganese Sulfate	25 lb
J745612	Jacks Elementals Boron 20.5% Solu-Bor	20 lb

Professional Grower Products

Item	Description	Size
33602	Jack's All Purpose LX 21-5-20	25 lb
33-150014	Jack's Dark Weather Peat-Lite 15-0-15	25 lb
33601	Jack's Ca+Mg LX 15-5-15	25 lb
J77680	Jack's Berry Special 25-9-17	25 lb
J77004	Jacks AG Grow & Bloom 15-20-28	25 lb

Jack's Nutrients Retail-Ready Products

Item	Description	Size	CS/UOS
80060046	Jacks Nutrients Part A 5-12-26	2.2 lb	6/6
80060064	Jacks Nutrients Part A 0-12-26	2.2 lb	6/6
80060050	Jacks Nutrients Clone 15-6-17	2.2 lb	6/6
80060047	Jacks Nutrients 12-4-16	2.2 lb	6/6
80060048	Jacks Nutrients 15-5-20	2.2 lb	6/6
80060061	Jacks Nutrients Outdoor 18-8-23	2.2 lb	6/6
80060049	Jacks Nutrients Bloom 10-30-20	2.2 lb	6/6
80060051	Jacks Nutrients UltraViolet 5-50-18	2.2 lb	6/6
80060053	Jacks Nutrients Finish 7-15-30	2.2 lb	6/6
80060052	Jacks Nutrients Part B 15-0-0	2.2 lb	6/6
80060060	Jacks Magnesium Sulfate Epsom Salts	2.2 lb	6/6

All Purpose LX 21-5-20

Complete formula with calcium, magnesium and phosphorus. Can be tank mixed with other Jack's LX formulas, including 15-5-15, as well as calcium nitrate and/or magnesium nitrate. Acidic; for moderate to high alkalinity water.

Berry Special 25-9-17

Acidic fertilizer with elevated magnesium and micronutrients. Originally formulated for blueberry bushes, can be used on all berry crops, including high tunnel crops.

Calcium + Magnesium LX 15-5-15

Ideal for water low in Ca and Mg, with 4% Ca, 2% Mg, 80% of nitrogen is nitrate based, and a full micronutrient package. Potentially basic, so best for low alkalinity water or balanced with an acid formulation.

Dark Weather Peat-Lite 15-0-15

Ideal product for growers who want a non-phosphorus, high nitrate product with calcium. Formulated with elevated micronutrients for complete fertility.

Aqua Gold Grow & Bloom 15-20-20

Designed for high tunnel use. The ideal fertilizer for encouraging overall healthy plant growth, a strong root system, and rapid development of all plants. Its high phosphorus content encourages rapid root generation which eliminates transplant shock when used as a transplanting solution.



SOLUTION SPOTLIGHT

JACK'S 0-12-26 PART A

This zero-nitrogen formula delivers a proven ratio of P and K along with a micronutrient package to achieve harvest goals in the late flowering stages of cannabis crops. This unique fertilizer also complements programs where nitrogen is solely sourced from calcium nitrate such as Jack's 15-0-0 Cal Nit Part B.



EVOFACTOR

verano 365

2026
2027

What is Evofactor?

It's an adjuvant, designed to be added to fertilizer solutions



How does Evofactor help with nutrient uptake?

- Improves solution movement in media – as an adjuvant, Evofactor improves water and nutrient movement and availability in the root zone.
- Improves fertilizer efficacy – charged silica-based supramolecular structures trigger an osmotic pressure response in the plant. This natural plant response results in greater utility of the nutrition in the media.



How does Evofactor impact my production?

- Decreased fertilizer use – reduce fertilizer application rates by 25-35% due to better use of nutrients in the root zone or increase yields by 20-40% employing the same fertility levels already in use
- Hydroponic application – mix into recirculating nutrient solution or add to deep water ponds
- Stock tank – Evofactor can be added to your existing fertilizer stock



Item	Description	Size
67-9610	Evofactor Nutrient Adjuvant	2.5 gallon
67-9612	Evofactor Nutrient Adjuvant	2 x 2.5 gal per case
67-9615	Evofactor Nutrient Adjuvant	55 gallon drum

Plantex®





YOU DON'T NEED JUST ANY FERTILIZER,
You need Plantex Solutions!

Fresh Solutions for your Plant's Nutrition. Plantex has Micro Plus Enrichment in most of the Plantex Solutions products, which means enhanced iron, manganese, copper, boron, molybdenum, and zinc levels with additional chelating agents, making them available over a broader pH range.

No-Stretch® 15-0-20

No-Stretch works to harden plant structure and prevent leggy growth. Use toward the end of the crop cycle for compact sturdy growth and to keep internodes short.

Item: 31-140105 **Size:** 25 lb.

Complete 17-5-17

Complete is an all-in-one advanced nutritional program containing all 5 macros and high levels of nitrate with no urea. It is effective over a wide pH range. **Comes in a duo bag for easy usage.**

Item: 31-140145 **Size:** 25 lb.

pH Reducer 18-9-18

This balanced growth formulation, decreases pH levels while supplying the growing media with enhanced micronutrients, including three chelating agents.

Item: 31-140155 **Size:** 25 lb.

Fertility Plus 19-2-19

This high nitrate, urea-free fertilizer is balanced with enhanced micronutrient availability and performance, ideal for heavy feeding.

Item: 31-11078 **Size:** 25 lb.

Complete Plus 19-8-13

Complete Plus is a modification of the Complete formulation with more acidic potential. Growers with higher alkaline water can reduce or eliminate the use of acid. **Comes in a duo bag for easy usage.**

Item: 31-140165 **Size:** 25 lb.

Plantex Solutions Specifications

Plantex Formulation	No-Stretch® 15-0-20	Complete 17-5-17	pH Reducer 18-9-18	Fertility Plus 19-2-19	Complete Plus 19-8-13
Total Nitrogen (N)	15%	17%	18%	19%	19%
Nitrate Nitrogen	12.2%	12.1%	8.5%	12.2%	12.1%
Ammoniacal Nitrogen	2.8%	4.9%	9.5%	6.8%	6.9%
Urea Nitrogen	-	-	-	-	-
Available Phosphate (P_2O_5)	-	5%	9%	2%	8%
Soluble Phosphorus (P)	-	2.1%	3.9%	0.8%	3.4%
Soluble Potash (K_2O)	20%	17%	18%	19%	13%
Soluble Potassium (K)	16.6%	14.1%	14.9%	15.7%	10.7%
Calcium (Ca)	3%	3%	-	-	2.5%
Magnesium (Mg)	1.5%	1%	0.2%	1.5%	1%
Sulphur (S)	-	-	5.5%	1.8%	-
Iron (Fe)	0.25%	0.10%	0.25%	0.25%	0.25%
Manganese (Mn)	0.075%	0.05%	0.075%	0.075%	0.075%
Zinc (Zn)	0.075%	0.05%	0.075%	0.075%	0.075%
Copper (Cu)	0.05%	0.05%	0.05%	0.05%	0.05%
Boron (B)	0.02%	0.02%	0.02%	0.02%	0.02%
Molybdenum (Mo)	0.015%	0.015%	0.015%	0.015%	0.015%
Chelating agent	1.48% EDTA 0.95% DTPA 0.1% EDDHA	1.24% EDTA	1.49% EDTA 0.95% DTPA 0.09% EDDHA	1.48% EDTA 0.95% DTPA 0.1% EDDHA	1.48% EDTA 0.95% DTPA 0.1% EDDHA
Potential Acidity (A) / Basicity (B) (lbs $CaCO_3$ per ton of fertilizer)	154 (B)	105(A)	716 (A)	309 (A)	300 (A)
Solubility (lb per gallon)					
50°F	2 1⁄6	3 1⁄4	2 1⁄2	1	2
60°F	3 1⁄2	4 1⁄2	2 3⁄4	1 2⁄3	3 1⁄3
75°F	4 7⁄8	6 2⁄3	4	3 2⁄5	4 2⁄3
Electrical Conductivity (EC): ppm of Nitrogen					
100	0.91	0.69	0.88	0.78	0.56
200	1.82	1.35	1.72	1.54	1.12
300	2.72	2.00	2.55	2.29	1.67

Reference: EDTA - Ethylene Diamine Tetraacetate • DTPA - Diethylene Triamine Pentaacetate • EDDHA - Ethylene Diamine Dihydroxyphenylacetic Acid

For detailed information please visit www.plantprod.com

Plantex®



Custom mixes are available for any water soluble fertilizer, premix or micronutrient mix.

15-15-30 High K

High K has a higher level of potash, particularly well suited for finishing container grown plants.

Item: 31-140125 **Size:** 25 lb.

20-10-20 All Purpose High Nitrate

All Purpose High Nitrate is an all season fertilizer with a high potential acidity.

Item: 31-140200 **Size:** 25 lb.

20-20-20 Classic

Classic is a balanced fertilizer that may be used for general feeding. It is ideal for when a more specific formula is not required.

Item: 31-140300 **Size:** 25 lb.

10-52-10 High P

High P supplies the necessary high phosphorus levels that young plants require with maximum solubility.

Item: 31-10368 **Size:** 25 lb.

21-5-20 High Nitrate Low P

Effective in soilless media, High Nitrate Low P is a general feed formulation and is the base for many fertilizer programs.

Item: 31-140306 **Size:** 25 lb.

12-2-14 Cal Mag + P

Cal Mag + P is designed for plug production with 6% calcium and 3% magnesium as well as a complete micronutrient package.

Item: 31-140075 **Size:** 25 lb.

21-7-7 Acid

This highly acidic formulation should be used for crops requiring higher acid soil conditions and when irrigation water has a high pH level.

Item: 31-140310 **Size:** 25 lb.

15-0-15 Cal-Plus

Cal-Plus is a completely water soluble prilled mixture of calcium nitrate, potassium nitrate, and micronutrients.

Item: 31-140100 **Size:** 25 lb.

Media Starter 10-5-10

This premix is designed to be incorporated into the media prior to planting and provides nutrition early in the crop cycle. It serves as a starter charge and has a wetting agent added to ensure uniform penetration. Do not heat/steam sterilize this mix after incorporation.

Item: 31-11104 **Size:** 50 lb.

Plantex Specifications

Plantex Formulation	High P 10-52-10	Cal Mag +P 12-2-14	Cal-Plus 15-0-15	High K 15-15-30	Pansy 17-4-19	Poinsettia Plus 18-6-20	All Purpose High Nitrate 20-10-20	Classic 20-20-20	High Nitrate Low P 21-5-20	Acid 21-7-7	Nutritrace	Media Starter 10-5-10
Total Nitrogen (N)	10%	12%	15%	15%	17%	18%	20%	20%	21%	21%	-	10%
Nitrate Nitrogen	-	11.7%	13.3%	8.9%	11%	11.4%	12%	5.9%	12.8%	2.1%	-	8.4%
Ammoniacal Nitrogen	7.1%	0.3%	1.7%	2.9%	6%	6.6%	8%	3.9%	8.2%	13.2%	-	1.2%
Urea Nitrogen	2.9%	-	-	3.2%	-	-	-	10.2%	-	5.7%	-	0.4%
Available Phosphate (P_2O_5)	52%	2%	-	15%	4%	6%	10%	20%	5%	7%	-	5%
Soluble Phosphorus (P)	22.6%	0.8%	-	6.5%	1.7%	2.62%	4.3%	8.7%	2.1%	3%	-	2.1%
Soluble Potash (K_2O)	10%	14%	15%	30%	19%	20%	20%	20%	20%	7%	-	10%
Soluble Potassium (K)	8.3%	11.6%	12.4%	24.9%	15.7%	16.6%	16.6%	16.6%	16.6%	5.8%	-	8.3%
Calcium (Ca)	-	6%	11%	-	-	-	-	-	-	-	-	6%
Magnesium (Mg)	-	3%	-	-	3.25%	2%	0.24%	-	0.20%	-	1.5%	3%
Sulphur (S)	-	-	-	-	4%	2.5%	0.20%	-	0.20%	13%	1%	4%
Iron (Fe)	0.10%	0.10%	0.10%	0.10%	0.18%	0.10%	0.10%	0.10%	0.125%	0.10%	7%	0.75%
Manganese (Mn)	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	2%	0.15%
Zinc (Zn)	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.4%	0.15%
Copper (Cu)	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.1%	0.05%
Boron (B)	0.02%	0.02%	0.02%	0.02%	0.035%	0.01%	0.02%	0.02%	0.02%	0.02%	-	0.02%
Molybdenum (Mo)	0.0005%	0.015%	0.015%	0.0005%	0.015%	0.06%	0.015%	0.0005%	0.015%	0.0005%	0.06%	0.004%
Chelating agent	1.24% EDTA	1.24% EDTA	1.24% EDTA	1.24% EDTA	1.24% EDTA 0.56% DTPA	0.71% EDTA 0.70% DTPA	1.24% EDTA	1.24% EDTA	1.24% EDTA 0.17% DTPA	1.24% EDTA	65.4% EDTA	-
Potential Acidity (A) / Basicity (B) (lbs $CaCO_3$ per ton of fertilizer)	900 (A)	383 (B)	314 (B)	100 (A)	265(A)	304 (A)	437 (A)	570 (A)	440 (A)	1580(A)	-	-
Solubility (lb per gallon)												
50°F	3	4	1¾	2⅓	2⅓	2½	3	3	3	4		
60°F	3⅓	5⅓	2½	3	3⅓	4	4½	3½	4⅓	4½		
75°F	4	6⅓	3⅓	3¾	4⅓	4½	5	4	5	4⅝		
Electrical Conductivity (EC): ppm of Nitrogen												
100	0.81	0.89	0.84	0.8	0.91	0.86	0.73	0.45	0.72	0.78		
200	1.61	1.68	1.60	1.4	1.79	1.69	1.45	0.94	1.42	1.52		

Formulation	Potential Acidity (A)/ Basicity (B)	EC (mmhos) at 200 ppm N
Cal Mag +P 12-2-14	383 (B)	1.68
Cal-Plus 15-0-15	314 (B)	1.60
High K 15-15-30	100 (A)	1.40
All Purpose High Nitrate 20-10-20	437 (A)	1.45
High Nitrate Low P 21-5-20	440 (A)	1.42
Classic 20-20-20	570 (A)	0.94
High P 10-52-10	900 (A)	1.61
Acid 21-7-7	1580 (A)	1.52
No-Stretch® 15-0-20	154 (B)	1.82
Complete 17-5-17	105 (A)	1.35
Complete Plus 19-8-13	300 (A)	1.12
Fertility Plus 19-2-19	309 (A)	1.54
pH Reducer 18-9-18	716 (A)	1.72

Reference:

- EDTA - Ethylene Diamine Tetraacetate
- DTPA - Diethylene Triamine Pentaacetate
- EDDHA - Ethylene Diamine Dihydroxyphenylacetic Acid

Potential Acidity/Basicity for Plantex and Plantex Solutions Fertilizers

Acidity potential is the amount in lb. of calcium carbonate needed to neutralize the acidity caused by one ton of the fertilizer. Potential basicity is the amount in lb. of calcium carbonate that has the same alkalizing effect as one ton of the fertilizer.

For detailed information please visit www.plantprod.com

Plant-Prod MJ™

Simple yet scientific.

The Plantex MJ™ line of fertilizers was designed to bring 77 years of experience to the cannabis growers of today. Plantex is excited to provide licensed growers of medical marijuana products that are scientifically optimized, consistent and completely soluble.



SOLUTION SPOTLIGHT

CHELATED IRON DTPA AND EDDHA

Plantex's new chelated products are ideal replacements for Sprint 138 and 330 providing water soluble, plant available iron over a wide soil and solution pH range.

Plantex MJ™ Spike (CaMg)

Spike (CaMg) is a fully chelated supplemental formulation that provides calcium and magnesium in a desirable 2:1 ratio. This has been specifically formulated to meet the high demands of cannabis plants throughout the entire production cycle with no additional nitrogen, phosphorus or potassium. Ideal for use with reverse osmosis (RO) or city water where calcium and magnesium levels are usually low. Application should be limited to two times per week.

Item: 31-M12310 **Size:** 25 lb.
Item: 81970004 **Size/Qty:** 12.3 oz. (12 case)

Plantex MJ™ Bloom 10-30-20

Bloom is an essential formulation to cannabis production. This high phosphorous, moderate potassium formulation encourages full bud set and improves bud filling.

Item: 31-M12206 **Size:** 25 lb.
Item: 81970002 **Size:** 4.4 lb.

Plantex MJ™ Boost 15-30-15

Boost is a high phosphorus formulation that supplies the necessary phosphorus for cannabis transplants and bud sizing.

Item: 31-M12278 **Size:** 25 lb.
Item: 81970003 **Size:** 4.4 lb.

Plantex MJ™ Cal Kick 15-0-14

Cal Kick is a high calcium formulation that should be used as the main calcium source throughout the production cycle when levels in water source are not adequate. Calcium is vital to plant rigidity and bud formation.

Item: 31-M12305 **Size:** 25 lb.

Plantex MJ™ Finisher 4-31-37

Finisher is a cannabis specific finishing formulation with elevated phosphorus and potassium to encourage fullness and density of buds.

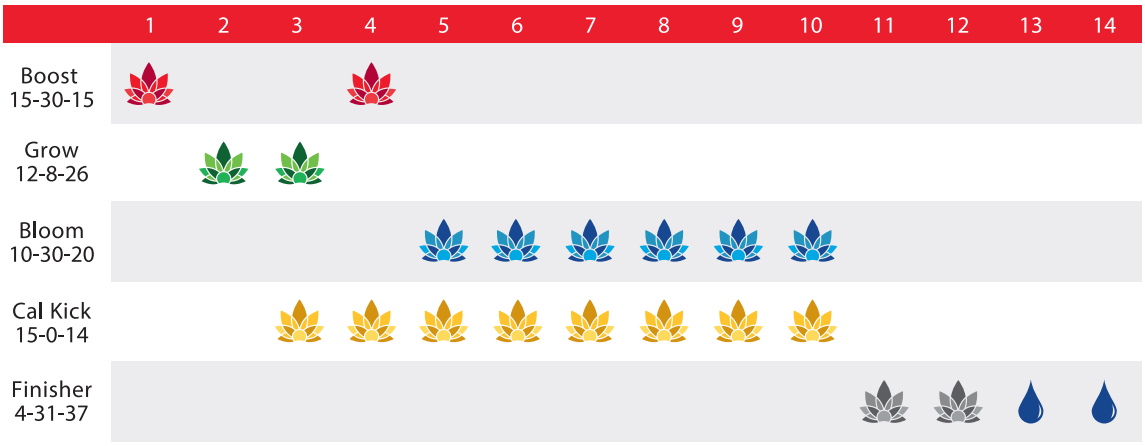
Item: 31-M12280 **Size:** 25 lb.
Item: 81970005 **Size:** 4.4 lb.

Plantex MJ™ Grow 12-8-26

Grow is specifically formulated for the vegetative growth stage of cannabis plants. Ideal for use in a mother plant feeding program with Cal Kick.

Item: 31-M12279 **Size:** 25 lb.
Item: 81970001 **Size:** 4.4 lb.

Plantex MJ Program Schedule by Week



Visit the Plant-Prod website at **plantexfertilizer.com** for full program details and suggested rates.

ICL PROFESSIONAL CANNABIS SYSTEM



The ICL Professional Cannabis System is a comprehensive nutrition program designed for cannabis production in controlled environment agriculture (CEA). The program integrates Peters Professional® hydroponic fertilizers, Liquid STEM® micronutrients, and H2Pro® liquid surfactants to support crop nutrition from propagation through finishing. Together, these products provide a straightforward, reliable fertility program that helps growers achieve consistent results while simplifying nutrient management.



Peters Professional® 5-11-26 Hydroponic Special

Water-soluble fertilizer formulated for hydroponic production. Supplies NPK, magnesium, sulfur, and essential micronutrients for consistent crop nutrition throughout vegetative and reproductive growth.

Item: 67-2320 **Size:** 25 lb.

Peters Professional® 14-0-8 Hydroponic Boost

Supplemental hydroponic fertilizer supplying nitrogen, potassium, calcium, and magnesium during periods of active growth and flower development. Designed for use with complete fertility programs.

Item: 67-2321 **Size:** 25 lb.

Peters Professional® 0-15-30 Hydroponic Finisher

Nitrogen-free fertilizer formulated for finishing crops. Provides phosphorus, potassium, magnesium, and sulfur to support late-stage production while reducing nitrogen inputs.

Item: 67-2319 **Size:** 25 lb.

Peters Professional® STEM™ Liquid

SOLUBLE TRACE ELEMENT MIX - Micronutrient liquid supplement containing the ideal balance of essential micronutrients: boron, copper, iron, manganese, molybdenum, zinc. Liquid S.T.E.M. in a convenient, ready-to-mix liquid formulation. Goes from the jug to the tank in one easy step with no solubility issues.

Item: 67-2366 **Size:** 2.64 gal.

H2Pro® Liquid Surfactant

H2ProTM Greenhouse & Nursery surfactant optimizes soilless media water-holding capacity, decreases irrigation frequency, reduces or eliminates dry spots, and helps prevent wilting both in production and post-production.

It comes in both liquid and granular formulations allowing the user to choose the one that best fits their operation.

It can be applied during soil blending, or any time during production, right up through shipping. At high rates, H2Pro Greenhouse and Nursery's rewetting ability can continue for as long as a year - long enough for the entire production cycle - and right through the retail environment for many crops.

Item: 74-1424 **Size:** 2.5 gal.
Item: 74-1422 **Size:** 1 L.

Secondary Nutrients Ca & Mg

Calcium Chloride Dihydrate
Applied as a foliar spray to safely add calcium to plant tissue.

Item: 35315 **Size:** 1 lb.
Item: 35317 **Size:** 25 lb.

Cal Prime Calcium Nitrate 17-0-0
Calcium nitrate with a higher percentage of calcium and nitrogen than standard calcium nitrate fertilizers.

Item: 67-8125 **Size:** 25 Kg (55 lb.)

Calcium Nitrate 15.5-0-0
Item: 67-8130 **Size:** 50 lb.
Item: 67-8130W **Size:** 50 lb. *(WEST COAST)*

PureCal Calcium Nitrate 13-0-0

Item: 31-10033 **Size:** 55 lb.

CalOx FT
CalOx FT patented technology stimulates selective ion channels in plant cell membranes, allowing calcium to flow through plant cells and deliver calcium through the plant even during periods of low transpiration. The 'FT' stands for the calcium Flow Through. CalOx FT increases cellular calcium throughout the plant resulting in stronger stems and optimum growth. Formulation 8-0-0, 10% Ca is stable in storage and does not settle out in container.
Guidelines: Apply CalOx® FT as a coarse foliar spray every 7-14 day at 18 fl oz per 100 gal or 1 1/8 tsp per gal with CapSil.

Item: 75-0532 **Size:** 2.5 gal.

Calcium Chelate Sequestar Ca-EDTA 9%

Item: 67-04005 **Size:** 5 lb.
Item: 67-0400 **Size:** 25 lb.

Magnesium Chelate Sequestar EDTA 5.5%

Item: 67-04255 **Size:** 5 lb.
Item: 67-0425 **Size:** 25 lb.

Magnisal Magnesium Nitrate 11-0-0

Item: 67-4106 **Size:** 50 lb.

Epsom Salt, Magnesium Sulfate Heptahydrate

Item: 33-79160 **Size:** 25 lb.

Magriculture Mag Sulfate Hepta Hydrate

Item: 67-7500GW **Size:** 50 lb. *(WEST COAST)*

Epsom Salts, Magnesium Sulphate Heptahydrate

Item: 14MGSUL **Size:** 50 lb.

Specialty Fertilizer Salts

Mono-ammonium phosphate (MAP) 12-61-0
Fully water soluble source of phosphorus and ammonium nitrogen that can be safely used through injectors.

Item: 67-6603 **Size:** 55 lb.

Mono-potassium phosphate (MKP) 0-52-34
Fully water soluble source of phosphorus and potassium for use through injectors.

Item: 14MPP55 **Size:** 55 lb.

Multi-K GG Potassium Nitrate 13.5-0-46.2

Greenhouse grade, fully soluble for chemigation, foliar spray, or side-dressing.

Item: 67-8505 **Size:** 50 lb.

Potassium Sulfate

Non-Stock. Assorted Sizes Available.

Sulfate of Potash (SOP) 0-0-52

Water soluble source of potassium and sulfate derived from potassium sulfate.

Item: 67-4200 **Size** 55 lb.

Ultrasol K Plus Potassium Nitrate 13.7-0-46

Fully water soluble source of potassium and nitrogen suitable for use through injectors and all types of irrigation systems.

Item: 67-9000 **Size** 25 Kg (55 lb.)

Nitrate of Soda 15-0-2

Chilean nitrate with potassium sulfate from mined sources supplies organic nitrogen for field production. Pallet quantities only.

Item: 67-3845* **Size:** 50 lb.
*These items are non-stock.

Soil pH Modification

CalOx pH

CalOx pH is an easy and effective way to raise the pH of crops in soil-less potting media during the production cycle. For use in ornamental and edible crops. The finely micronized calcium in a liquid suspension provides a long-lasting pH adjustment. Rinse foliage after application.

Item: 75-0525 **Size:** 2.5 gal.

Potassium Bicarbonate

Potassium Bicarbonate is used to quickly and safely raise soil pH. It is easily applied through fertilizer injector and leaves no visible residue.

Item: 91-2190 **Size:** 1 lb.
Item: 91-21950 **Size:** 50 lb.

Potassium Bicarbonate

Potassium Bicarbonate is used to raise the pH of potting mix during the production cycle. It is also used to add bicarbonate alkalinity for hydroponic production with reverse osmosis-purified water or other water sources with very low alkalinity.

Item: 31-10404 **Size:** 25 kg

Potassium Bicarbonate

pH Adjustment for Potting Mix

1:100 Injector Rates

- 2 lb. per gallon at a 1:100 ratio
  High change = ~ 1 point change
- 1 lb. per gallon at a 1:100 ratio
  Low change = ~ 0.5 point change

Hozon Rates

- 24 oz. per 5 gallon
  High change = ~ 1 point change
- 12 oz. per 5 gallon
  Low change = ~ 0.5 point change

Buffered pH Up: Ready to use

Item: 87-PHUP **Size:** 1 gal.

Buffered pH Down: Ready to use

Item: 87-PHDOWN **Size:** 1 gal.

pH Reducer

Liquid, based product for use as an organic option for adjusting solution pH and managing media pH. Contains 50% citric acid and a yucca-based, natural wetting agent. Washington State Department of Agriculture (WSDA) approved for use in organic production. Review label for recommended rates.

Item: 1652025GR **Size:** 2.5 gal.

Sulfuric Acid 93% Tech Grade

Added to irrigation water to neutralize excess alkalinity and/or reduce soil pH. Contact GGSPro for rates and precautions.

Item: 75-5030 **Size:** 1 gal/1 cs. min. - 4 per cs.

Larger sizes available.

Phosphoric Acid Tech Grade

Item: 75-207555 **Description/Size:** 75% 55 gal.
Item: 75-208555 **Description/Size:** 85% 55 gal.

Nitric Acid 38%

Item: 75-3855NA **Size:** 55 gal.

Micronutrients

Assorted Sizes Available. Non-Stock unless otherwise noted.

Boron: Solu-Bor (20.5%)

Item: BORON1 Size: 1 lb.
Item: J745612 Size: 20 lb.

Copper Chelate EDTA (14%)

Item: 67-04055 Size: 5 lb.
Item: 67-0405 Size: 25 lb.

Copper Sulfate (26%)

Item: 31-11259 Size: 22.68 kg

Iron Sulfate

Item: 14FESUL Size: 50 lb.

Iron Chelate - Fe EDTA (13.2%)

Item: 67-04205 Size: 5 lb.
Item: 67-0420 Size: 25 lb.
Item: 31-10056 Size: 50 lb.

Iron Chelate - Fe EDDHA (6%)

Item: 67-04105 Size: 5 lb.
Item: 67-0410 Size: 25 lb.

Manganese Chelate EDTA (13%)

Item: 67-04305 Size: 5 lb.
Item: 67-0430 Size: 25 lb.

Manganese Sulfate

Item: 31-10271 Size: 50 lb.

Ammonium Heptamolybdate

Item: J74744 Size: 1 lb.

Sodium Molybdate (39.6%)

Item: 31-12485 Size: 1 Kg (2.2 lb.)

Zinc Chelate EDTA (14%)

Item: 67-04355 Size: 5 lb.
Item: 67-0435 Size: 25 lb.

Plantex®

Iron Chelate DTPA (11%) & EDDHA (6%)

Item: 67-12906 **Size:** 5 lb. **Item:** 67-12905 **Size:** 5 lb.
Item: 67-12907 **Size:** 50 lb. **Item:** 67-12904 **Size:** 50 lb.

Micronutrient Mixes

Jack's PROFESSIONAL

M.O.S.T (Mix of Soluble Traces)

A water soluble supplement containing the full package of essential micronutrients: sulfur, boron, copper, iron, manganese, molybdenum, zinc. M.O.S.T is mixable with fertilizers not containing calcium.

Item: J74394 **Size:** 1 lb.
Item: 33633 **Size:** 25 lb.

Jack's PROFESSIONAL

Mix of Soluble Trace Elements With No Boron (MOSTNB)

A NO Boron mix of soluble trace elements for locations naturally high in boron.

Item: JPMOSTNB **Size:** 25 lb.

ICL

Peters Professional® STEM™ Liquid

SOLUBLE TRACE ELEMENT MIX - Micronutrient liquid supplement containing the ideal balance of essential micronutrients: boron, copper, iron, manganese, molybdenum, zinc. Liquid S.T.E.M. in a convenient, ready-to-mix liquid formulation. Goes from the jug to the tank in one easy step with no solubility issues.

Item: 67-2366 **Size:** 2.64 gal.

Plantex®

NUTRITRACE

Chelated Secondary Micronutrient Mix is a water soluble mix of secondary nutrients which can be used as a general preventative supplement or as a corrective where known deficiencies exist. **No Boron.**

Item: 31-11172 **Size:** 25 lb.

Supplements

Item	Description		Sold as
67-0070	Nature's Source Plant Probiotic	Microbial blend, incl *Bacillus spp*, *Streptomyces*, and more	1 gal
166072	Companion Maxx 2-0-1	*Bacillus subtilis*	2.5 gal
1660110GR	Essential Plus AG 1-0-1	Soil conditioner with humic acid, proteins, sugars and yucca-based wetting agent	1 gal
67-2715	BioPhyter	*Beauveria bassiana*	15 oz
67-2720	BioPhyter	*Beauveria bassiana*	1 gal
67-2751	Liventia SOS	Formulated with 19 species of beneficial bacteria	1 gal
67-2753	Liventia SOS	Formulated with 19 species of beneficial bacteria	2.5 gal
67-95101	MycoApply Endo	OMRI, granular mycorrhizae, 4 species blend	40lb
67-9523	MycoApply Ultrafine Endo	OMRI, powdered mycorrhizae, 4 species blend	1 lb
67-9525	MycoApply Ultrafine Endo	OMRI, powdered mycorrhizae, 4 species blend	20 lb
67-9522	MycoApply Injector Endo	OMRI, injector-friendly mycorrhizae, 4 species blend	100 grams
16-03082	Biomin Booster 126	OMRI, amino acid micronutrient blend	2.5 gal
16-03012	Biomin Calcium 5%	OMRI, amino acid chelated calcium	2.5 gal
16-03042	Biomin Magnesium 3%	OMRI, amino acid chelated magnesium	2.5 gal
16-03422	Biomin Nitrogen 5-0-0	OMRI, amino acid organic nitrogen	2.5 gal
16-03032	Biomin Iron 1-0-0	OMRI, amino acid chelated iron	2.5 gal
16-01112	Humax	OMRI, 12% humic acid from leonardite	2.5 gal
16-01182	Fulmax	3% fulvic acid from leonardite	1 gal
67-2999	TerraGrow	Blend of five *Bacillus spp.*	5 lb
67-3000	TerraGrow	Blend of five *Bacillus spp.*	10 lb
67-3002	TerraGrow	Blend of five *Bacillus spp.*	25 lb
67-9536	AGTIV REACH® P	Powdered mycorrhizae, 8000 viable spores/g	1.75 lb
67-9537	AGTIV REACH® G	Granular mycorrhizae, 178 viable spores/g	13.2 lb
67-1000	AgSil 16H	85% Certis Potassium Silicate Powder	50 lb





SOLUTION SPOTLIGHT

BIOPHYTER

BioPhyter represents a new approach to plant health by utilizing a plant-derived strain of *Beauveria bassiana* as a systemic endophyte rather than a traditional insecticide. Once established within the plant, BioPhyter supports nutrient movement, photosynthesis, root development, and overall plant vigor while helping crops better tolerate abiotic and biotic stress. Compatible with hydroponic, greenhouse, cannabis, and other controlled environ-ment production systems, BioPhyter provides a unique biological tool that complements fertility, pest management, and plant health programs from root to apex.

SOLUTION SPOTLIGHT

AGSIL 16H

Silicon is often considered a "beneficial element" due to its ability to improve plant resilience under a wide range of growing conditions. AgSil 16H supplies highly available potassium silicate that can be applied as a foliar spray or drench to strengthen cell walls, improve tolerance to heat, drought, salinity, and mineral toxicities, and reduce pressure from certain diseases and insect pests. AgSil 16H is an excellent addition to intensive greenhouse, vertical farm, cannabis, and other controlled environment production systems where maximizing crop quality and stress tolerance is critical.





pH Pen (A)

The Bluelab hand held pH pen provides a compact, quick and handy way to manage the success of your crop to ensure maximum uptake of nutrients.

Item: 83-2701

Conductivity (EC/PPM) Pen (B)

The Bluelab Conductivity Pen can read EC, PPM and temperature of water solutions.

Item: 83-2702

Multimedia pH Meter (C)

Accurately measure and monitor pH levels in solution or in a wide range of media. Combine the Multimedia pH Meter and Leap™ pH Probe to take fast accurate measurements.

Item	Description
83-2774	Multimedia pH Meter
83-2776	Leap™ Replacement Probe

Combo Meter Plus (D)

Measures pH, conductivity and temperature in one portable handheld meter. This all-in-one, convenient portable solution for accurate measurement of pH in soil or nutrient solutions. Conductivity (EC) and temperature of solutions. This battery-powered, lightweight unit can be used anywhere, anytime to measure critical parameters related to healthy plant growth. The new Bluelab Leap pH probe included, also allows fast and accurate pH measurements direct from the root zone in a wide range of growing media including soil, coco coir, potting mixes and nutrient solution - no more pH slurries or extraction mixes.

Item	Description
83-2777	Combo Plus Meter
83-2776	Leap Spear-Tip Probe

Guardian Monitor (E)

Provides 24 hour continuous reading for pH, conductivity (EC/PPM) and temperature within a nutrient solution in hydroponics and other systems. Connect monitors has alarm notification and wireless data logging.

Item	Description
83-2772	Guardian Inline pH Probe

Combo Meter EC (F)

Measures pH, conductivity (EC) and temperature on the go. Brilliantly simple design that's easy to use, clean and calibrate for solution measurements. Backlit display to capture every measurement with ease. Includes a pH Probe and Conductivity Probe to cover all your nutrient uptake fundamentals. 2-meter cable for measuring in hard-to-reach locations. Customise scales to your preference - conductivity in EC, CF, PPM 500 (TDS) or PPM 700; temperature in °C or °F.

Item: 83-2709

OnePen (G)

The Bluelab OnePen is a robust 3-in-1 tool for measuring pH, conductivity (EC/PPM), and temperature, optimizing nutrient uptake. Connect via Bluetooth for real-time sharing, updates, and comprehensive data management.

Item: 83-2707

Bluelab

Commercial Truncheon Meter

An EC meter built to last a lifetime – now on a bigger scale. Robust and reliable construction for long-lasting value. Fully waterproof; splash, submerge or sink - we've got you covered. Automatically detects liquids and bright LEDS indicate measurement for brilliantly simple functionality. Long-format design for mixing and measuring nutrient reservoirs simultaneously. No calibration required and easy to clean and disinfect. All conductivity scales included – EC, CF, PPM 500 (TDS), PPM 700. Industry-leading five-year warranty for peace of mind. Ideal for hydroponics.



Item: 83-2706

Pulse 3-1 Multimedia Meter

Allows growers to get fast, accurate temperature, moisture, and EC measurements directly from the root zone sent direct-to-mobile. Quickly and accurately spot-check moisture, conductivity and temperature. Wireless smartphone syncing meter.



Item: 83-2778

Calibration Solutions and Probe Care Kits pH & Conductivity



All the tools you need to care for Bluelab probes. The probe surface is where the instrument takes the reading of the solution or soil/media. If the probe face is dirty or contaminated, then the reading will be inaccurate. Accurate readings simplify crop management and provide improved growth.

Item #	BlueLab Calibration Solutions	Amt.
83-2751	pH 7.0 Calibration Solution	500 ml /16.9 fl oz.
83-2754	pH 7.0 Calibration Solution	250 ml /8.45 fl oz.
83-2752	pH 4.0 Calibration Solution	500 ml /16.9 fl oz.
83-2755	pH 4.0 Calibration Solution	250 ml /8.45 fl oz.
83-2753	EC 2.77 Conductivity Solution	500 ml /16.9 fl oz.
83-2756	EC 2.77 Conductivity Solution	250 ml /8.45 fl oz.
83-2758	KCL Storage Solution	120ml/4.05 fl oz.
83-2734	Probe Care Kit – Conductivity 2 sachet – EC 2.77, 1 plastic cups, conductivity probe cleaner, chamois	Each single use sachet – 20 ml /0.67 fl oz.
83-2736	Probe Care Kit – pH & Conductivity 2 sachet – pH 7.0, pH 4.0, KCL, EC 2.77 3 plastic cups, pH probe cleaner, conductivity probe cleaner, pH probe brush, chamois	Each single use sachet – 20 ml /0.67 fl oz.
83-2735	Probe Care Kit – pH 2 sachet – pH 7.0, pH 4.0, KCL , 3 plastic cups, pH probe clean-er, pH probe brush	Each single use sachet – 20 ml /0.67 fl oz.

SOLUTION SPOTLIGHT

BLUELAB ONEPEN

Accurate nutrient management starts with accurate measurements. The Bluelab OnePen combines pH, EC, and temperature monitoring into a single handheld device, allowing growers to quickly evaluate nutrient solutions, irrigation water, and runoff. Built with a replaceable probe, titanium electrodes, Bluetooth connectivity, and an IP68 waterproof design, the OnePen is engineered for the demands of commercial CEA production. Real-time data sharing through the Edenic app helps growers make informed decisions that optimize nutrient uptake, crop performance, and consistency.

apogee INSTRUMENTS

Apogee Light Meter

Apogee's Daily Light Integral and Photoperiod meters are an elegant and accurate solution for measuring Daily Light Integral (DLI) and Photoperiod for up to 99 days with scientific accuracy and 0.1 hour resolution of DLI. View data onscreen or download. Easily mounts to camera tripod, provides 180° view, and is contained in a rugged and splash-proof housing for durability.

Item: 83-2800 **Description:** DLI-400
Item: 83-2801 **Description:** DLI-500
Item: 83-2802 **Description:** DLI-600





Sunlight Only | Full-Spectrum | ePAR



	DLI-400	DLI-500	DLI-600
Spectral Measurement Range (± 5 nm)	370 to 650 nm (sunlight only)	389 to 692 nm	383 to 757 nm
Proton Flux Display Range	0-4000 µmol m^{-2} s^{-1}	0-4000 µmol m^{-2} s^{-1}	0-4000 µmol m^{-2} s^{-1}
Measurement Frequency	3 minutes	3 minutes	3 minutes
Data Log Capacity	99 days (DLI & Photoperiod), 10 days (30 min PPFD/ePPFD averages)	99 days (DLI & Photoperiod), 10 days (30 min PPFD/ePPFD averages)	99 days (DLI & Photoperiod), 10 days (30 min PPFD/ePPFD averages)
Connectivity	CSV file via USB-C data transfer	CSV file via USB-C data transfer	CSV file via USB-C data transfer
Operation	2 AAA batteries, life 6 mo.	2 AAA batteries, life 6 mo.	2 AAA batteries, life 6 mo.
Operating Environment	-10 to 60 C; 0 to 100% relative humidity	-40 to 70 C; 0 to 100% relative humidity	-40 to 70 C; 0 to 100 % relative humidity
Ingress Protection	IP65	IP65	IP65
Mounting Compatibility	Brass ¼-20 threaded mount	Brass ¼-20 threaded mount	Brass ¼-20 threaded mount
Warranty	Warranty 4 years against defects in materials and workmanship	Warranty 4 years against defects in materials and workmanship	Warranty 4 years against defects in materials and workmanship

Jack's® NUTRIENTS

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

CROP PROTECTION & SANITATION



IMPORTANT CHEMICAL USAGE INFORMATION

Labels & Registration

Pesticide information in this catalog is believed to be correct but it is the responsibility of the applicator to read and follow all label directions. Labels do change without notice, including state registrations and restricted use status. Final responsibility for compliance rests with the applicator.

Storage

Your storage areas should be clean, well-ventilated and maintained at temperatures between 45° - 90°F. The floor should be covered with a non-absorbent material. All pesticides should be stored in their original containers. Pesticides have shelf lives and should be marked with the date of purchase. Unsafe pesticide storage can lead to serious accidents. Be sure the storage area can be locked and is clearly marked with appropriate pesticide storage signage.

Griffin's Pesticide Permit Policy

Chemicals that have been designated by law as restricted use pesticides require Griffin to only sell to growers that have a current/valid Pesticide Applicators Permit. We are required to record your license to use these products and report that information on demand. No restricted products can or will be allowed out of our warehouse until that copy is on file.

2026
2027

Chemical Shipping

1. **No chemicals will be left without a customer's signature.** If there isn't anybody there at time of delivery, the chemical materials will NOT be delivered.
2. Transportation during extremely cold weather is not possible for many of our liquid chemicals.
3. There are certain chemicals that cannot be shipped via commercial carrier, (or there is an upcharge for handling) due to hazardous chemical shipping laws. Please plan ahead for our truck delivery.
4. MSDS/SDS - Material Safety Data Sheets for all the different pesticides we carry may often be obtained directly from the manufacturer's website or from our Customer Service Dept.

Restricted-Entry Interval (REI)

All EPA registered pesticides have a REI assigned to them. This is expressed in either hours or days and is included in the descriptions of all pesticides in the Griffin catalog except those labeled for retail purposes. Growers must abide by all re-entry restrictions and personal protection equipment (PPE) requirements as listed on the label for the duration of the REI.

Mode of Action Groups (MOA's)

The mechanism by which a pesticide controls a pest is known as its mode of action. In order to rotate pesticides to reduce the chance of resistance it is necessary to use pesticides that utilize different modes of action. Descriptions of insecticides, fungicides and herbicides in the Griffin catalog include the industry accepted mode of action group. Griffin's GGSPro technical team is available to help create responsible pesticide rotation programs.

CHEMICAL CONVERSION TABLE

Equivalent quantities of liquid materials (Emulsifiable concentrates, etc.) for various quantities of water based on volume per 100 gal

American Fluid Measure

80 drops = 1 teaspoon (tsp)
3 teaspoons = 1 tablespoon (Tbls)
2 tablespoons = 1 fluid ounce (fl oz)
8 fluid ounces = 1 cup
2 cups = 1 pint (pt)
2 pints = 1 quart (qt)
4 quarts = 1 gallon (gal)

American Dry Measure

3 tsp = 1 Tbls
16 Tbls = 1 cup
28 gm = 1 oz
454 gm = 1 lb

Water	Liquid Chemicals, Smaller Volume Conversions					
100 gal	2 Tbls	4 oz	8 fl oz	16 fl oz	1 qt	2 qt
25 gal	1 Tbls	1 oz	2 fl oz	4 fl oz	8 fl oz	1 pt
5 gal	0.6 tsp	1.25 tsp	2.5 tsp	5 tsp	1.66 fl oz	3.33 fl oz
1 gal	0.12 tsp	0.25 tsp	0.5 tsp	1 tsp	2 tsp	4 tsp

Nationwide Poison Control Center

800-222-1222

LOOK FOR THIS SYMBOL FOR: TOTAL RELEASE



Chemicals with this icon are aerosol cans.

Understanding the GGSPro Bee Safety Codes



Responsible applicators consider bee safety when making their product choices. GGSPro is well versed in managing chemical use for minimizing impacts to biological control agents (BCAs) and now extends this knowledge to bees that can come in contact with pesticides both in greenhouses and outdoors. Our Bee Safety Codes will help you quickly determine which pesticide choices are most appropriate for your specific situation. From there, the GGSPro team can further help you narrow the options and develop strategies that will help you control your pests while minimizing risks to area bee populations.

The GGSPro Bee Safety Codes summarize existing EPA bee caution label content into a simple icon system in which a color and a number provide information on both toxicity and exposure routes. Please note that some application methods (ex. granular) and some product classes (ex. fungicides, surfactants) are not currently subject to bee hazard evaluation by the EPA. Therefore, the lack of a Bee Safety Code should not be considered an indication of complete lack of risk. The GGSPro team is available to discuss your specific concerns. Bee Safety Codes indicate the need to plan pesticide applications carefully to minimize the risk to bees. Products toxic to bees might still be part of a pest control program if the proper precautions are taken. It's all about wise and effective use of pesticides, and GGSPro is here to help you, every step of the way.

All Bee Safety information presented by Griffin Greenhouse Supplies is intended to serve as a reference for growers. It does not replace the need to read and follow the directions on entire pesticide labels or supersede any applicable law, rule, regulation or standard. While every effort has been made to ensure its accuracy, human error is possible and labels do change without notice. Pesticides other than those listed may be safe, legal and effective.

EXPOSURE KEY

1 **Toxicity risk through direct exposure only:**
avoid treatment when bees are actively visiting or actively foraging in the treatment area. Actively visiting the treatment area refers to bees you see on the plants and pertains to products that do not show residual effect. Bees are protected when bees are absent during treatment.

2 **Toxicity risk through residual exposure only:**
avoid treatment when bees are visiting the treatment area. Visiting the treatment area refers to bees that may visit the plants after treatment. Bees are protected when bees are absent from the area following treatment. Avoid use of these products when crops and/or weeds are in bloom.

3 **Toxicity risk through both direct exposure and residual exposure**:
avoid treatment when bees are visiting the treatment area. Visiting the treatment area refers to bees that may visit the plants after treatment. Bees are protected when bees are absent from the treatment area both during and following treatment. Avoid use of these products when crops and/or weeds are in bloom.



Highly Toxic
EPA describes as very highly toxic, highly toxic or very toxic to bees



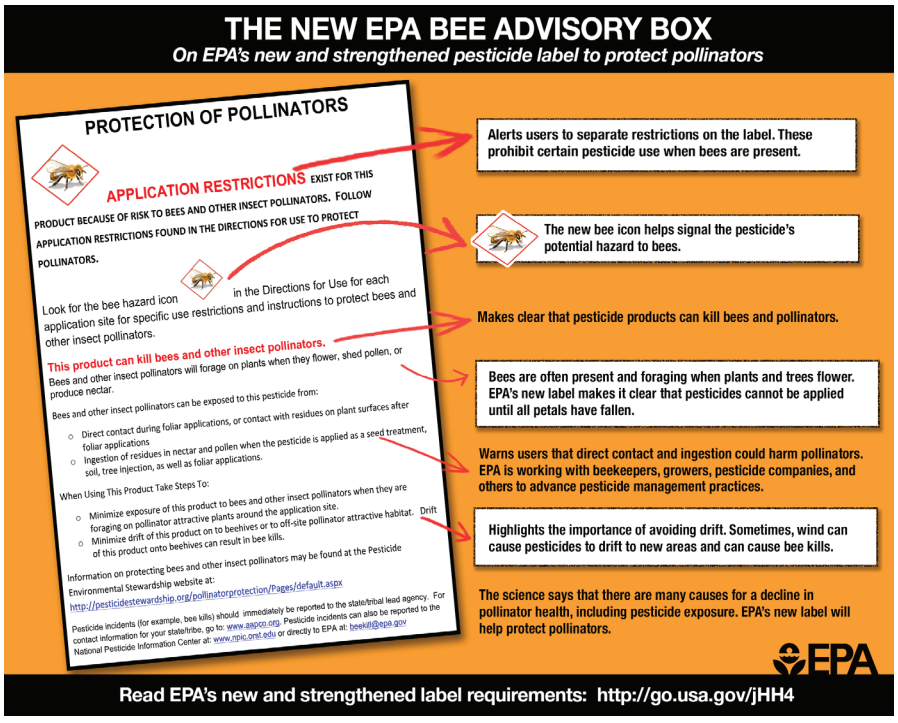
Toxic
EPA describes as toxic to bees



Low Toxicity
EPA describes as a potential pathogen or with low toxicity to bees



Special case
Special use notes per label; contact GGSPro for more information.



FUNGICIDES

Affirm WDG

nufarm

MOA 19 | REI 4

Active Ingredient: Polyoxin D Zinc Salt

Broad-spectrum fungicide for use on ornamentals and many edible crops in greenhouses, nurseries, interiorscapes, and other labeled sites. Foliar spray controls *Alternaria*, *Botrytis*, *Colletotrichum*, powdery mildew, and others. Drench treatments control *Rhizoctonia* and *Thielaviopsis*. Chemigation instructions have been added to the label. **Foliar spray and drench rates:** ½-1 tsp per gal or 4-8 oz per 100 gal.

Item: 71-1131 **Size:** 2.4 lb.

Badge SC

Gowan

MOA M01 | REI 24-48

Active Ingredient: Copper Oxychloride & Copper Hydroxide

Dual copper-based active ingredients used to control a wide variety of bacterial and fungal pathogens. Approved for use on ornamentals, fruiting crops, vegetables, and herbs. Foliar applications on plants grown in greenhouses, shadehouses, outdoor nurseries, landscapes, and field production settings. Rates vary widely by crop, check the label for rates. For greenhouse grown ornamentals: **Foliar spray rates:** 1.5-2 tsp per gal or 24-32 fl oz per 100 gal. Restricted Entry Interval is 24 hours for greenhouse uses and 48 hours for all field applications.

Item: 71-1205 **Size:** 2.5 gal.

BotryStop WP

BioWorks

MOA NC | REI 4

Active Ingredient: *Ulocladium oudemansii* (U3 strain)

BotryStop is a wettable powder formulation biofungicide that controls *Botrytis, Sclerotinia spp.*, and *Xanthomonas spp*. by out competing pathogens for living space without harming living tissue. Foliar sprays can be applied on ornamentals in greenhouses, nurseries and many edible crops including certain vegetables, berries and tree fruits in field, high tunnel or greenhouse sites. Excellent plant safety but leaves some visible residue. **Foliar spray rates:** 3 Tbls per gal or 3 lb per 100 gal. Requires constant agitation during application. Check BioWorks' website for fungicide compatibility information. **OMRI listed.**

Item: 71-12601 **Size:** 12 lb.
Item: 71-12603 **Size:** 30 lb.

Camelot O

SePRO

MOA M01 | REI 4

Active Ingredient: Copper Octanoate

Copper based fungicide/bactericide. Controls anthracnose, *Alternaria*, *Cylindrocladium*, powdery mildew, certain bacterial leaf spots, and more. Labeled for use under field conditions, greenhouses, nurseries, interiorscapes, and landscapes. Many edible crops on the label. **Foliar spray rates**: 4 tsp-2 fl oz per gal or 0.5-2 gal per 100 gal. **OMRI listed.**

Item: 70-21202 **Size:** 1 gal.

CEASE

BioWorks

MOA BM02 | REI 4

Active Ingredient: *Bacillus subtilis* QST 713 strain

Broad-spectrum bacterial based fungicide that provides preventative control of certain fungal diseases such as *Alternaria, Botrytis,* downy mildew, powdery mildew and bacterial diseases including *Erwinia, Pseudomonas,* and *Xanthomonas*. CEASE is labeled for use on ornamentals and several vegetable crops in greenhouses, interiorscapes, fields, and nurseries. **Foliar spray rates:** 1.25-2.5 fl oz per gal or 1-2 gal per 100 gal. CEASE can be used as a soil drench to suppress root rots such as *Fusarium, Pythium, Phytophthora,* and *Rhizoctonia*. **Drench rates:** 32-128 fl oz per 100 gal. **OMRI listed**.

Item: 71-13301 **Size:** 1 gal.
Item: 71-1335 **Size:** 2.5 gal.

Decree 50 WDG

SePRO

MOA 17 | REI 12

Active Ingredient: Fenhexamid

Decree provides long residual control of *Botrytis* with minimal visible residue and excellent plant and bloom safety. Several edible crops are on the label. Labeled for grown to harvest greenhouse tomato, pepper, cucumbers and leafy greens. **Foliar spray rates:** 1-2 tsp per gal or 0.75-1.5 lb per 100 gal.

Item: 71-1439 **Size:** 2.5 lb.

Eagle 20 EW

CORTEVA agriscience

MOA 3 | REI 24

Active Ingredient: Myclobutanil

Foliar fungicide for the control of powdery mildew, rust, scab and other diseases. Can be used on ornamentals outdoors, in greenhouses, and on some fruit trees and vine crops. Eagle is locally systemic, with curative and protectant activity. **Foliar spray rates:** ½-¾ tsp per gal or 6-12 fl oz per 100 gal. **Restricted use pesticide in NY. Prohibited in Nassau and Suffolk County, NY.**

Item: 71-1435 **Size:** 1 pt.
Item: 71-1437 **Size:** 1 gal.

EcoSwing

Gowan

MOA BM01 | REI 4

Active Ingredient: Extract of *Swinglea glutinosa*

EcoSwing is a foliar fungicide based on a botanical extract from *Swinglea glutinosa*. EcoSwing is primarily a preventative fungicide with some curative activity for the control of *Alternaria*, basil downy mildew, *Botrytis*, powdery mildew and others. It can be used on ornamental and food crops in greenhouses, nurseries, and landscapes. Best results are achieved by using it as part of a regular program at 7-14 day intervals. **Foliar spray rates:** 1.5-2 tsp per gal, or 24-32 fl oz per 100 gal. **OMRI listed**.

Item: 71-1455 **Size:** 1 qt.

Fosphite

JH Biotech Inc

MOA P07 | REI 4

Active Ingredient: Mono & Di-Potassium Salts of Phosphorous Acid

Broad spectrum, systemic fungicide for control of downy mildew, *Pythium*, *Phytophthora* and many other diseases in greenhouse and nursery outdoor crops. Many edible crops are on the label. Stimulates natural plant defenses. Do not apply within 20 days of a copper application. **Foliar spray rates:** 2-4 tsp per gal or 32-64 fl oz per 100 gal. **Drench rates**: ½-¾ tsp per gal or 6-12 fl oz per 100 gal.

Item: 71-1522 **Size:** 2.5 gal.
Item: 71-1525 **Size:** 55 gal.

Guarda

BioSafe Systems

MOA BM01 | REI 0

Active Ingredient: Thyme Oil

Guarda is an emulsifiable concentrate of a botanical extract of Thyme oil that has been stabilized with the HOLDit® Technology that allows it to remain active for up to 14 days. Labeled as a spray, drench or dip on ornamentals, turf, and edible crops including herbs. Use preventatively against foliar pathogens bacterial blight/canker, *Botrytis, Colletotrichum,* downy mildew, fungal leaf spots, powdery mildew, and rust, and for *Fusarium, Pythium* and *Rhizoctonia* when applied as a drench. **Foliar spray rates:** 0.8-4.2 fl oz per gal or 80-422 fl oz per 100 gal. **Drench rates:** 5 fl oz per gal or 4 gal per 100 gal. **Pre-Plant dip rates:** 3.2-6.4 fl oz per gal or 32-64 fl oz per 10 gal.

Item: 71-1610 **Size:** 2.5 gal.

Heritage

syngenta

MOA 11 | REI 4

Active Ingredient: Azoxystrobin

A broad-spectrum, contact and xylem-mobile systemic strobiluron fungicide, labeled for use as a foliar spray or drench on ornamentals as well as many vegetable and herb transplants in greenhouses, container or field-grown crops and other locations. It controls many diseases including *Alternaria*, boxwood blight, *Cercospora*, downy mildew, powdery mildew, *Rhizoctonia*, and scab. Heritage is available as a WG and an SC formulation. The rates are different as shown below. **Foliar spray rates for WG:** 1 tsp per 2.5-5 gal or 1-4 oz per gal 100 gal. **Drench rates for WG:** 1 oz per 100 gal. **Foliar spray rates for SC:** 1/8 -1 tsp per gal or 2-15.3 fl oz per 100 gal. **Drench rates for SC:** 1/4 tsp per gal or 3.8 fl oz per 100 gal. **Restricted use pesticide in VT.**

Item: 71-1408 **Size:** 4 fl oz., SC formulation
Item: 71-1400 **Size:** 1 lb., WG formulation
Item: 71-1405 **Size:** 6 lb., WG formulation

LalStop G46 WG

LALLEMAND

MOA BM02 | REI 4

Active Ingredient: *Clonostachys rosea* Strain J1446

This fungal-based biopesticide controls seed-borne and soil-borne plant diseases such *Botrytis*, *Fusarium*, *Phytophthora*, *Alternaria*, *Bipolaris*, *Cladosporium*, *Colletotrichum*, *Pythium*, *Rhizoctonia*, *Sclerotinia*, and *Verticillium*. Foliar diseases include *Botrytis*, fungal leaf spots, and Powdery Mildew. Approved for use on vegetables, herbs, ornamentals, and wide range of other edible crops. **Foliar spray and drench rates:** 1.3-13 oz per 100 gal. **OMRI listed.**

Item: 71-2055 **Size:** 2 lb.



SOLUTION SPOTLIGHT

GUARDA

Guarda is a botanical extract of thyme oil that has been stabilized, allowing it to provide activity for up to 14 days after application. Labeled as a spray, drench, or dip on ornamentals, turf, and edible crops including herbs. Use this unique oil-based fungicide to combat many foliar pathogens.

LalStop K61 WP

LALLEMAND

MOA BM02 | REI 4

Active Ingredient: *Streptomyces* sp. strain K61

Developed from a naturally occurring bacteria, LalStop K61 WP is a preventative foliar spray or drench product that thrives in the rhizosphere for several weeks and provides effective control on a wide range of pathogens including damping-off caused by various fungi, such as *Alternaria* and *Rhizoctonia*; and wilt and root diseases caused by *Fusarium*, *Phytophthora* and *Pythium*. Also used in hydroponics and plant dipping. Refer to label for specific edible crop application rates. **OMRI listed.**

Item: 71-2061 **Size:** 0.88 oz.
Item: 71-2063 **Size:** 3.5 oz.
Item: 71-2065 **Size:** 2 lb.

Micora

syngenta

MOA 40 | REI 4

Active Ingredient: Mandipropamid

Contact and translaminar systemic fungicide for use in greenhouses, shade structures, lath houses and nurseries. Foliar sprays control downy mildew and aerial *Phytophthora*. Drench applications control *Phytophthora* on roots and crowns. Also labeled for use on many vegetable transplants, and control of late blight of tomato and downy mildew in basil. **Foliar spray and drench rates:** ¼-½ tsp per gal or 4-8 fl oz per 100 gal.

Item: 71-1655 **Size:** 1 qt.

Mildew Cure

JH Biotech Inc

MOA 25b | REI 0

Active Ingredient: Cottonseed Oil, Clove Oil, & Garlic Oil

Foliar spray for the control of powdery mildew on ornamentals and many edible crops. Active ingredients are essential oils and this product is a 25b product (no EPA registration required). **Foliar spray rates:** 1.25 fl oz per gal or 1 gal per 100 gal. **OMRI listed.**

Item: 16-11005 **Size:** 2.5 gal.

MilStop SP

BioWorks

MOA NC | REI 1

Active Ingredient: Potassium Bicarbonate

Fast acting broad-spectrum foliar fungicide. Especially effective as a quick knockdown of powdery mildew. Controls *Alternaria*, anthracnose, black spot, *Botrytis*, powdery mildew and others on ornamentals and certain edible crops. **Foliar spray rates:** 1-2 Tbls per gal or 2.5-5 lb per 100 gal. **OMRI listed.**

Item: 71-2878 **Size:** 5 lb.
Item - CA Only: 71-2879B-CA **Size:** 5 lb.
Item: 71-2881 **Size:** 25 lb.

Mural WG

syngenta

MOA 7+11 | REI 12

Active Ingredient: Azoxystrobin & Solatenol

Combining two active ingredients, this broad-spectrum, translaminar systemic fungicide is labeled for use on many ornamentals and edible crop transplants in greenhouses, shade and lath houses, outdoor nurseries and field grown ornamentals. Labeled for both protective and curative treatments for foliar including *Alternaria*, *Botrytis*, boxwood blight, *Cercospora*, *Colletotrichum*, downy mildew, *Entomosporium*, powdery mildew, rust and many more. Root diseases include *Fusarium*, *Phytophthora*, *Rhizoctonia*, *Sclerotium*, *Sclerotinia*, and *Thielaviopsis*. **Foliar spray rates:** 1/4-1/2 tsp per gal or 4-7 oz per 100 gal. **Drench rates:** 2-3 oz per 100 gal. **Restricted use pesticide in NY & VT.**

Item: 71-1690 **Size:** 1 lb.

Nordox 75 WG

BRANDT

MOA M01 | REI 12

Active Ingredient: Cuprous Oxide

Broad-spectrum copper fungicide/bactericide labeled for use on field grown ornamentals, tree fruits, grapes, small fruits and vegetables. Nursery and greenhouse crops include ornamentals and certain vegetables. Labeled for foliar diseases such as *Alternaria*, anthracnose, *Cercospora*, black spot, downy mildew, powdery mildew, and many bacterial leaf spots. **Foliar sprays rates:** ⅓ tsp per gal or 10.66 oz per 100 gal. **OMRI listed.**

Item: 71-1700 **Size:** 12.5 lb.

Obtego

SePRO

MOA BM02 | REI 4

Active Ingredient: *Trichoderma asperellum* & *Trichoderma gamsii*

Biofungicide used to protect plants against soil-borne diseases. Obtego has shown to be active against *Pythium*, *Rhizoctonia*, *Phytophthora*, *Fusarium*, *Verticillium*, and several other soil pathogens. Labeled for all ornamental plants including edible crops, flowering plants, foliage, cut flowers, bulbs, shrubs, and trees. Used in greenhouses, nurseries, and landscape settings. No refrigeration required. **Rates:** Drench 2.5-7.5 oz per 100 gal; consult label for rates for dip, media incorporation or field broadcast applications. **OMRI listed.**

Item: 71-2105 **Size:** 5 lb.

OxiPhos

BioSafe Systems | MOA P07+NC | REI 4

Active Ingredient: Mono and Di-Potassium Salts of Phosphorus Acid & Hydrogen Peroxide

Broad spectrum fungicide/bactericide in a liquid formulation that can be applied by foliar spray, drench, trunk spray, root dip or trunk injection depending on the crop. Ornamentals and many edible crops can be treated. Labeled diseases include: bacterial canker, leaf spot and soft rot, downy mildew, powdery mildew, *Phytophthora* and more. 0 hr REI for drench applications if label conditions are met. **Foliar spray rates:** 2.5 tsp-1.25 fl oz per gal or 42-128 fl oz per 100 gal. **Drench rates:** 3/4-1.5 tsp per gal or 12.8-25.6 fl oz per 100 gal.

Item: 71-2350 **Size:** 2.5 gal.
Item - CA only: 71-2350-CA **Size:** 2.5 gal.
Item: 71-2355 **Size:** 55 gal.

Pageant Intrinsic WG

BASF We create chemistry | MOA 7+11 | REI 12

Active Ingredient: Boscalid & Pyraclostrobin

Broad spectrum fungicide combining two active ingredients for foliar and root diseases on ornamentals in greenhouses, interiorscapes, landscapes, nurseries and greenhouse grown tomatoes. Supplemental labels allow for the treatment of many vegetable crops as transplants and grown on to harvest. Foliar diseases include *Alternaria*, *Botrytis*, boxwood blight, *Cercospora*, *Colletotrichum*, downy mildew, aerial *Phytophthora*, powdery mildew, rust and scab. Root and crown rots include *Cylindrocladium*, *Fusarium*, *Pythium*, *Rhizoctonia*, and *Sclerotinia*. Plant health benefits include increased cold, heat and drought tolerance. **Foliar spray rates:** ½–1½ tsp per gal or 6-18 oz per 100 gal. **Drench rates:** 1-1½ tsp per gal or 12-18 oz per 100 gal. **Restricted use Pesticide in NY.**

Item: 71-26801 **Size:** 1 lb.
Item: 71-26821 **Size:** 12 lb.

Palladium WDG

syngenta | MOA 9+12 | REI 12

Active Ingredient: Cyprodinil & Fludioxonil

Broad spectrum foliar spray with contact and translaminar systemic activity controls many foliar and stem diseases, including *Botrytis*, *Alternaria*, boxwood blight, *Cercospora*, *Myrothecium*, aerial *Rhizoctonia*, *Septoria*, and 10 other diseases. Labeled for use on ornamentals in the greenhouse, various edibles and herb transplants, landscapes, interiorscapes, golf courses, nurseries, and other application sites. **Foliar spray rates**: ¼-¾ tsp per gal or 2-6 oz per 100 gal. **Restricted use pesticide in NY. Nassau and Suffolk County, NY restrictions apply.**

Item: 71-2685 **Size:** 2 lb.

PerCarb

BioSafe Systems | MOA NC | REI 1

Active Ingredient: Sodium Carbonate Peroxyhydrate

PerCarb is a contact foliar fungicide and bactericide labeled for field-grown crops, tree crops, berries, small fruits, vine crops, and ornamentals. Provides prevention and control of downy mildew, powdery mildew, *Botrytis*, and bacterial leaf spots. **Rates:** 1/8-1/2 oz per gal or 1-3 lb per 100 gal. Refer to label for liverwort control. **Do not apply to crops in bloom. OMRI listed.**

Item: 71-8687 **Size:** 50 lb. (3 bag minimum)

Phostrol

nufarm | MOA P07 | REI 4

Active Ingredient: Mono & Dibasic Sodium, Potassium & Ammonium Phosphites

Phostrol is a true systemic fungicide labeled for the prevention of *Pythium*, *Phytophthora* and downy mildew and others. Labeled for ornamentals and many edible crops in greenhouses, field production, commercial landscapes, nurseries, and turf. Methods of application vary by crop including foliar sprays, soil drenches, soil incorporation, and dipping. Phostrol works by stimulating the natural defenses of plants. Do not apply within 20 days of a copper application. **Foliar spray rates:** 1⅔-4 tsp per gal or 26-64 fl oz per 100 gal. **Drench rates:** 1/3-2/3 tsp per gal or 5-10 fl oz per 100 gal.

Item: 71-2725 **Size:** 2.5 gal.

Phyton 35

PHYTON CORPORATION | MOA M01 | REI 48

Active Ingredient: Copper Sulfate Pentahydrate

Translaminar systemic copper bactericide and fungicide. Preventative and curative activity against major diseases such as *Alternaria*, *Botrytis*, powdery mildew, *Phytophthora*, *Erwinia*, *Pseudomonas* and *Xanthomonas*. Labeled for use on ornamentals and many edible crops in greenhouses and nurseries. Apply as a spray or drench. See label cautions about interactions with B-Nine and phosphonate fungicides. **Foliar spray rates:** ¾-3 tsp per gal or 13-50 fl oz per 100 gal. **Drench rates:** 13-35 fl oz per 100 gal.

Item: 71-2732 **Size:** 1 L.
Item: 71-2737 **Size:** 1 gal.

Postiva

syngenta

MOA 3+7 | REI 12

Active Ingredient: Pydiflumetofen & Difenoconazole

Broad spectrum, translaminar systemic with long residual activity that also suppresses certain bacterial leaf spots. It can be applied as a foliar spray and a drench. Postiva can be used on ornamentals and certain vegetable transplants. Foliar diseases controlled include: *Alternaria, Botrytis,* boxwood blight, *Colletotrichum, Cercospora*, powdery mildew, and as well as suppression of the bacterial diseases *Pseudomonas* and *Xanthomonas* spp. Drench treatments provide control of the soilborne pathogens *Fusarium, Rhizoctonia,* and *Sclerotinia.* Excellent plant and bloom safety. *Do not use on Celosia.* **Foliar spray and Drench rates:** 2/3-1¾ tsp per gal or 10-28 fl oz per 100 gal. **Restricted use pesticide in NY. Not registered in AK, CA.**

Item: 71-2400 **Size:** 28 fl oz
Item: 71-2405 **Size:** 1 gal.

Multipacks:
Item: 71-PMM **Description:** Postiva/Mural Multipak
(4) - 28 fl oz of Postiva fungicide & (2) - 1 lb. of Mural fungicide

Procidic C

greensoire GLOBAL, INC.

MOA NC | REI 0

Active ingredient: Citric Acid

25b product for preventative control of powdery mildew and both preventative/curative control of *Botrytis*. Recommended for greenhouse and field crops, including hemp and cannabis. **Foliar spray rates:** 0.5-3.5 fl oz per gal.

Item: 71-2744 **Size:** 2.5 gal

Protect DF

nufarm

MOA M03 | REI 24

Active Ingredient: Mancozeb

Turf and ornamental fungicide. Controls petal blight, leaf spot, *Botrytis*, anthracnose, rust, and black spot on roses, azaleas, mums and many other ornamentals. *Do not use on marigolds.* Tank mix with copper products for even greater control of bacterial diseases. Labeled for certain vegetable transplants. **Foliar spray rates:** 1 Tbls per gal or 1.5 lb per 100 gal.

Item: 71-2748 **Size:** 6 lb.

Ranman 400 SC

SUMMITAGRO

MOA 21 | REI 12

Active Ingredient: Cyazofamid

Label permits drench applications to greenhouse tomato transplants and bell peppers grown to harvest only for *Phytophthora*, and foliar sprays for downy mildew and aerial *Phytophthora* on herbs or cucurbit vegetables grown to harvest in a greenhouse. See label for crop specific rates. **Foliar spray rates:** 1/2 tsp per 3-4 gal or 2.1-2.75 fl oz per 100 gal. **Drench rates:** 1/2 tsp per 2.5 gal or 3 fl oz per 100 gal.

Item: 71-27651 **Size:** 1 qt.
Item: 71-27652 **Size:** 1 gal.

Regalia CG

ProFarm

MOA P05 | REI 4

Active Ingredient: Extract of *Reynoutria sachalinensis*

A botanical fungicide labeled for use on ornamentals in greenhouses, shade-houses, outdoor nurseries and landscape plantings. Utilizing Induced Systemic Resistance, Regalia CG primes the plants for self defense. Protects against foliar diseases, like *Alternaria*, *Colletotrichum*, *Botrytis*, *Cercospora*, downy mildew, *Myrothecium*, powdery mildew, rust and *Septoria*. Bacterial disease protection against *Erwinia*, *Pseudomonas* and *Xanthomonas*. Root and crown diseases include *Fusarium*, *Phytophthora*, *Pythium*, and *Rhizoctonia*. **Foliar spray and drench rates:** 0.64-1.28 fl oz per gal or 64-128 fl oz per 100 gal. **OMRI listed.**

Item: 70-2841 **Size:** 1 qt.
Item: 70-2845 **Size:** 2.5 gal.

RootShield Granules

BioWorks

MOA BM02 | REI 0

Active Ingredient: *Trichoderma harzianum* Rifai strain T-22

Biological fungicide. Protects plants from root diseases caused by *Pythium*, *Fusarium*, and *Rhizoctonia*. Apply as preventive granular incorporation into soil mix before potting or seeding. **Incorporation rates:** 1-1.5 lb per cu yd of soil. **OMRI listed.**

Item: 71-2781 **Size:** 40 lb.
Item: 71-2783 **Size:** 500 lb.
Item: 71-2785 **Size:** 1,000 lb.

RootShield Plus Granules

BioWorks

MOA BM02 | REI 0

Active Ingredient: *Trichoderma harzianum* Rifai strain T-22 & *Trichoderma virens* strain G-41

Naturally occurring fungus that grows along with the roots to protect plants from root and crown diseases such as *Cylindrocladium*, *Fusarium*, *Phytophthora*, *Pythium*, and *Rhizoctonia*. Labeled for ornamentals and many edible crops in greenhouses and nurseries. **Incorporation rates:** 1-3 lb per cu yd of soil mix. **OMRI listed.**

Item: 71-27921 **Size:** 40 lb.
Item: 71-27931 **Size:** 500 lb.
Item: 71-27941 **Size:** 1,000 lb.

GGSPRO TIP

CROP PROTECTION EXPIRATION DATES

Just like ketchup and mustard, chemicals have a shelf life that must be respected to maximize plant safety and product effectiveness. You can ensure maximum shelf life by storing products according to label recommendations - typically in cool, dry conditions away from direct sunlight. Shelf life can vary widely, ranging from as little as 6 months to over 8 years, so it's important to keep track of purchase dates and storage conditions. Contact GGSPro for specific shelf life information on the items in your cabinet.

RootShield WP

BioWorks | MOA BM02 | REI 0

Active Ingredient: *Trichoderma harzianum* **Rifai strain T-22**

Fully compatible with injectors and drip irrigation systems. Biological fungicide for use as a soil drench on ornamentals and many edible crops. Proliferates in the root zone to protect plants from pathogens such as: *Pythium*, *Rhizoctonia*, and *Fusarium*. Must be used prior to disease onset. **Drench rates:** Soil drench at ½-¾ tsp per gal or 3-5 oz per 100 gal. **OMRI listed.**

Item: 71-2789 **Size:** 1 lb.
Item: 71-27901 **Size:** 3 lb.
Item: 71-27903 **Size:** 30 lb.

RootShield Plus WP

BioWorks | MOA BM02 | REI 0

Active Ingredient: *Trichoderma harzianum* **Rifai strain T-22 &** *Trichoderma virens* **strain G-41**

Naturally occurring fungus that grows along with the roots to protect plants from root and crown diseases such as *Cylindrocladium*, *Fusarium*, *Phytophthora*, *Pythium*, and *Rhizoctonia*. Improved formulation is fully compatible with injectors and drip irrigation systems. Labeled for ornamentals and many edible crops in greenhouses and nurseries. Approved for hydroponic applications. **Drench rates:** ½-1 tsp per gal or 3-8 oz per 100 gal. **OMRI listed.**

Item: 71-27951 **Size:** 1 lb.
Item: 71-27961 **Size:** 3 lb.
Item: 71-27971 **Size:** 30 lb.

Sandrine

BioWorks | MOA M01 | REI 4

Active Ingredient: *Copper Octanoate* **(Copper Soap)**

Sandrine Copper Soap offers effective protection against numerous labeled fungal and bacterial diseases. This fungicide blends soluble copper with fatty acids to create a true soap formulation, allowing for improved leaf surface coverage while using a lower amount of copper. Controls: anthracnose, Alternaria, Cylindrocladium, powdery mildew, certain bacterial leaf spots, and more. Labeled for ornamentals grown in greenhouses, nurseries, and interiorscapes, as well as herbs and vegetable crops in greenhouses and shadehouses. **Foliar spray rates:** 4 tsp-2 fl oz per gal or 0.5-2 gal per 100 gal. **OMRI listed.**

Item: 71-2925 **Size:** 1 gal.

Segovis

syngenta | MOA 49 | REI 4

Active Ingredient: Oxathiapiprolin

Liquid formulation controls downy mildew and *Phytophthora* by spray or drench. For use on ornamental plants in greenhouses, shade houses, lathhouses, outdoor nurseries, commercial landscapes, and basil transplants. Longer residual activity at higher rates. **Foliar spray rates:** ⅛ to ½ tsp per 3.5 gal or 0.6 to 2.4 fl oz per 100 gal. **Drench rates:** ⅕ to 1 tsp per 5 gal or 0.65 to 3.2 fl oz per 100 gal.

Item: 71-3100 **Size:** 1 pt.

Segway O

ohp | MOA 21 | REI 12

Active Ingredient: Cyazofamid

Foliar spray or drench to control downy mildew (spray only), *Pythium* and *Phytophthora* on ornamentals in greenhouses, nurseries, and landscapes. Herbs, tomatoes, and peppers added to the label, see label for details. **Foliar spray rates:** ⅜-⅝ tsp per 3 gal or 2.1-3.5 fl oz per 100 gal. **Drench rates:** ¼-1 tsp per 3 gal or 1.5-6 fl oz per 100 gal depending on the disease. **Restricted use pesticide in VT.**

Item: 71-31102 **Size:** 16 fl oz.
Item: 71-3113 **Size:** 64 fl oz.

Sil-Matrix LC

CERTIS Biologicals | MOA UN | REI 4

Active Ingredient: Potassium Silicate

Sil-Matrix LC is an aqueous liquid concentrate. This versatile product applied as a spray for control of foliar diseases and certain insects and mites. For use on ornamentals and many edible crops including certain vegetables, berries, vines, and fruit trees. Foliar diseases controlled: *Botrytis*, powdery mildew and certain turf diseases. Flower caution on label. **Foliar spray rates:** 2 tsp-1.25 fl oz per gal or 32-128 fl oz per 100 gal. Must keep spray solution at pH 4-5 or 7-8 to prevent from gelling. **OMRI listed**.

Item: 71-2939 **Size:** 2.5 gal.

Spirato GHN

nufarm

MOA 12 | REI 12

Active Ingredient: Fludioxonil

For control of foliar, stem and root diseases in ornamentals and certain greenhouse vegetables grown as transplants or grown on to harvest. Labeled for use in interiorscapes, greenhouses, lath, shade and hoop houses, enclosed structures, nurseries and residential landscapes. Foliar diseases include *Alternaria*, *Botrytis*, boxwood blight, *Cercospora*, *Myrothecium*, and *Rhizoctonia* web blight. Labeled as a soil drench for *Cylindrocladium*, *Fusarium*, *Rhizoctonia*, *Sclerotium*, and *Thielaviopsis*. **Foliar spray rates:** ¼-½ tsp per 4 gal or 1-2 fl oz per 100 gal. **Drench rates:** ¼-½ tsp per 4 gal or 1-2 fl oz per 100 gal. **Restricted use pesticide in NY. Nassau and Suffolk County, NY restrictions apply. Not registered in ME.**

Item: 71-2948 **Size:** 1 pt.

Stargus

ProFarm

MOA BM02 | REI 4

Active Ingredient: *Bacillus amyloliquefaciens* strain F727

Broad-spectrum biofungicide/bactericide for control or suppression of fungal and bacterial plant diseases. Applications can be made by spray, dip or drench in ornamentals and many edible crops in greenhouses, shadehouses, field, outdoor and retail nurseries, and the landscape. Diseases controlled include: *Alternaria*, *Botrytis*, *Cercospora*, *Colletotrichum*, downy mildew, *Pythium*, *Phytophthora*, powdery mildew, *Rhizoctonia*, *Sclerotinia*, *Xanthomonas* and more. **Foliar spray rates:** 2 tsp-1.25 fl oz or 32-128 fl oz per 100 gal. **Drench rates:** 2 tsp-1.25 fl oz per gal or 32-128 fl oz per 100 gal. **OMRI listed**

Item: 71-2950 **Size:** 2.5 gal.

Subdue Maxx

syngenta

MOA 4 | REI 48

Active Ingredient: Mefenoxam

Systemic residual control of root and stem rot diseases caused by *Pythium* and *Phytophthora*. Applications for downy mildew must be tank mixed with a product for downy mildew from another MOA class. **Drench rate:** Soil drench at time of seeding at 0.13-0.25 fl oz per 100 gal; at time of transplanting ½-1 fl oz per 100 gal. A 0 hour REI can be obtained for drench applications that meet label criteria. **Foliar spray rates:** 0.15-0.3 ml per gal or 0.5-1 fl oz per 100 gal. Many vegetable and herb transplants can be treated. **CA and NY require a supplemental label.** Some states have 24C labels that allow for use on basil.

Item: 71-2979 **Size:** 1 qt.
Item: 71-2978 **Size:** 1 gal.
Item: 71-29781 **Size:** 10 gal.

Triact 70

ohp

MOA UNE | REI 4

Active Ingredient: Clarified Hydrophobic Extract of Neem Oil

Horticultural oil labeled for the control of foliar fungal diseases of ornamentals and edible crops in greenhouses, interiorscapes, landscapes, and nurseries. Diseases controlled include: *Alternaria*, anthracnose, black spot, *Botrytis*, powdery mildew, rust, and scab. **Foliar spray rates:** 4 tsp-1.28 fl oz per gal or 0.5-1 gal per 100 gal. **OMRI listed.**

Item: 70-3226 **Size:** 2.5 gal.



SOLUTION SPOTLIGHT

WARHAMMER

WarHammer contains 10% chitosan, a natural plant defense elicitor, meaning that it triggers the plant's immune system to fight against pathogens and stress. Diseases suppressed include *Fusarium*, *Rhizoctonia*, *Pythium*, *Phytophthora*, *Sclerotinia*, *Verticillium*, and other soil-borne pathogens. Above-ground disease suppression covers powdery mildew, downy mildew, *Botrytis*, *Erwinia*, fungal leaf spots, and interestingly, viruses as well such as Tobacco Mosaic Virus. WarHammer is also labeled as a nematicide, adding to the short list of tools to combat common species such as root-knot and lesion nematodes.

Triathlon BA

MOA BM02 | REI 4

Active Ingredient: ***Bacillus amyloliquefaciens*** **strain D747**

Biofungicide/bactericide for use on ornamentals, vegetables, herbs, berries, stone fruits and turf for prevention of many foliar and root diseases. Foliar sprays for anthracnose, *Alternaria*, bacterial leaf spots (*Erwinia*, *Pseudomonas*, *Xanthomonas*), *Botrytis*, black spot on roses, *Cercospora*, downy mildew, *Entomosporium*, *Myrothecium*, powdery mildew, rust, and scab. Soil drench application prevents *Fusarium*, *Pythium*, *Phytophthora*, and *Rhizoctonia*. Labeled for cutting and root dip. **Foliar spray rates:** 1 tsp-2 Tbls per gal or 16-96 fl oz per 100 gal. **Drench rates:** 1 tsp-4½ tsp per gal or 16-72 fl oz per 100 gal. **OMRI listed.**

Item: 71-3040 **Size:** 1 gal.

WarHammer

25b | REI 0

Active Ingredient: Chitosan

WarHammer is a broad-spectrum biostimulant that helps crops defend themselves against parasitic nematodes, fungi, bacteria, and some viruses. It suppresses key soil-borne pathogens such as *Fusarium, Rhizoctonia, Pythium, Phytophthora, Sclerotinia*, and *Verticillium*, while also controlling foliar diseases including powdery and downy mildew, *Botrytis*, fire blight, *Alternaria*, and *Xanthomonas* species. Effective on fruits, vegetables, grains, nuts, herbs, and more. WarHammer can be applied as a drench, foliar spray, or seed treatment, and is compatible with a wide range of fertilizers, pesticides, and biostimulants. **Foliar spray rates:** 1/4-3/4 tsp per gal or 4-12 fl oz per 100 gal. **Drench rates:** 1/4-3/4 tsp per gal or 4-12 fl oz per 100 gal.

Item: 75-9590 **Size:** 2.5 gal.

ZeroTol 2.0

MOA NC | REI 1

Active Ingredient: Hydrogen Dioxide & Peracetic Acid

For use in greenhouses, garden centers, landscapes, nurseries, hydroponics and turf. Kills algae, bacteria, fungi and their spores on contact. Can be used to treat irrigation water for pathogen control. Labeled for use on ornamentals, herbs, vegetables, small fruits, and hard surface applications. Safe on foliage and most open blooms. Can be applied as a spray, fog or drench. Leaves no residue and has 0 REI for drench treatments if label conditions are met. **Foliar spray rates:** 0.5-1.25 fl oz per gal or 50-128 fl oz per 100 gal. **Drench rates:** 0.25-1.25 fl oz per gal or 25-128 fl oz per 100 gal. **OMRI listed.**

Item: 71-35501 **Size:** 2.5 gal.
Item - CA only: 71-35501-CA **Size:** 2.5 gal.
Item: 71-35511 **Size:** 30 gal.
Item - CA only: 71-35511-CA **Size:** 30 gal.
Item: 71-35521 **Size:** 55 gal.
Item - CA only: 71-35521-CA **Size:** 55 gal.



SOLUTION SPOTLIGHT

ZEROTOL 2.0

The active ingredients in ZeroTol 2.0; hydrogen dioxide and peracetic acid, kill algae, bacteria, and fungi on contact using their oxidation properties. This multi-use staple fungicide and disinfecting sanitizer is labeled for use on ornamentals, herbs, vegetables, small fruits, irrigation systems, hard surface applications, and more!

INSECTICIDES

2026
2027

Akari 5SC

MOA 21A | REI 12

Active Ingredient: Fenpyroximate

Miticide with 21 to 28 days of residual contact control. The label allows for use on greenhouse ornamentals as well as interiorscapes. Labeled for broad mites, cyclamen mites, spider mites, pysllids, and whitefly. Mite feeding stops within a day and control can be evaluated 4 to 7 days after treatment. No visible residue. **Foliar spray rates:** 1-1½ tsp per gal or 16-24 fl oz per 100 gal. Greenhouse grown tomatoes, peppers and cucumbers: 1-2 tsp per gal or 16-32 fl oz per 100 gal.

Item: 70-1160 **Size:** 1 qt.

Altus

MOA 4D | REI 4

Active Ingredient: Flupyradifurone

Altus is a soluble concentrate (SC) formulation of a broad spectrum insecticide. It is labeled as a translaminar foliar spray or drench for use in greenhouses, field and container nurseries, shadehouses, interiorscapes and landscapes. Labeled pests include: aphids, leafhoppers, mealybugs, plant bugs, and whiteflies. Suppression of soft scale and western flower thrips can also be expected. Altus can be applied to ornamentals and many vegetable transplants. In addition, cucumbers, lettuce, peppers, and tomatoes can be treated when grown to harvest. **Foliar spray rates:** 1/2-3/4 tsp per gal or 7-14 fl oz per 100 gal. **Drench rates:** 1/6-1/4 tsp per gal or 2.8-3.7 fl oz per 100 gal. 12 REI in CA. **Restricted use pesticide in MA & NY. Prohibited in Nassau and Suffolk County, NY.**

Item: 70-11612 **Size:** 64 fl oz.



SOLUTION SPOTLIGHT

ALTUS

Often referred to as a “neo-nicotinoid alternative,” Altus offers broad-spectrum insect control with a similar mode of action, classified in group 4D. This bloom and plant safe formulation can be applied as a foliar spray or drench for ornamental and edible productions. This can be valuable tool for aphid control on cucumbers, lettuce, peppers, and tomatoes - right up to harvest along with a wide range of other edible transplants. With translaminar activity, Atlus effectively controls aphids, whiteflies, mealybugs, and plant bugs, while also suppressing Western Flower Thrips (WFT) and soft scale. GGSPro frequently recommends Atlus for late-season aphid management in hanging baskets, thanks to its relatively low cost in use as a pollinator and BCA safe drench option.

Aza-Direct

Gowan

MOA UN | REI 4

Active Ingredient: Azadirachtin

A botanical (neem) insect growth regulator. Tank mix with other insecticides to increase control of a wide range of pests because of its ability to keep larval, pupal, and nymph stages from developing further. Labeled for ornamentals, vegetables, fruit trees, and herbs. Approved for use in greenhouses, nurseries, or outdoor field production. **Foliar spray rates:** 1 1/8-1 1/3 tsp per gal or 18-21 fl oz per 100 gal. **OMRI listed.**

Item: 70-1222 **Size:** 2.5 gal.

AzaGuard EC

BioSafe Systems

MOA UN | REI 4

Active Ingredient: Azadirachtin

A botanical (neem) insect growth regulator and nematicide. Targets larval, pupal and nymph stages of many insects such as leafhoppers, mealybugs, soft scale, thrips, and whitefly. Labeled for use on ornamentals and many edible crops in greenhouse, hydroponics, interiorscapes, and field crops. May damage certain open blooms. No additional surfactants needed. **Foliar spray rates:** 2/3 to 1 1/3 tsp per gal or 10-16 fl oz per 100 gal. **Drench rate:** 6.4 fl oz per 100 gal. **OMRI listed.**

Item: 70-1224 **Size:** 1 qt.
Item: 70-1225 **Size:** 1 gal.
Item: 70-1226 **Size:** 2.5 gal.

Azatin O

ohp

MOA UN | REI 4

Active Ingredient: Azadirachtin

Botanical (neem) insect growth regulator with 4.5% active ingredient. Halts the growth process of instar and pupal stages of labeled insects. Controls whiteflies, thrips, mealybugs, leafminer, fungus gnats, soft scale, aphids, and more. Herbs and vegetables on the label. **Foliar spray rates:** 2/3 tsp per gal or 10.66 fl oz per 100 gal. **Drench rate:** ½-1 tsp per gal or 8-16 fl oz per 100 gal. **OMRI listed.**

Item: 70-12301 **Size:** 1 qt.

BioNex

BioWorks

MOA UN | REI 12

Active Ingredient: Pyrethrins & Canola Oil

BioNex is a broad-spectrum, natural pyrethrum-based contact insecticide that delivers rapid knockdown of pests and is well-suited for organic and conventional programs. Featuring multiple modes of action, pyrethrins disrupt insect sodium channels for fast control, while canola oil acts as a smothering agent and spreader. It has minimal environmental persistence when applied according to label directions and breaks down quickly. Labeled pests include: aphids, earwigs, leafhoppers, tent caterpillars, plant bugs, mealybugs, thrips, spider mites, sawfly larvae and more. Do not apply within 21 days of a sulfur product. **Foliar spray rates:** 1.25-2.5 fl oz per gal or 1-2 gal per 100 gal.

Item: 70-1247 **Size:** 1 gal.

BotaniGard 22WP

ohp 1

MOA UNF | REI 4

Active Ingredient: *Beauveria bassiana* strain GHA

Wettable powder insecticide. Naturally occurring fungus for use in controlling aphids, thrips and whiteflies on ornamentals, herbs and vegetable crops in greenhouses and outdoor production. Greater compatibility with biological control agents than the ES formulation. No injector use. **Foliar spray rates**: 1-4 tsp per gal; 0.5-2 lb per 100 gal. **Drench rate for soil-dwelling pests:** 1-4 oz per 1,000 sq ft. Safe for tomatoes. **OMRI listed.**

Item: 70-12521 **Size:** 1 lb.

BotaniGard ES

ohp 1

MOA UNF | REI 4

Active Ingredient: *Beauveria bassiana* strain GHA

Emulsifiable suspension mycoinsecticide. A naturally occurring fungus for use in controlling whitefly, aphids, and thrips on greenhouse crops, ornamentals, herbs, and vegetables. For indoor/outdoor nursery, greenhouse, and landscape use. **Foliar spray rates:** 2-4 tsp per gal or 32-64 fl oz per 100 gal. May damage tomatoes. **OMRI listed.**

Item: 70-12501 **Size:** 1 qt.
Item: 70-12511 **Size:** 1 gal.

BotaniGard Maxx

MOA 3A+UNF | REI 12

Active Ingredient: Pyrethrins & *Beauveria bassiana* strain GHA

Natural pyrethrum combined with a naturally occurring fungus. Foliar sprays control: aphids, thrips, whitefly, mealybugs, leafhoppers, plants bugs and many more. Labeled for ornamentals, herbs, vegetables, fruits and nuts in greenhouses, shade houses, nursery, field, landscape, turf, and interiorscapes. Use caution on open blooms and *do not apply to poinsettias after bract formation.* Check compatibility with fungicides prior to tank mix. **Foliar spray rates:** ½-2 tsp per gal water or 8-32 fl oz per 100 gal (higher rates on vegetables outside).

Item: 70-1254 **Size:** 1 gal.
Item: 70-1255 **Size:** 2.5 gal.

BT NOW

MOA 11A | REI 4

Active Ingredient: *Bacillus thuringiensis* ssp. *kurstaki* strain EVB-113-19

BT NOW is toxic to many species of Lepidopteran larvae when applied as a foliar spray. It is labeled for use on ornamentals and edible crops in greenhouses, nurseries, and agricultural sites. BT NOW must be ingested by susceptible larvae to be effective. Thorough coverage of target foliage where larvae are feeding is essential. **Foliar spray rates:** ½-3 ½ tsp per gal or 8-56 fl oz per 100 gal. **OMRI listed.**

Item: 70-1290 **Size:** 1 gal.
Item: 70-1290-CA **Size:** 1 gal.



SOLUTION SPOTLIGHT

AZADIRACHTIN

The active ingredient Azadirachtin, found in products like Azatin O, AzaGuard, Aza-Direct, and Molt-X, is a powerful Insect Growth Regulator (IGR) that disrupts multiple life stages across a wide range of insect pests. When paired with *Beauveria bassiana* (e.g., Principle WP, BotaniGard WP), *Isaria fumosorosea* (e.g., NoFly WP) products, or conventional chemistry, the combination works synergistically to enhance control and reduce pest pressure more effectively than when used alone. With OMRI listings and broad-spectrum activity, these products are excellent choices for both edible and ornamental production as a valuable tool in any integrated pest management (IPM) program.

Bug-N-Sluggo

MOA UN+5 | REI 4

Active Ingredient: Iron Phosphate & Spinosad

Small bait pellets for the control of ants, earwigs, crickets, cutworms, slugs, snails, sowbugs, and pillbugs. Scatter pellets around the perimeter of the field or greenhouse vegetable plantings. Fruit trees, small fruits, and ornamentals can also be treated. **Rates**: 0.5-1 lb per 1,000 sq ft for most applications. **OMRI listed.**

Item: 70-1295 **Size:** 50 lb.

Captiva Prime

MOA UN | REI 4

Active Ingredient: Capsicum Oleoresin Extract, Garlic Oil, & Canola Oil

Natural plant-based bioinsecticide, miticide, and insect repellent in an emulsifiable concentrate formulation. Tank mix with other insecticides and miticides to increase control of a wide range of pests because of its irritant effect. It is recommended to perform small-scale trials before applying to entire crop areas to identify any phytotoxicity issues. Labeled for a wide range of ornamentals and edibles grown in greenhouses, nurseries, or outdoors. **Foliar spray rates:** ½-1 tsp per gal or 8-16 fl oz per 100 gal. **OMRI listed.**

Item: 70-1340 **Size:** 2.5 gal.

Cintro

MOA UN | REI 12

Active Ingredient: Potassium Salts of Fatty Acids

Cintro is an insecticidal soap providing effective control of a wide range of pests including aphids, thrips, whiteflies, leafhoppers, spider mites, and others. This easy-to-apply soap works upon direct contract to the insect and leaves no residual insecticidal activity once it has dried. Cintro can be applied to many field and greenhouse-grown vegetable, herb, and ornamental crops. Refer to the label for strategies to reduce the risk of phytotoxicity. **Foliar spray rates:** 1.25-2.5 fl oz per gal or 1-2 gal per 100 gal. **OMRI listed.**

Item: 00-0000 **Size:** 2.5 lb.

Citation WSP

MOA 17 | REI 12

Active Ingredient: Cyromazine

Insect growth regulator for the control of fungus gnat larvae, and dipterous leafminers in interiorscapes, landscape ornamentals, container-grown ornamentals, lath and shade house grown ornamental bedding plants. Also labeled for shoreflies in greenhouse and interiorscapes. Labeled for certain vegetable transplants. **Drench rate:** 1/2 tsp per gal or one 2.66 oz pouch per 100 gal.

Item: 70-13501 **Qty:** 6 - 2.66 oz.

Deadline Mini-Pellets

AMVAC Amvac Chemical Corporation

MOA 1A | REI 12

Active Ingredient: Metaldehyde

Snail and slug bait mini pellets. Use around ornamentals in field, or greenhouses, or orchards, and outdoor vegetables. Resistant to rain and irrigation. **Rates:** 3.6-7.2 oz per 1,000 sq ft; 10-25 lb per acre. **Restricted use pesticide in NY.**

Item: 70-14301 **Size:** 10 lb.

DiPel Pro DF

VALENT nufarm

MOA 11A | REI 4

Active Ingredient: *Bacillus thuringiensis kurstaki* **ABTS-351**

Bacillus thuringiensis for the control of many caterpillars. DiPel works by ingestion, so thorough coverage of foliage is important. **Foliar spray rates:** ½-4 tsp per gal or 0.25-2 lb per 100 gal. Repeat application in 3-14 days to maintain control. **OMRI listed.**

Item: 70-1450 **Size:** 1 lb.

Distance IGR

VALENT nufarm

MOA 7C | REI 12

Active Ingredient: Pyriproxyfen

Insect growth regulator for use in greenhouse, outdoor ornamentals and interiorscapes. Controls whitefly, fungus gnat and shorefly larvae (soil surface spray or drench), scale, and others. **Foliar spray rates:** ⅓-⅔ tsp per gal or 6-12 fl oz per 100 gal. *Do not use on salvia, fern, scheflera, heuchera or gardenia.* **Drench rates** and special instructions for poinsettias are on the label.

Item: 70-1465 **Size:** 1 qt.

Ecotec Plus

BRANDT 1

25b | REI 0

Active Ingredient: Rosemary Oil, Geraniol, & Peppermint Oil

Broad spectrum 25b contact insecticide/miticide provides quick kill and control of all life stages of certain pests. Foliar sprays control: aphids, thrips, whiteflies, mites, cabbage loopers, armyworms and other pests. Labeled for use on indoor/outdoor ornamentals and edibles in greenhouses, nurseries, interiorscapes, and residential use. **Foliar spray rates:** 1-4 tsp per gal or 16-64 fl oz per 100 gal. **OMRI listed.**

Item: 70-1507 **Size:** 2.5 gal.

Endeavor WP

syngenta

MOA 9B | REI 12

Active Ingredient: Pymetrozine

A unique mode of action controls aphids and whiteflies by interfering with their ability to feed. Applied as a foliar spray, insect death occurs in 2-4 days through translaminar systemic activity. Foliar sprays can be used on ornamentals or vegetable transplants for re-sale. Soil drenches can be used on ornamentals only to provide 5 weeks or more of control. **Foliar spray rates:** 1 Tbls per 5 gal or 5.0 oz per 100 gal. **Drench rates:** 5 oz per 100 gal. **For ornamentals only in CA.**

Item: 70-1655 **Size:** 15 oz.

Engulf GHN

nufarm 1

MOA 20D | REI 12

Active Ingredient: Bifenazate

Flowable suspension miticide that controls 18 species of spider mite adults including eggs. Not systemic, thorough application necessary. Labeled for ornamentals, interiorscapes, landscapes, nurseries and more. High pH water may reduce effectiveness. Do not use more than two times per year. Labeled for greenhouse grown tomatoes. **Foliar spray rates:** 1/8-1/4 tsp per gal or 2-4 fl oz per 100 gal. **Not registered in ME.**

Item: 70-1515 **Size:** 1 pt.

Entrust SC

CORTEVA agriscience 1

MOA 5 | REI 4

Active Ingredient: Spinosad

Labeled for control of foliage feeding Lepidopterous larvae (worms or caterpillars), Colorado potato beetles, leafminers, and thrips (suppression only) on ornamentals in greenhouses and nurseries as well as specific edible crops in fields and greenhouses. Labeled for certain pests in aquatic production. **Foliar spray rates:** 1/8-1¼ tsp per gal or 3-22 fl oz per 100 gal. **OMRI listed.**

Item: 70-1538 **Size:** 1 qt.
Item: 70-1544 **Size:** 36 fl oz.
Item: 70-1547 **Size:** 2.5 gal.



SOLUTION SPOTLIGHT

EPISHIELD O

Epishield O is a 25(b) Exempt product recently released by BioWorks. Now OMRI certified, EpiShield O is a miticide and insecticide based on a blend of essential oils, providing quick knockdown control of mites, aphids, thrips, whiteflies, and mealybugs. EpiShield O provides lower oil content, reducing the potential for phytotoxicity, which can be seen with other oil-based products.

EpiShield O

BioWorks | 25b | REI 0

Active Ingredient: Peppermint Oil & Clove Oil

EpiShield O is a miticide and insecticide based on a proprietary blend of essential oils. Working on contact as a foliar spray or dip, EpiShield O results in pest paralysis, suffocation, and desiccation. EpiShield O delivers high mortality levels for controlling mites and aphids, while using 10x lower rates than other oil-based insecticides. This rate reduction of up to 10-fold gives growers more powerful results without storing and moving high volumes of product around the growing facility. **Application Rates:** 1/2-3/4 tsp per gal or 9-12 fl oz per 100 gal. **OMRI listed.**

Item: 70-1544 **Size:** 36 fl oz.
Item: 70-1547 **Size:** 2.5 gal.

Flagship 25WG

syngenta | 3 | MOA 4A | REI 12

Active Ingredient: Thiamethoxam

Flagship offers contact, translaminar systemic and systemic control of many greenhouse and nursery pests, including aphids, leafhoppers, mealybugs, whiteflies and others. Flagship sprays are rapidly absorbed into the leaf tissue yielding 2 to 4 weeks residual control. Drench applications can provide systemic control for 6-8 weeks. Certain vegetable transplants are on the label. Consult label for spray rates that vary by pest and crop. **Foliar spray rates and drench rates:** ½-1 tsp per gal or 4-8.5 oz per 100 gal. Drench volumes found on the label. **Restricted use pesticide in CT, MA, MD, ME, NJ, NV & NY. Prohibited in Nassau and Suffolk County, NY. NY use limited to Christmas trees and greenhouses. Not approved for use in VT.**

Item: 70-17002 **Size:** 2 lb.

Floramite SC

envu | 1 | MOA 20D | REI 12

Active Ingredient: Bifenazate

Soluble concentrate miticide that controls 8 species of mites, including all life stages of spider mites. Labeled for greenhouses, interiorscapes, landscapes, nurseries and more. High pH water reduces effectiveness. Excellent plant safety. Labeled for tomatoes that are 1" or larger at maturity. **Foliar spray rates:** ¼-½ tsp per gal or 4-8 fl oz per 100 gal.

Item: 70-16530 **Size:** 1 qt.

Gnatrol WDG

VALENT nufarm | MOA 11A | REI 4

Active Ingredient: *Bacillus thuringiensis israelensis*

Gnatrol WDG is a biological larvacide, applied as a drench for fungus gnat larvae in greenhouses, interiorscapes, and nurseries. It is labeled for ornamental and vegetable crops as well as breeding areas on greenhouse floors. **Drench rates:** preventative to moderate infestations, apply 3.2–6.4 oz per 100 gal. For heavier infestations apply 13–26 oz per 100 gal. Apply 3 times at weekly intervals. **OMRI listed. Not for use in ME.**

Item: 70-1716 **Size:** 16 lb.

Grandevo CG

ProFarm | 1 | MOA UNB | REI 4

Active Ingredient: *Chromobacterium subtsugae* strain PRAA4-1T

Biological insecticide/miticide for use on ornamental plants and turf against caterpillars, aphids, mealybugs, thrips, whiteflies, and mites on ornamentals and edibles in greenhouses and nurseries. Product needs to be ingested to be effective. **Rates:** 2.5 tsp-2.5 Tbls per gal or 1-3 lb per 100 gal. **OMRI listed.**

Item: 70-1756 **Size:** 10 lb.

Hachi-Hachi SC

SePRO | 3 | MOA 21A | REI 12

Active Ingredient: Tolfenpyrad

Improved formulation of this contact, broad spectrum insecticide controls thrips, aphids, flea beetles, mealybugs, scale, leafhoppers and early instar caterpillars. Suppresses whiteflies and powdery mildew. Labeled for indoor and outdoor ornamental crops, including cut flowers. See label for cut flower rates. Labeled for greenhouse grown cucumber and tomato. *Label cautions against use on salvia, impatiens, gypsophila, N.G. impatiens and poinsettia bracts. Consult label for more information.* **Foliar spray rates:** 1⅓-2 tsp per gal or 21-32 fl oz. per 100 gal. **Not registered in NY.**

Item: 70-1795 **Size:** 0.5 gal.

GGSPRO TIP

SOURCE WATER IMPACTS CHEMICAL EFFICACY

Did you know that every insecticide, fungicide, and plant growth regulator (PGR) has an optimal pH range for maximum effectiveness? GGSPro collaborates with our trusted vendors to compile ideal spray pH ranges for all our chemical offerings. Since our goal is to help you maximize profitability, we've already done the hard work—this information can be found in the 6th Edition GGSPro Technical Reference Guide. This is also a key reason to have your water tested regularly. If adjustments are needed, our technical team can guide you on altering your spray solution pH to the appropriate target.

Hexygon IQ

Gowan

MOA 10A | REI 12

Active Ingredient: Hexythiazox

Long residual mite growth regulator that controls egg and immature stages of spider mites and several other Tetranychid mites for up to 60 days. Hexygon IQ is labeled for use on ornamentals in greenhouses, landscapes and nurseries. Certain fruiting vegetables in greenhouses can also be treated. Use only one application per crop per year. 2EE dip label available **Foliar spray rates:** 1/4-1/2 tsp per gal or 4-8 fl oz per 100 gal. **Restricted use pesticide in NY.**

Item: 70-1868 **Size:** 1 qt.

LalGuard M52 OD

LALLEMAND

MOA UNF | REI 4

Active Ingredient: *Metarhizium brunneum* strain F52

An effective and versatile bioinsecticide for foliar and soil pest management in edible and ornamental crops. Composed of fungal spores, this microbial based pesticide provides pest control efficacy with minimum impact to applicators, non-targets, and the surrounding environment. Foliar applications controls whiteflies, thrips, mites and aphids. Drench applications targets thrips pupae and weevils. 2EE powdery mildew label available. **Foliar spray rates:** 8-20 fl oz per 100 gal. **Drench rates:** 40-60 fl oz per 100 gal.

Item: 70-2289 **Size:** 8 fl oz.
Item: 70-2291 **Size:** 1 L.

Mainspring Xtra

syngenta 3

MOA 4A+28 | REI 12

Active Ingredient: Thiamethoxam & Cyantraniliprole

Provides fast knockdown and residual control of chewing, sucking and soil-dwelling insects, including thrips, aphids, whiteflies, leafminers and more. Extended protection through its systemic and translaminar movement. Labeled for use on ornamentals, residential and commercial landscapes, non-bearing fruit and nut trees, and vegetable transplants grown for retail sales to consumers. **Foliar spray rates:** 1/4-1 tsp per gal or 2.5-10.5 oz per 100 gal. **Drench rates:** 1/2-1 tsp per gal or 5-10.5 oz per 100 gal. Refer to label for soil drench volumes. **Restricted use pesticide in CT, MA, ME, NJ & NV. Not for sale in CA, NY, or VT.**

Item: 70-2333 **Size:** 48 oz.

Mallet 2F

nufarm 3

MOA 4A | REI 12

Active Ingredient: Imidacloprid

nurseries, greenhouses, and interiorscapes. Application can be made by soil broadcast, sprays and drenches (including ebb and flood treatments). Controls aphids, beetles, mealybugs, leafminers, soil grubs and other insects. **Foliar spray rates:** ½ tsp per 5 gal or 1.7 fl oz per 100 gal. See label for soil treatment rates. **Not registered in DE. Restricted use pesticide in CT, MA, MD, NJ, NV & NY. No soil injection in Nassau and Suffolk Country, NY. Not approved for use in VT.**

Item: 70-2340 **Size:** 1 gal.

Marathon 1% G

ohp

MOA 4A | REI 12

Active Ingredient: Imidacloprid

Granular systemic insecticide. Controls aphids, mealybugs, caterpillars and others. Long-lasting residual control; 4-6 weeks with a single application. Labeled for use on ornamentals, non-bearing fruit trees, and certain vegetable transplants. **Rates:** See label for rate chart. Higher rates are on the label for three or more plants per pot. **Restricted use pesticide in CT, MA, MD, NJ, NV & NY. Not approved for use in VT.**

Item: 70-23752 **Size:** 5 lb.
Item: 70-23812 **Size:** 50 lb.

Marathon II

ohp 3

MOA 4A | REI 12

Active Ingredient: Imidacloprid

Insect control on ornamental and certain vegetable transplants in nurseries, greenhouses and interiorscapes. Application can be made by foliar application, soil broadcast sprays and drenches (including ebb and flood treatments). Controls aphids, caterpillars, mealybugs, leafminers and other insects. **Foliar spray rates:** ½ tsp per 5 gal or 1.7 fl oz (50 ml) per 100. See label for soil treatment rates. **Restricted use pesticide in CT, MA, MD, NJ, NV & NY. No soil injection in Nassau and Suffolk County, NY. Not approved for use in VT.**

Item: 70-23712 **Size:** 250 ml.

Molt-X

BioWorks | MOA UN | REI 4

Active Ingredient: Azadirachtin

Botanical (neem) insect growth regulator and nematicide. Targets larval, pupal and nymph stages of many insects such as cutworms, caterpillars, leafhoppers, thrips, and whitefly. Labeled for use on ornamentals and many edible crops in greenhouses, nurseries, and interiorscapes. Excellent plant safety. For heavy infestations or dense foliage use the maximum rates. For tank mixing use the lowest rates. **Foliar spray rates:** ½-1 tsp per gal or 8-16 fl oz per 100 gal. **Drench rates:** ½ tsp per gal or 8 fl oz per 100 gal. **OMRI listed.**

Item: 70-2405 **Size:** 1 qt.
Item: 70-2410 **Size:** 1 gal.

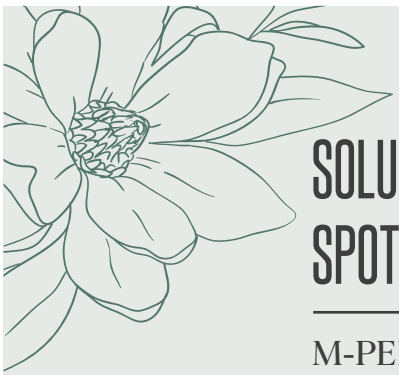
M-Pede

Gowan | MOA UN | REI 12

Active Ingredient: Potassium Salts of Fatty Acids

Concentrated insecticidal soap is a contact insecticide containing naturally occurring fatty acids for control of adult and immature pests on vegetables, greenhouse crops, and ornamentals. Controls whitefly, aphids, mealybugs, thrips, spider mites and more. There are some plant and bloom safety concerns. A supplemental 2ee label allows for plant dips and use as deer repellent. No NY. Refer to the label for strategies to reduce the risk of phytotoxicity. **Foliar spray rates:** 1.25-2.5 fl oz per gal or 1-2 gal per 100 gal. **OMRI listed.**

Item: 75-10262 **Size:** 2.5 gal.



SOLUTION SPOTLIGHT

M-PEDE & CINTRO

Insecticidal soaps remain valuable “soft chemistry” tools for edible and controlled environment production. Both M-Pede and Cintro utilize potassium salts of fatty acids to provide contact control of soft-bodied pests including aphids, whiteflies, mealybugs, thrips, and spider mites. With no systemic activity and minimal residual, these products fit well into resistance management programs, plant dip applications, and BCA-compatible rotations when timed appropriately. Their broad-spectrum activity, favorable safety profile, and suitability for frequent use make insecticidal soaps a foundational tool in modern IPM programs for CEA crops.



SOLUTION SPOTLIGHT

NOFLY WP

NoFly WP harnesses the power of the naturally occurring fungus *Isaria fumosorosea* to provide biological control of many challenging greenhouse pests. Labeled for foliar and drench applications, NoFly WP targets aphids, whiteflies, thrips, mealybugs, leafhoppers, plant bugs, and more, while also suppressing root-stage pests such as aphid root forms and thrips pupae. As a microbial insecticide, NoFly WP fits well into resistance management programs and biological control strategies, making it a valuable tool for edible, cannabis, and controlled environment production systems seeking effective pest control with a softer environmental profile.

NoFly WP

BLACKSMITH BIOSCIENCE | MOA UNF | REI 12

Active Ingredient: *Isaria fumosorosea* strain FE 9901

NoFly is a wettable powder insecticide based on a naturally occurring fungus. From a foliar spray it is labeled to control: aphids, leaf hoppers, mealybugs, plant bugs, spider mites, thrips, whiteflies and others. Soil applications can be made by drenching or blending in the soil prior to planting for: aphids (root), mealybugs (root), caterpillars, and the pupal stage of thrips. NoFly is labeled for ornamentals as well as many herbs, fruits and vegetables grown in containers in greenhouses, hydroponic systems, nurseries, and field-grown nursery stock. Acceptable storage temperatures are 34-72˚F, refrigeration is recommended. **Foliar spray and drench rates:** 6 tsp gal or 14-28 oz per 100 gal. **OMRI listed.**

Item: 70-2509 **Size:** 2 lb.
Item: 70-2512 **Size:** 20 lb.

Pedestal SC

ohp | MOA 15 | REI 12

Active Ingredient: Novaluron

Insect growth regulator for the control of thrips, leafminers, loppers, armyworm, stink bugs, and whitefly on ornamentals in greenhouses or nurseries. Tomato transplants grown in greenhouses can also be treated. *Not for use on poinsettias.* **Foliar spray rates:** ⅓-½ tsp per gal or 6-8 fl oz per 100 gal. **Limited to indoor greenhouse use in NY.**

Item: 70-29501 **Size:** 1 qt.

Pest Out

JH Biotech Inc

25b | REI 0

Active Ingredient: Cottonseed Oil, Clove Oil, & Garlic Oil

Foliar spray for the control of aphids, mites and thrips on ornamentals and many edible crops. Active ingredients are essential oils and this product is a 25b product (no EPA registration required). **Foliar spray rates:** 1.25 fl oz per gal or 1 gal per 100 gal. **OMRI listed.**

Item: 16-11011 **Size:** 2.5 gal.

PRINCIPLE WP

BioWorks

1

MOA UNF | REI 4

Active Ingredient: *Beauveria bassiana* strain BW149

Wettable powder biological insecticide formulated with the entomopathogenic fungus *Beauveria bassiana*, designed for use in greenhouses, nurseries, landscapes, and field production. It offers effective control of a wide range of soft-bodied insect pests, including thrips, aphids, whiteflies, mealybugs, diamondback moths, and cabbage loopers (see label for full list of pests). PRINCIPLE WP is suitable for use on ornamentals, edibles, and herbs making it a versatile solution for integrated pest management (IPM) programs. **Foliar spray rates:** 1-4 tsp per gal or 0.5-2 lb per 100 gal. Refer to the label for plant dip rates. **OMRI listed.**

Item: 70-2645 **Size:** 1 lb.



SOLUTION SPOTLIGHT

PRINCIPLE WP

Introducing BioWorks' latest *Beauveria bassiana* formulation, designed to provide resistance-free control of thrips, aphids, whiteflies, and more. Backed by over 20 years of experience in biological solutions, BioWorks continues to support growers with effective tools for integrated pest management. This OMRI-listed product is tank-mix compatible and versatile in application - whether sprayed, fogged, or used as a dip. For best results, apply during early morning or evening hours to minimize UV degradation and maximize efficacy when relative humidity is highest. With no restrictions on application frequency or seasonal volume, this product is an excellent choice to keep in rotation throughout the growing cycle for both edible and ornamental production.

PyGanic 5.0 Specialty

MGK Insect Control Solutions

1

MOA 3A | REI 12

Active Ingredient: Pyrethrins

Insecticide with natural pyrethrins labeled for a wide range or ornamental and edible crops in greenhouses and outdoor crops. Labeled pests include: aphids, beetles, caterpillars, leafhoppers and many others. **Foliar spray rates:** 1-2 tsp per gal or 16-32 fl oz per 100 gal. **OMRI listed.**

Item: 70-2687 **Size:** 1 qt.
Item: 70-2688 **Size:** 1 gal.

Pylon

BASF We create chemistry

1

MOA 13 | REI 12

Active Ingredient: Chlorfenapyr

Miticide/Insecticide/Foliar Nematicide with translaminar activity for use on ornamentals and certain fruiting vegetables in greenhouses only. Pests controlled include: spider mites, broad mites, cyclamen mites, thrips, fungus gnat larvae (soil surfaces spray) and foliar nematodes (consult label for special instructions). *Do not use on poinsettia, salvia, zinnia, roses, kalanchoe, and dianthus.* **Foliar spray rates:** mites and thrips ⅓ tsp per gal or 5.2 fl oz per 100 gal. Do not use with a organo-silicone surfactant such as CapSil. **Soil surface spray rates:** for fungus gnat larvae: ⅓-⅔ tsp per gal or 5.2-10 fl oz per 100 gal. **Restricted use pesticide in NY. Not registered in ME.**

Item: 70-26750 **Size:** 1 qt.

Pylon TR

BASF We create chemistry

MOA 13 | REI 12

Active Ingredient: Chlorfenapyr

A total release translaminar and contact insecticide for ornamentals and certain fruiting vegetables in greenhouses to control mites, thrips, and adult fungus gnats. *Do not use on poinsettia, salvia, zinnia, roses, kalanchoe, and dianthus.* **Rate:** 1 can per 1,500-3,000 sq ft. **Restricted use pesticide in NY.**

Item: 70-2660 **Qty:** 12-2 oz.

Pyrethrum TR

BASF We create chemistry

MOA 3A | REI 12

Active Ingredient: Pyrethrins & PBO

A ULV greenhouse aerosol formulation containing natural pyrethrins. Broadly labeled for many greenhouse pests on ornamentals and a wide variety of crops including vegetables and herbs. **Rate:** 1 can per 3,000 sq ft.

Item: 70-2693 **Qty:** 12-2 oz.

Romivex DIP

AgroPlantae | 25b | REI 0

Active Ingredient: Rosemary Oil

Romivex™ DIP is an insecticide and miticide developed for dipping unrooted cuttings to provide effective protection against mites and small, soft-bodied insects. Formulated with rosemary oil, adjuvant, and emulsifiers, it delivers multiple modes of action for reliable control. Romivex™ DIP targets two-spotted spider mites, aphids, whiteflies, thrips, mealybugs, Lygus bugs, and more. Labeled for use on all plants and crops, it is ideal for greenhouses, nurseries, ornamentals, and landscapes, offering broad-spectrum control in one easy-to-use solution. **Dip rates:** 0.32-0.64 fl oz per gal or 32-64 fl oz per 100 gal. **OMRI listed**.

Item: 70-2860 **Size:** 1 gal.

Safari 20 SG

VALENT nufarm | 3 | MOA 4A | REI 12

Active Ingredient: Dinotefuran

Safari is labeled as a foliar spray or a drench. Highly systemic drench is taken up into even older woody foliage. Insects controlled include aphids (drench only), fungus gnat larvae, leafminers, mealybugs, scale, thrips (suppression only), and whiteflies. Drench applications remain effective for up to 6 weeks. Labeled sites include ornamentals grown in greenhouses, and outdoor nurseries. Certain vegetable transplants can be treated by foliar spray only. **Foliar spray rates:** at ½-1 tsp per gal or 4-8 oz per 100 gal. **Drench rates:** 1.5-2.5 tsp per gal or 12-24 oz per 100 gal with 4 oz per 6" pot being applied. **Restricted use pesticide in CT, MA, MD, ME, NJ, NV & NY. Special use instructions for NY on 24C label. Not approved for use in VT.**

Item: 70-29951 **Size:** 3 lb.

Sanmite SC

Gowan | 1 | MOA 21A | REI 12

Active Ingredient: Pyridaben

Solution concentrate formulation adds additional pests and certain vegetable transplants. Labeled pests include: aphids (certain species), leafhoppers, mites (broad, spider and others) pear psylla, and whiteflies. Sanmite SC is labeled for ornamentals and greenhouse grown tomatoes and cucumbers. **Foliar spray rates:** 1 tsp per 2.5-1.66 gal or 6.4-9.6 fl oz per 100 gal. The REI includes ventilation requirements per the label. **Prohibited in Nassau and Suffolk County, NY. Restricted use pesticide in VT.**

Item: 70-2915 **Size:** 1 qt.

Sarisa

ohp | 1 | MOA 28 | REI 4

Active Ingredient: Cyclaniliprole

Broad spectrum contact and ingestion insecticide in a soluble concentrate formulation. Sarisa is labeled for use as a foliar spray and soil drench on ornamentals including conifers and Christmas trees grown in commercial greenhouses, shadehouses and nurseries. Approved for foliar sprays on greenhouse lettuce, cucumbers, peppers, and tomatoes grown to harvest (see supplemental label for restrictions). Labeled pests include: adelgids, armyworms, borers (beetle and caterpillar) flea beetles, plant bugs, Japanese beetles, lace bugs, leafminers, leafrollers, loopers, mealybugs, psyllids, root weevil complex (adults), and webworms. Sarisa also provides suppression of thrips and mealybugs. Up to 2 weeks of control from one application. **Foliar spray rates:** 3/4-1 2/3 tsp per gal or 11-27 fl oz per 100 gal. **Drench rates:** 1-1 2/3 tsp per gal or 16.4-27 fl oz per 100 gal. **Not labeled for use in CA, MA, NY, OR.**

Item: 70-2975 **Size:** 64 fl oz.

Shuttle

envu | MOA 20B | REI 12

Active Ingredient: Acequinocyl

Miticide for spider mites and spruce mites that combines a quick knockdown and long residual control. Shows activity against all life stages of susceptible mites. Labeled for ornamentals and certain fruiting and cucurbit vegetables in greenhouses and nurseries. Labeled for outdoor landscapes around the perimeter of residences, businesses, schools and public property; and on ornamentals in non-residential interiorscapes. Use only the lowest rates on impatiens and roses. *Do not use on miniature roses.* **Foliar spray rates:** ½-¾ tsp per gal or 6.4-12.8 fl oz per 100 gal.

Item: 70-3013 **Size:** 1 qt.

Sil-Matrix LC

CERTIS Biologicals | MOA UN | REI 4

Active Ingredient: Potassium Silicate

Sil-Matrix LC is an aqueous liquid concentrate. This versatile product applied as a foliar spray for control of certain insects, mites and foliar diseases. For use on ornamentals and many edible crops including certain vegetables, berries, vines, and fruit trees. Insects and mites controlled: aphids, spider mites and whiteflies. Foliar diseases controlled: *Botrytis*, powdery mildew and certain turf diseases. Keep pH >7.0 to prevent gelling of product that occurs at pH 6. **Foliar spray rates:** 2 tsp-1.25 fl oz per gal or 32-128 fl oz per 100 gal. **OMRI listed**.

Item: 71-2939 **Size:** 2.5 gal.

SuffOil-X

BioWorks

MOA UNM | REI 4

Active Ingredient: Horticultural Oil

Labeled for mite, insect and disease control on ornamentals as well as many vegetables. Labeled insect pests include aphids, mealybugs, mites, scale, whiteflies and many others. Labeled diseases include powdery mildew and rust. **Foliar spray rates:** 1.25-2.5 fl oz per gal or 1-2 gal per 100 gal. **OMRI listed.**

Item: 70-4040 **Size:** 2.5 gal.
Item: 70-4043 **Size:** 30 gal.
Item: 70-4045 **Size:** 250 gal.

Sultan

BASF We create chemistry

MOA 25 | REI 12

Active Ingredient: Cyflumetofen

Miticide with newest mode of action available. Contact activity and rapid knockdown of all life stages of spider mites. Label cautions against certain tank mixes. Labeled for use in greenhouses, nurseries, landscapes, and interiorscapes. Labeled for certain edible transplants and crops grown to harvest. Good plant safety with up to 28 days of control. **Foliar spray rates:** ¾ tsp per gal or 13.7 fl oz per 100 gal. **Not registered in ME.**

Item: 70-3045 **Size:** 16 fl oz.

Talus 70 DF

SePRO

MOA 16 | REI 12

Active Ingredient: Buprofezin

IGR for the control of whiteflies, leafhoppers, scale and mealybugs. Up to 28 days of control from one foliar spray. Greenhouse and outdoor ornamentals and greenhouse tomatoes are on the label. Excellent plant safety including poinsettia bracts. **Foliar spray rates** vary by pest: ⅔-1⅓ tsp per gal or 6-14 oz per 100 gal. **Restricted use pesticide in NY. Prohibited in Nassau and Suffolk County, NY.**

Item: 70-1172 **Size:** 3 lb.

TetraCURB MAX

AgroPlantae

25b | REI 0

Active Ingredient: Castor Oil, Rosemary Oil, Clove Oil, & Peppermint Oil

TetraCURB™ MAX is a contact biopesticide designed to control mites and a wide range of small, soft-bodied insects. More than a traditional horticultural oil, it combines rosemary oil with functional ingredients for multiple modes of action, making it a valuable tool for resistance management and IPM programs. Labeled for food and non-food crops, it can be used indoors or outdoors on fruits, vegetables, ornamentals, citrus, nuts, hops, and hemp, delivering broad-spectrum control as a spray or unrooted cutting dip. **Foliar spray rates:** 0.32-2.56 fl oz per gal or 32-256 fl oz per 100 gal. **Dip rates:** 0.32-0.64 fl oz per gal or 32-64 fl oz per 100 gal. **OMRI listed.**

Item: 70-3125 **Size:** 1 gal.

TetraSan 5 WDG

VALENT nufarm

MOA 10B | REI 12

Active Ingredient: Etoxazole

Long residual miticide/ovicide. Foliar spray for the control of egg and nymphal stages of several types of mites, including spider mites. Excellent translaminar activity and residual control for 4-6 weeks. Can be used on greenhouse tomatoes. **Foliar spray rate:** One 2 oz water soluble packet per 12.5-25 gal. Labeled for greenhouses, outdoor and interiorscape uses. **Restricted use pesticide in NY.**

Item: 70-3130 **Size:** 1 lb.

TriStar 8.5 SL

Cleary nufarm 1

MOA 4A | REI 12

Active Ingredient: Acetamiprid

Translaminar systemic insecticide for use on ornamentals and certain vegetable transplants in greenhouses, shadehouses, lath houses, and outdoor nurseries. Applied as a foliar spray for aphids, caterpillars, leafhoppers, mealybugs, scale, thrips, whiteflies, and other insect pests. Excellent plant safety including poinsettia bracts. *Do not use on verbena.* Allows a one-time drench to greenhouse grown tomatoes. See label for rates. **Foliar spray rates** vary by pest: ¼-1½ tsp per gal or 4-25 fl oz per 100 gal. **Restricted use pesticide in MA, MD, NJ, NV, & NY. Not approved for use in VT.**

Item: 70-85221 **Size:** 1 qt.
Item: 70-85241 **Size:** 1 gal.

Ultra–Pure Oil

BASF We create chemistry

MOA UNE | REI 4

Active Ingredient: Horticultural Oil

Ultra-Pure oil is highly refined petroleum oil for control of eggs, immature and adult stages of mites and soft bodied insects including adelgids, aphids, mealybugs, plant bugs, thrips, and whiteflies. Labeled for ornamental crops and certain vegetables grown in greenhouses and nurseries. Avoid application to plants under moisture or heat stress. See label for further precautions regarding specific greenhouse and nursery crops. **Foliar spray rates:** 1.25-2.5 fl oz per gal or 1-2 gal per 100 gal.

Item: 70-21401 **Size:** 2.5 gal.
Item: 70-21451 **Size:** 30 gal.

Velifer

BASF We create chemistry | 1 | MOA UNF | REI 12

Active Ingredient: *Beauveria bassiana* strain PPRI 5339

Microbial insecticide/miticide delivered in an oil dispersion formulation for commercial greenhouse use only. Labeled pests include: aphids, mealybugs, mites, thrips, and whiteflies. Velifer can be used on ornamentals, fruits, vegetables, herbs, and spices. Refer to label about needing time to hydrate. No CapSil or adjuvant required. **Foliar spray rates:** ¼-¾ tsp per gal or 3-13 fl oz per 100 gal. Can be used in non-thermal foggers. New label additions have added drenching and dipping applications. Refer to label for rates. **Not registered in ME.**

Item: 70-9540 **Size:** 1 qt.

Venerate CG

ProFarm | 1 | MOA UNB | REI 4

Active Ingredient: Heat-killed *Burkholderia* spp. strain A396

Biological insecticide applied as a foliar spray provides control of wide variety of caterpillars and control or suppression of many soft bodied insects, such as aphids, caterpillars, fruit curculios, leafhoppers, mites, psyllids, stink bugs, thrips, true bugs, certain weevils, and whiteflies. Use as a foliar spray on ornamentals and edible crops outdoors or in a greenhouse. Labeled for many food crops, including herbs and fruit-bearing trees. Labeled for certain soil dwelling insects. Refer to label for use directions. **Foliar spray rates:** 4 tsp–2.66 Tbls per gallon or 64-128 fl oz per 100 gal. **OMRI listed.**

Item: 70-9465 **Size:** 2.5 gal.

Ventigra

BASF We create chemistry | 1 | MOA 9D | REI 12

Active Ingredient: Afidopyropen

Insecticide with translaminar systemic activity in a water based Dispersible Concentrate (DC) formulation. Labeled for foliar applications to ornamentals, landscape plants and many vegetable transplants (for resale to home consumer market). Sites include: greenhouses, lath houses, shade houses, interiorscapes, landscapes, and outdoor nurseries. Ventigra controls or suppresses certain aphids, mealybugs, psyllids, scale, and whiteflies. *Ventigra should not be used on coleus, ficus, and poinsettia bracts.* **Foliar spray rates:** Aphids only, ¼ tsp per 3 gal or 1.4 fl oz per 100 gal; Other labeled pests, 1/4-1/2 tsp per gal or 4.8-7.0 fl oz per 100 gal. **Prohibited in Nassau and Suffolk County, NY. Restricted use pesticide in NY.**

Item: 70-9550 **Size:** 20 fl oz.

Vykenda

BASF We create chemistry | 1 | MOA 30 | REI 12

Active Ingredient: Isocycloseram

Vykenda insecticide/miticide is powered by PLINAZOLIN technology, a novel active ingredient in a new class of chemistry, IRAC Group 30, for use on ornamentals, vegetables, fruit and nut trees, vines, and small fruits grown for resale to consumers. Vykenda features a unique mode of action that acts through contact and ingestion againsta wide range of the most difficult-to-control insects including mites, thrips, red-headed flea beetles, black vine weevil adults and more. **Foliar spray rates:** Mites 1/4-3/8 tsp per gal or 4-6 fl oz per 100 gal; Thrips and Other Pests 3/8-5/8 tsp per gal or 6-10 fl oz per 100 gal. **Maximum rate for outdoor applications** is 5 fl oz per 100 gal.

Item: 70-9585 **Size:** 1 qt.

HERBICIDES

AXXE

BioSafe Systems | 3 | MOA NC | REI 4

Active Ingredient: Ammonium Nonanoate

Quick burn-down non-selective **post-emergence** contact herbicide labeled for use on many sites including interiorscapes, greenhouses, and landscapes. **Foliar spray rate:** 6–19 fl oz per gal. Controls grasses and broadleaf weeds, mosses, liverworts, nostac algae, and lichens. Does not translocate to roots. Do not apply to plants wet with dew. No surfactant needed. Label allows use around specific edible crops. **OMRI listed with restrictions** - prior to use OMRI certification needs to be verified if applying inside the greenhouse.

Item: 72-1050 **Size:** 2.5 gal.

Hoplite

BioWorks® | MOA UN | REI 24

Active Ingredient: Potassium Salts of Fatty Acids

Hoplite is a fast-acting liverwort, moss, algae, and lichen control agent formulated from potassium salts of fatty acids. The active ingredient disrupts the lipid–protein matrix of cellular membranes in target organisms. This disruption causes membrane leakage, rapid desiccation, and cell death, with treated moss and algae yellowing and browning soon after application.
Rate: 6.8 oz in 1 gal of water per 1,000 square feet.

Item: 72-2200 **Size:** 1 gal.

BotaniGard®
Mycoinsecticide





BotaniGard® Mycoinsecticide offers proven, broad-spectrum control of a variety of pests in the GH, nursery, and CEA markets. Long recognized as the best-in-class mycoinsecticide in horticulture, BotaniGard is the latest addition to the OHP family of Solutions.

Ask for BotaniGard, *the Natural Selection*.

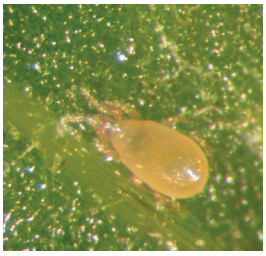
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An American Vanguard Company

Biological Control Agents (BCAs)

Griffin supports growers currently using biological control agents (BCAs) and those growers considering BCA use. The GGSPro team serves as a coach and technical resource to these growers. In addition to creating individualized BCA plans, the GGSPro team maintains a collection of Quick Sheets, a BCA compatibility database, and an assortment of useful bulletins to guide grower success. The GGSPro Quick Sheets contain information growers need to be successful with BCAs for control of common insect and mite pests. In addition to rates, the Quick Sheets contain release and placement instructions, viability assessment criteria, temperature and humidity requirements and more. The GGSPro compatibility database compiles information from multiple sources for a well-rounded perspective on pesticide compatibility.

Griffin is also committed to providing high quality BCAs with state-of-the-art packaging, including a variety of sachets (breeding colonies), blister packs and traditional bulk packaging. Bioline Agrosciences, Beneficial Insectary and BioBee are prime suppliers to ensure uninterrupted availability and a wide selection of available products to meet individual grower needs.

Ordering deadlines vary by product and vendor. Some products can ship M-Th if the order is in by noon M-W (EST) which then will ship the following day. To assure delivery, it is best to place orders one week in advance with orders being placed by 2 pm (EST) Tuesday/Wednesday with shipment the following week.



Amblyseius



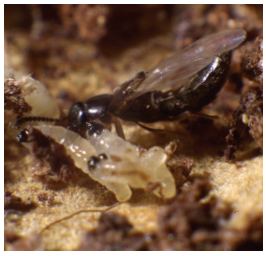
Amblyseius



Aphelinus



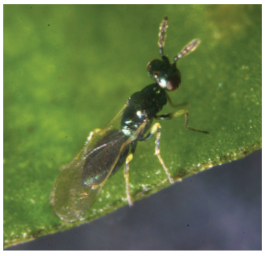
Aphidoletes



Dalotia/Atheta



Chrysoperla



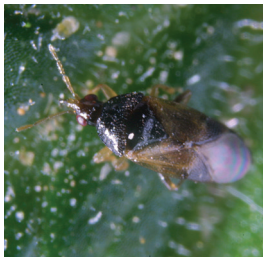
Diglyphus



Encarsia



Eretmocerus



Orius



Nematodes



Parasitic Wasp



Phytoseiulus



Stratiolaelaps/Hypoaspis

GGSPRO TIP

USING CROP PROTECTION CHEMISTRY WITH BCAS

Biological control agents (BCAs) and conventional crop protection products can work together as part of a successful IPM program. Reserve conventional chemistry for cleanup or outbreak situations and rely on compatible biopesticides and BCAs preventatively. Understanding product compatibility, residual activity, and application timing helps preserve beneficial populations while maintaining effective pest control. Contact GGSPro for compatibility guidance and recommendations.

Photo Credits: Agro Biosciences

Biological Control Agents (BCAs) - Info Chart







BCA Color Key

Green	Aphid Control
Orange	Multiple Pest / Other Pest Control
Gold	Leafminers Control
Teal	Mealybugs Control
Red	Spider Mite Control
Lilac	Thrips Control
Blue	Whitefly Control
Yellow	Pollination
Grey	Supplementary Products

Target Pest	Control Agent
Aphids	*Aphelinus abdominalis*
	Aphidius colemani
	Aphidius ervi
	Aphidius matricariae
	Aphidius colemani 50%, ervi 50%
	Aphelinus abdominalis 50%, Aphidius colemani 25% and A. ervi 25%
	Aphelinus abdominalis 25%, Aphidius colemani 25%, A. ervi 25%, and A. matricariae 25%
	Aphidoletes aphidimyza
	Adailia bipunctata
	Hippodamia convergens
	Rhopalosiphum padi (prey aphids for A. colemani)
	Acyrthosiphon pisum (prey aphid for A. ervi)
	Chrysoperla carnea
	Chrysoperla rufilabris
Caterpillar/Moth Eggs	*Trichogramma sp*
Caterpillar/Moth Nymphs & Adults	*Podius maculiventris*
Fungus Gnats, Shoreflies, Thrips Pupae	*Dalotia coriaria (Atheta coriaria)*
	Stratiolaelaps scimitus (Hypoaspis miles)
	See Nematodes pages
Leafminers	*Diglyphus isaea*
	Dacnusa sibirica
Mealybugs	*Anagyrus vladimiri (Available only in CA)*
	Cryptolaemus montrouzieri
	Chrysoperla carnea
	Chrysoperla rufilabris
Spider Mites	*Amblyseius andersoni*
	Amblyseius californicus
	Amblyseius fallacis
	Feltiella acarisuga
	P. persimilis + A.californicus
	Phytoseiulus persimilis
Thrips	*Amblyseius cucumeris*
	Orius insidiosus
	Amblyseius swirskii
	Dalotia coriaria (Atheta coriaria)
	Stratiolaelaps scimitus (Hypoaspis miles)
	Refer to Nematodes Section
Whiteflies	*Encarsia formosa*
	Encarsia formosa & Eretmocerus eremicus
	Eretmocerus eremicus
Pollination	*Bombus impatiens*
Food Source *Orius, Dicyphus* & Lacewing (*Chrsoperla*)	*Ephestia kuehniella*
Food Source for *A. cucumeris, swirksii* & *Orius*	*Artemia*
Food Source for *Chrysoperla* (Lacewing larvae)	
Food Source for Predatory Mites	Typha pollen or *Carpoglyphus lactic*
Food Source for Predatory Mites; Control Agent is *Thyreophagus Entomophagus*	
European Pepper Moth Lure	
Western Flower Thrips Lure	

Beneficial Insectary	BIOBEE Inspired by Nature	Bioline AgroSciences	Nature's Control	IPM Labs
Aphelinus System		Apheline		
APHIDIUSforce™ C	BioAphidius	Aphiline		
APHIDIUSforce™ E	BioErvi	Erviline		
APHIDIUSforce™ M	BioMatricariae			
APHIDIUSforce™ CE		Aphiline Mix		
		Aphiline Veg		
APHIDIUSforce™ Mix				
APHIDOLETESforce™	BioAphidoletes	Aphidoline		
Adalia		Adaline		
			Ladybugs	
Aphid Banker Plants	Aphid Banker Plants			Banker Plants
				Banker Plants
	BioLacewing	Chrysoline		
CHRYSOforce™ R		Chrysoline	Green Lacewing	
TRICHOforce™ B, M, PL and Mix	BioTricho B, M, O, and Mix	Tricholine TB & TP		
Predatory Soldier Bug		Podiline		
DALOTIAforce™	BioAtheta	Staphyline		
STRATIOforce™	BioStratiolaelaps	Hypoline		
Diglyphus System	BioDiglyphus	Digline		
Dacnusa System				
Anagryus	BioAnagyrus			
CRYPTOforce™	BioCryptolaemus	Cryptoline		
	BioLacewing	Chrysoline		
CHRYSOforce™ R			Green Lacewing	
AMBLYforce™ A	BioAndersoni	Anderline		
CALIforce™	BioCalifornicus & BioCali Combo	Californiline		
	BioFallacis			
FELTIELLAforce™		Feltiline		
		PERCAL Mix		
PERSIMILISforce™	BioPersimilis/BioPersi+	Phytoline		
AMBLYforce™ C	BioCucumeris	Amblyline		
ORIUSforce™	BioOrius	Oriline		
AMBLYforce™ S	BioSwirskii Combo, + Artemia	STARSKII		
DALOTIAforce™	BioAtheta	Staphyline		
STRATIOforce™	BioStratiolaelaps	Hypoline		
ENCARSIAforce™	BioEncarsia	Encarline		
ENCAR/ERETforce™	BioEncarsia/BioEretmocerus	Encarline Mix		
ERETforce™	BioEretmocerus	Eretline		
Bombus impatiens				
Ephestia Kuehniella/ NUTRIforce™	BioEphestia	Bugfood E		
	BioArtFeed			
Wheast®				
Nutrimite™	BioCLFeed			
		PREDAFIX PLUS		
		Dupoline PRO		
		Thripline Lure		

NEMATODES

Beneficial or Entomopathogenic nematodes are microscopic roundworms that are parasites of certain insects and can be used effectively as biological control agents (BCAs) in IPM programs. *Steinernematidae* and *Heterohabditidae* are frequently used families of nematodes since they target common greenhouse and nursery pests (fungus gnats and grubs). They are also a safe alternative to traditional pesticides with no personal protective equipment or REI (restricted-entry interval) required.

Benefits of using nematodes include:

- Fast, effective, residual control.
- No re-entry requirements.
- No pest resistance problems.
- Compatible with other biological and IPM programs.
- Non-toxic. No need for protective clothing.

For a successful nematode application remember to:

- Ensure adequate soil moisture.
- Avoid high light (UV). Cloudy days are best.
- Use cool water, gentle agitation and aeration in stock tank.
- Remove any screens that are finer than 50 mesh.
- Do not tank mix in stock solution.

Steinernema feltiae

Beneficial nematode for the control of fungus gnat larvae when applied as a drench. *S. feltiae* when used as the second part of a two part control plan helps kill Western flower thrips pupae and pre-pupae from a soil drench treatment. **Rate for fungus gnat larvae and thrips pupae:** 50 million nematodes treat 1,100 sq ft; 250 million nematodes treat 5,500 sq ft.

BASF
Nemasys

MOA NC | REI 0

Item: 70-2460 **Qty:** 5 trays 50 mil / tray
Item: 70-2489 **Qty:** 250 mil / tray

BENEFICIAL INSECTARY
NEMAforce™ SF

MOA NC | REI 0

Item: 30F50 **Qty:** 1 tray 50 mil / tray
Item: 30F250 **Qty:** 1 tray 250 mil / tray
Item: 30F600 **Qty:** 600 mil 12 x 50 mil trays
Item: 30F5T **Qty:** 5 trays 250 mill / tray

OMRI listed.

BIOBEE
BioSF

MOA NC | REI 0

Item: BB-0038 **Qty:** 50 million nematodes / bag
Item: BB-0035 **Qty:** 250 million nematodes / bag
Item: BB-0032 **Qty:** 500 million nematodes / bag

NemaPlus Depot

NemaPlus capsules need to be covered into top 0.25" media, not top dressed. The capsules will slowly release nematodes to target soil pests such as fungus gnat larvae and thrips pupae. The capsule is spherical, 0.4mm and is a liquid oil-water emulsion core and a spongy hydrogel outer shell.

Depot 200
Item: BB-0056 **Qty:** 320K / 200 capsules / bag

Depot P
Item: BB-0158 **Qty:** 25 mil / 12.5 K capsules / tray

BIOLINE
Exhibitline SF

MOA NC | REI 0

Item: SB1011-01 **Qty:** 1 tray 50 mil / tray
Item: SB1011-02 **Qty:** 5 trays 50 mil / tray
Item: SB1011-04 **Qty:** 1 tray 250 mil / tray
Item: SB1011-03 **Qty:** 5 trays 250 mil / tray

BIOWORKS
NemaShield

MOA NC | REI 0

Item: 70-6033 **Qty:** 100 million nematodes / cup
Item: 70-6030 **Qty:** 250 million nematodes / cup

Steinernema carpocapsae

Beneficial nematode for the control of shorefly larvae, soil dwelling insects and borer larvae. Labeled for use on ornamental and edible crops in greenhouses, interiorscapes, nursery, landscapes and turfgrass. **Rate for shorefly larvae:** 50 million nematodes treat 540-1,080 sq ft; 250 million treats 2,700-5,400 sq ft.

BASF
Millenium

MOA NC | REI 0

Item: 70-2455 **Qty:** 5 trays 250 mil / tray

BENEFICIAL INSECTARY
NEMAforce™ SC

MOA NC | REI 0

Item: 30C50 **Qty:** 1 tray 50 mil / tray
Item: 30C250 **Qty:** 1 tray 250 mil / tray
Item: 30C125B **Qty:** 1 tray 1.25 bil / tray
Item: 30C10x250M **Qty:** 10 x 250M



BIOBEE
BioSC

MOA NC | REI 0

Item: BB-0039 **Qty:** 50 million nematodes / tray
Item: BB-0036 **Qty:** 250 million nematodes / tray
Item: BB-0033 **Qty:** 500 million nematodes / tray

BIOLINE
Exhibitline SC

MOA NC | REI 0

Item: SB1012-02 **Qty:** 1 tray 50 mil / bag
Item: SB1012-01 **Qty:** 1 tray 250 mil / bag

Heterorhabditis bacteriophora

Beneficial nematode for controlling the larvae of black vine weevil. It is also reported to control cutworms and white grubs. **Rate for Black Vine Weevil Larvae:** 50 million nematodes treat 540-1,080 sq ft and 250 million treats 2,700-5,400 sq ft depending on pressure. **Rate for grubs:** 50 million nematodes treats 1,000-2,000 sq ft and 250 million treats 5,000-10,000 sq ft depending on pressure.

BENEFICIAL INSECTARY
NEMAforce™ HB

MOA NC | REI 0

Item: 30H50 **Qty:** 1 tray 50 mil / tray
Item: 30H250 **Qty:** 1 tray 250 mil / tray
Item: 30H500 **Qty:** 1 tray 500 mil / tray



BIOBEE
BioHB

MOA NC | REI 0

Item: BB-0040 **Qty:** 50 million nematodes / tray
Item: BB-0037 **Qty:** 250 million nematodes / tray
Item: BB-0034 **Qty:** 500 million nematodes / tray

BIOLINE
Exhibitline HB

MOA NC | REI 0

Item: SB1021-01 **Qty:** 50 million / bag
Item: SB1021-02 **Qty:** 250 million / bag

BIOWORKS
NemaShield HB

MOA NC | REI 0

Item: 70-6035 **Qty:** 50 million nematodes / tray
Item: 70-6036 **Qty:** 500 million nematodes / tray
*2-3 wk lead ltime UPS next day air + freight

Steinernema kraussei

Beneficial nematode for controlling the larval and pupal stages of the black vine weevil. Available in trays of 50 million or 250 million. **Rate for Black Vine Weevil Larvae:** 50 million treats 1,000 sq ft; 250 million treat 5,500 sq ft. Available in July-September.

BASF
Nemasys L

MOA NC | REI 0

Item: 70-2475 **Qty:** 5 trays 250 mil / tray
10-14 day lead time for delivery.

BIOLINE
Nemasys L

MOA NC | REI 0

Item: SB1014-02 **Qty:** 50 mil / bags
Item: SB1014-03 **Qty:** 250 mil / bags

EQUIPMENT

BioFoamer

Foaming agent that can be used in a wide variety of foaming equipment. Creates a thick foam that can be regulated by changing the rates. For most equipment add 1-4 fl oz of BioFoamer for every gal of solution to be foamed.

Item: 74-1360 **Size:** 5 gal.

Compression Foamer Hand Pressurized, 8L Tank



Disinfecting your greenhouse is the first step in healthy production. Foam improves disinfection by increasing contact time for the disinfectant on the surface. A rich foam can even stick to vertical surfaces. Dramm has developed the FOAM8L to improve foaming at a low cost. Like a compression sprayer, the FOAM8L is pumped full of air to pressurize the solution tank. The unique feature of the FOAM8L is that this compressed air is also mixed with the solution at the nozzle to produce an air-rich foam that lasts.

Item: 74-2688

HydroFoamer #481

For use with Pace 49 products.



The HydroFoamer's unique injection concept mixes the proper amount of concentrate with both air and water to produce a thick, rich foam for longer soak time. Capacity: 96 oz (2.8 liters).

Item: 74-2103

CLEANERS

AgH PRO

AgH PRO is an ECO friendly, indoor/outdoor cleaner for easy removal of oils, sap, algae stains and common soils found in agricultural and industrial areas. Used to clean all growing, packing, and storages areas, as well as to clean tools and transportation equipment. The unique easy to rinse, dual foaming formulation produces a low foaming solution when using a sprayer and high foaming solution when using a foaming device. **Rates:** 2-8 fl oz per gal.

Item: 74-2100 **Size:** 2.5 gal.

GGSPRO TIP

END-OF-CYCLE SANITATION

End-of-season (or pre-season) sanitation is a critical step in minimizing pest carryover into the next growing cycle. An effective sanitation process involves three key stages:

1. Remove Physical Debris – Start by clearing out all organic and inorganic material such as pots, soil, weeds, and algae.
2. Apply a Cleaner – Use an appropriate cleaning agent (e.g., Strip-It PRO, Green Clean Acid Cleaner), ensuring sufficient contact time before thoroughly rinsing before drying to prevent residue on hard surfaces.
3. Use a Sanitizer – Finish by applying a sanitizer like ZeroTol 2.0 or SaniDate 5.0 to ensure complete disinfection of irrigation lines and hard surfaces.

GGSPro provides detailed sanitation guides tailored to Edible and Medicinal production facilities.

FloraLife Strip-It Cleaner

Strip-It Cleaner is an all-around cleaner for greenhouse structures and irrigation systems, water storage tanks and sunblock wash. This product is recommended for between crop cleaning of structures and irrigation systems to prepare them for treatment with an appropriate sanitizing agent. Floralife Strip-It is a specifically formulated combination of sulfuric acid and wetting agents that effectively removes whitewash coatings, organic sludge, heat-set, oil, dirt, calcium and other hard water deposits. **Rates:** Irrigation lines 1-3 fl oz per gal, Interior hard surfaces 4-5 fl oz per gal.

Item: 53-1109 **Size:** 1 gal.
Item: 53-1111 **Size:** 5 gal.
Item: 53-1112 **Size:** 30 gal.

GreenClean Acid Cleaner

Blend of mineral acids and wetting agents that quickly removes greenhouse whitewash, organic deposits, calcium and other hard mineral deposits. Areas of use include: structures and equipment, walkways, coverings, floors and piping. GreenClean acid cleaner can be applied by spray, mop or brush at a **rate** of 3-8 fl oz per gal. Irrigation piping inject undiluted at 1:50 to fill the lines, let sit for 8 hours, flush with plenty of water.

Item: 74-2040 **Size:** 5 gal.
Item: 74-2042 **Size:** 55 gal.

GreenClean Alkaline Cleaner

Removes organic and greasy deposits with non-corrosive self-foaming cleaner. Use for structures, tools, and surfaces including soft metals and food handling areas. **Rates** range from 4-8 oz per gal.

Item: 74-2045 **Size:** 5 gal.
Item: 74-2047 **Size:** 55 gal.

Strip-It PRO

A powerful combination of cleaning and wetting agents that effectively remove whitewash coatings, algae, dirt, calcium and other hard water deposits. Strip-It PRO's intensified scrubbing action will dislodge compacted organic debris and mineral deposits for easy removal with a high pressure hose. Do not allow Strip-It PRO to dry or surface etching may result. Strip-It PRO can be safely used on aluminium, copper, galvanized steel, glass, plastics, fiberglass and concrete and will not harm the greenhouse structure or horticultural equipment. Strip-It PRO can safely be used to clean under benches with no harmful fumes. **Rates:** Direct inject at 1:50, no plants present or treat at 2.5 fl oz per gal for irrigation line cleaning, use 5 fl oz per gal for hard surface cleaning.

Item: 74-2123 **Size:** 2.5 gal.
Item: 74-21230 **Size:** 30 gal.
Item: 74-21255 **Size:** 55 gal.

DISINFECTANTS

Eco-Clean

For Maintenance of Irrigation Systems

Eco-Clean is a biocatalyst whose advanced technology maintains drip and sprinkler irrigation systems free of deposits. Systems that are already fouled should be cleaned with an appropriate shock treatment before the constant injection of Eco-Clean begins.

- Great for cleaning drip irrigation and lines
- Vegetable based liquid concentrate
- Non-toxic and non-hazardous
- Environmentally safe

1 gal of Eco-Clean treats 50,000 gal of water at the final dilution

Gal of Stock Solution	1:100 Ratio	1:500 Ratio	1:1000 Ratio
1	0.25 fl oz	1.25 fl oz	2.5 fl oz
30	7.6 fl oz	38 fl oz	76 fl oz
50	12.8 fl oz	64 fl oz	1 gal
100	25.6 fl oz	1 gal	2 gal

Item: 74-1705 **Size:** 5 gal.
Item: 74-1730 **Size:** 30 gal.
Item: 74-1755 **Size:** 55 gal.

GreenClean PRO

REI 1

Active Ingredient: Sodium Carbonate Peroxyhydrate

A broad spectrum granular algaecide/fungicide. Kills algae on contact with its powerful oxidation reaction and is labeled for use in lakes, ponds, and large bodies of water, as well as on non-painted surfaces like benches and walkways. Irrigation water can be used without interruption after treatment. NSF/ANSI Standard 60 certified for drinking water. **Rates:** 1-2 lb per 1,000 sq ft or 0.5 lb per gal. **OMRI listed. Restricted use in NY.**

Item: 74-20521 **Size:** 50 lb.

KleenGrow

MOA NC | REI 0*

Active ingredient: Didecyldimethylammonium Chloride

Kleengrow is a 4th generation DDAC sanitizing agent for the control of algae, bacteria and viruses on hard surfaces. The EPA has approved the use of Kleengrow as a disinfectant for the human coronavirus. KleenGrow is non-corrosive and has up to 30 days of residual control. To ensure optimum results use after cleaning surfaces with Strip-It Pro or AgH PRO. **Rate:** refer to label for dilution rates for specific applications. KleenGrow is also labeled as a fungicide/bactericide for many ornamental crops where it carries a *48 hr REI. Product can safely be used to disinfect greenhouse structures, floors, benches, cooling pads, irrigation lines, plastic pots/trays, tools, coolers, and footbaths.

Item: 74-21125 **Size:** 2.5 gal.
Item: 74-21301 **Size:** 30 gal.
Item: 74-21302 **Size:** 55 gal.

SaniDate 5.0

Active Ingredient: Hydrogen Dioxide & Peracetic Acid

This powerful sanitizing agent controls algae and many water-borne pathogens in irrigation water and on many hard surfaces. Not for use over the crop. The EPA has approved the use of SaniDate 5.0 as a disinfectant for the human coronavirus. Labeled for use in all types of irrigation systems, industrial, and commercial water systems, and evaporative coolers. Helps add dissolved oxygen to the water and does not off-gas. Effective at any pH level. Label includes instructions for fruit and vegetable wash. **OMRI listed.**

Item: 71-35001 **Size:** 2.5 gal.
Item - CA Only: 71-35001-CA **Size:** 2.5 gal.
Item: 71-35101 **Size:** 5 gal.
Item: 71-35151 **Size:** 30 gal.
Item - CA Only: 71-35151-CA **Size:** 30 gal.

SaniDate 12.0

REI 1

Active Ingredient: Hydrogen Dioxide & Peracetic Acid

This powerful sanitizing agent controls algae and many waterborne pathogens in irrigation water and on many hard surfaces. Labeled for use in all types of irrigation systems, industrial and commercial water systems, and evaporative coolers and may be used over the crop. Helps add dissolved oxygen to the water and does not off-gas. Effective at any pH level. **OMRI listed.** Larger sizes available.

Item: 71-3530 **Size:** 5 gal.
Item: 71-35351 **Size:** 30 gal.

ZeroTol 2.0

REI 1

Refer to Fungicides section for further information.

WATER & MEDIA SURFACTANTS

Aqua-Gro L with PsiMatric Technology

The Aquatrols Company

AquaGro L with PsiMatric Technology was developed specifically to overcome water repellency in soilless mixes so they perform at full capacity from the start of production until the plants are shipped out the door. University research has proven and grower experience has verified that plants thrive when AquaGro L is consistently applied throughout production.

Benefits include: Overcoming the mix's inability to wet uniformly, more efficient and profitable crop production, improving plant vigor, saving water and money and better plant survival at retail.

Rates during production:
Inject 10 ppm (⅛ fl oz per 100 gal. of water) in every irrigation or
Inject 100 ppm (1¼ fl oz per 100 gal. of water) weekly or
Inject 600 ppm (7⅔ fl oz per 100 gal. of water) every 4 weeks.

Item: 74-1348 **Size:** 2.5 gal.
Item: 3104955M **Size:** 55 gal.

CapSil

The Aquatrols Company

Active Ingredient: Polyether Modified Polysiloxane

CapSil is a unique organo-silicone surfactant that increases spray droplet coverage by breaking surface tension. Most pesticides perform better, and visible residue from wettable powders is noticeably reduced. Do not use with pesticides that already contain a surfactant. Research has shown that CapSil can be used to decrease water stress and hasten rooting in many unrooted cuttings. **Rate:** ¼-½ tsp per gal or 4-8 fl oz per 100 gal. **OMRI listed.**

Item: 74-1541 **Size:** 1 gal.



SOLUTION SPOTLIGHT

CAPSIL

CapSil is a versatile, OMRI listed, organo-silicone surfactant that increases spray droplet coverage. Greater coverage ultimately leads to better pesticide efficacy against pests and diseases. Surfactants also help reduce visible residue left behind from foliar-applied pesticides and nutrients such as calcium chloride dihydrate. CapSil can be a valuable tool in all stages of production including propagation. It helps manage water stress of unrooted cuttings by preventing overheard mist from running off waxy foliage.

GGSPRO TIP

WHAT'S IN YOUR WATER?

Water testing is the foundation of any effective plant nutrition program. By understanding your water quality, including pH, EC, alkalinity, and macro/micronutrient content, you can make informed decisions that support plant health and performance. For most growers, testing at least once a year is sufficient unless the water source(s) change seasonally. Be sure to work with a reputable horticultural lab to get accurate and actionable results. When you know what's in your water, you can choose the right nutrition strategy that prevents costly pitfalls and gives your plants exactly what they need to thrive. GGSPro can help recommend a proper testing lab, review your results, and develop a fertilizer plan for your needs.

H2Pro

ICL H2Pro®

H2Pro™ Greenhouse & Nursery surfactant optimizes soilless media water-holding capacity, decreases irrigation frequency, reduces or eliminates dry spots, and helps prevent wilting both in production and post-production.

It comes in both liquid and granular formulations allowing the user to choose the one that best fits their operation.

It can be applied during soil blending, or any time during production, right up through shipping. At high rates, H2Pro Greenhouse and Nursery's rewetting ability can continue for as long as a year - long enough for the entire production cycle - and right through the retail environment for many crops.

Item: 74-1418 **Size:** 50 lb. granular
Item: 74-1424 **Size:** 2.5 gal. liquid
Item: 74-1422 **Size:** 1 L. liquid

Nu-Film P Spreader

Active Ingredient: Poly-1-p-Menthene

Nu-Film P is a non-ionic spreader-sticker agent designed for use with most pesticides. It forms a sticky, elastic film holding pesticides on crop foliage. **Rate:** ¼-⅓ tsp per gal or 4-6 fl oz per 100 gal. **OMRI listed.**

Item: 74-2960 **Size:** 1 gal.

Reténu G Advanced

The Aquatrols Company

Reténu G Advanced is a novel surfactant technology impregnated on an OMRI Listed® 100% biodegradable carrier. Reténu G Advanced can be conveniently incorporated into growing media during the mixing process to aid with moisture uniformity and drainage.

FEATURES & BENEFITS
May be used on a wide range of growing media substrates, designed to overcome substrate water repellent properties, quick and uniform substrate wetting.

USE RATES
Incorporate into growing media 1-3 lb per cubic yard.

Item: 74-1260 **Size:** 50 lb.

EMPLOYEE PROTECTION SIGNAGE



14" x 16" Signs
This EPA-approved reusable sign has correct legend and size.
Item: 41-1124



Small Signs
Approved for individual potted plants, greenhouse benches and certain nursery situations. These reusable 5" x 5" signs come with 16" PVC stake. Place no more than 25' apart.
Item: 41-1123



14" Pesticide Storage Sign
Mount this sign where pesticides are being stored

- UV resistant ink
- 0.030 gauge polyethylene

Item: 41-5026

Central Posting Kit



Handy for fulfilling WPS central posting requirements. Kit contains one of each of the following:

- Emergency Medical Facility Sign 10" x 12" 0.050 Plastic
- Pesticide Safety Poster 23" x 35" Full Color
- Pesticide Application Posting Tablet - 50 Sheets, 8½" x 11"
- EPA How to Comply booklet

Item: 41-5025

CROP PROTECTION ACCESSORIES

Chemical Measuring Kit



The AXIOM® Measuring Kit for oz and ml includes all three containers consisting of 4 oz, 8 oz, and 32 oz.

Item: 40-4180

BioSafe Equipment

Item: 41-9007
Description: Self-venting Spigot for 2.5 and 5 gal containers

Item: 41-9016
Description: EZI Pump Drum with measuring cup for 30 and 55 gallon containers

Bug-Scan Rolls and Cards



A yellow sticky plate made of durable, recyclable plastic with glue on both sides Commonly used tool for the timely detection of a new infestation and for monitoring the population size of pests already present Attracts the most harmful flying insects, such as whitefly, fungus gnats, aphids and leafminers.

Item: 30BSY25X10 **Description:** 25cm x 10cm, 20 pack
Item: 30BSY10X125 **Description:** 12.5cm x 10cm card, 100 pack
Item: 30BSRY30X100 **Description:** 30cm x 100m yellow roll
Item: 30BSRY15X125 **Description:** 15cm x 125m yellow roll, 2 pack

Insect Monitoring Sticky Cards

Bioline

Yellow and blue sticky cards are widely used in scouting/ monitoring programs to attract and capture the adult life stage of greenhouse insect pests including fungus gnats, leafminers, shore flies, western flower thrips, and whiteflies.

Item: SB8051-03 **Description:** Yellow 20 pack
Item: SB8052-11 **Description:** Blue 10 Pack
Item: SB8052-02 **Description:** Blue 36 pack
Item: SB8061-01 **Description:** Blue 10 pack with pheromone lure for Western Flower Thrips

Insect Monitoring Sticky Cards



These cards will trap the adult stages of flying insects. BioWorks' unique 2-sided (yellow / blue) design allows you to trap a wider variety of the most common plant-damaging insects (yellow for aphids, whitefly, fungus gnats, etc. and blue for thrips).

Item: 74-3668 **Description:** 10 pack 4" x 5"

Sensor Monitor Card



New Sensor Monitoring Cards the cards you have depended on for years have drastically improved. The new Sensor glue will not stick to your hands. The trap is as dependable as ever with 1'' grid printed on each card to help you determine the magnitude of your infestation.

Item: 74-36705 Yellow 3" x 5" Cards - Moisture Resistant (Qty 50)
Item: 74-3650 11" Card Wire Stakes (Qty 100)

Sticky Roll Clips

Item: 30BSRCLIPS (Qty 150)

Sticky-Trap Roll



Item: 74-12300 Yellow 12" x 300'
Item: 74-12300B Blue 12" x 300'
Item: 74-61500 Yellow 6" x 1500'
Item: 74-61500B Blue 6" x 1500'
Item: SB8051-05 Yellow 5.9" x 328'
Item: SB8052-05 Blue 5.9" x 328'
Item: SB8052-15 Blue 5.9" x 328' w/ Pheromone - 2 per cs



GROWTH REGULATORS

Sumagic

REI 12

Active Ingredient: Uniconazole

Used for height control of azaleas, bedding plants, chrysanthemums, Easter lilies, perennials and more. Plants vary in their response to powerful growth regulators, such as Sumagic. Trial according to label rates on new varieties or when using new rates. Dosage and application volumes are important to achieve desired plant response. Labeled for tomato, pepper, and eggplant vegetable transplants. **No outdoor use.**

Item: 73-1951 **Size:** 1 gal.
Item: 73-1952 **Size:** 15 gal.

Advocate

fine

REI 12

Active Ingredient: Indole-3-Butyric Acid

Liquid rooting hormone for use during cutting propagation. Approved for use on annual, perennial, and woody plant material. Application methods include foliar sprays and basal cutting dips. Rates vary widely based on plant species.

Item: 73-1157 **Size:** 1 qt.

Clonex Gel

HDI HYDRODYNAMICS INTERNATIONAL

REI 0

Active Ingredient: Indole-3-Butyric Acid

Rooting hormone in a gel form. Ready to use product is formulated for all types of cuttings, including herbaceous and woody species, ornamentals and edibles. Water-based, alcohol-free, 0.31% indole-3-butyric acid (IBA). Assorted package sizes available. **Rate:** ready to use from package. Sold in case qty. only.

Item: 81860068 **Size:** Gel 15 ml. Packet (108 per cs.)
Item: 81860067 **Size:** Gel 100 ml. (12 per cs.)
Item: 81860069 **Size:** Gel 250 ml. (12 per cs.)
Item: 81860074 **Size:** Gel Pint (6 per cs.)
Item: 81860075 **Size:** Gel Quart (1 per cs.)

Clonex® Clone Fertilizer Solution

CLONEX®

REI 0

- Nutrition for plants in propagation – macros, chelated micronutrients and vitamins
- Use when roots are present to enhance growth (avoid use prior to root development)

Rates: 5-10 ml per qt (1-2 tsp per qt)

Item: 81860076 **Size/Qty:** 20 ml packet / 108 qty

Dip 'N Grow

REI 24

Active Ingredient: Indole-3-Butyric Acid & 1-Napthaleneacetic Acid

Liquid rooting agent. A liquid concentrate that is diluted with water to any desired strength. Dip 'N Grow's liquid form allows it to be absorbed more easily by cuttings and ensures that a precise amount of chemical comes in contact with the stem. Contains indole-3-butyric acid and naphthaleneacetic acid. Users should test on soft wood cuttings for compatibility. **Rate:** Use a 1/20 ratio with a 5 second dip for most herbaceous cuttings. The label contains information to aid in choosing the correct dilution.

Item: 73-1410 **Size:** 2 fl oz.
Item: 73-1430 **Size:** 16 fl oz.
Item: 73-1440 **Size:** 1 gal.

Hormodin Powder

ohp

REI 0

Active Ingredient: Indole-3-Butyric Acid



Hormone powder for rooting cuttings available in three strengths for basal application. Active ingredient is indole-3-butyric acid
#1 (0.1% IBA) for herbaceous crops.
#2 (0.3% IBA) for semi-woody ornamentals.
#3 (0.8% IBA) for evergreen trees and shrubs.

Item: 73-18601 **Desc:** 1 lb. Hormodin #1
Item: 73-18611 **Desc:** 1 lb. Hormodin #2
Item: 73-18621 **Desc:** 0.5 lb. Hormodin #3

Hortus IBA Water Soluble Salts 20%

REI 0

Active Ingredient: Indole-3-Butyric Acid

Dissolve Hortus IBA salts in water to make solution for foliar or basal applications to enhance rooting. May be applied to herbaceous or woody cuttings. Rates vary by plant and application method, please consult the label.

Item: 73-1903 **Size:** 100 gm.
Item: 73-1904 **Size:** ¼ kg.
Item: 73-1905 **Size:** 1 kg.

Item: 10-1000 **Description:** AW US Balance Digital Table Top Scale (0.01 X 500 gram)

Item: 10-1001 **Description:** AW US-Scoop (4pcs) Measuring Cup Set



POINT OF PURCHASE SIGNAGE

Custom Designs and Sizes for your Greenhouse benching and outdoor needs!

Call **800.888.0054 (ext. 8)** or email **signs@griffinmail.com**

CUSTOM VINYL BANNERS:

Durable high quality 13oz vinyl, wind and weather resistant.

Item #	Description	UOS
PP-BA02	24" width banner	Sold by linear foot
PP-BA03	36" width banner	Sold by linear foot
PP-BA04	48" width banner	Sold by linear foot
PP-BA05	60" width banner	Sold by linear foot

INFORMATIONAL/MARKET SIGNS:





Polystyrene (thin durable material).

Item #	Description	UOS
PP-0705	7" x 5" polystyrene signs	114pk bundle

This option is suitable for signs that need to fit into a sign holder frame.

We offer many product templates or customize with a mix of signs to meet the bundle minimum requirement.



Pre-designed Poster Options

- 2 sided printing on Coroplast
- Full color print
- UV coated
- Grommets for easy hanging (24x36)

16" x 24"

Item #	Description
PP-1623PE	Perennials
PP-1623PO	Poinsettias
PP-1623SH	Shade Annuals
PP-1623SU	Sunny Annuals
PP-1623VG	Vegetables
PP-1623HG	Herb Garden

24" x 36"

Item #	Description
PP-2436PE	Perennials
PP-2436PO	Poinsettias
PP-2436SH	Shade Annuals
PP-2436SU	Sunny Annuals
PP-2436VG	Vegetables
PP-2436HG	Herb Garden

DIRECTIONAL OVERHEAD SIGNAGE:



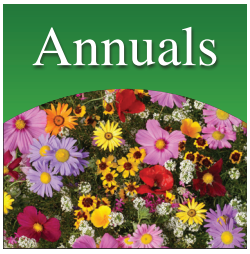
4mm coroplast with weather resistant print.

Item #	Description	UOS
PP-2412	24" x 12" coroplast 1-sided print	16pk bundle
PP-24122	24" x 12" coroplast 2-sided print	16pk bundle
PP-1208	12" x 8" coroplast 1-side print	48pk bundle
PP-12082	12" x 8" coroplast 2-side print	48pk bundle

#93992210 Sign Conversion kits are helpful so customer can add grommets and rings to each sign.

YARD, LAWN & EVENT SIGNS:







4mm coroplast with weather resistant print.

Item #	Description	UOS
PP-2424	24" x 24" coroplast 1-sided print	8pk bundle
PP-24242	24" x 24" coroplast 2-sided print	8pk bundle
PP-3624	24" x 36" coroplast 1-sided print	4pk bundle
PP-24362	24" x 36" coroplast 2-sided print	4pk bundle

#PP-SS Lg Yard Sign Holder stakes are needed for each 24"x24" Yard Sign.

Each bundle can include a mix of different signs, giving you the flexibility to choose exactly what you need—no requirement for them to be identical.

We have templates or can create something custom for you. Many other substrates available.

Call the Sign Shop at 800.888.0054 Press 8 or email request to signs@griffinmail.com

CROP SUPPORT





2026
2027

Trellis netting is used to support vegetable, cutflower and medicinal crops. Choose from different mesh sizes and product widths to prevent breakage and increase airflow for reduced disease in the crop.





- UV-treated polypropylene stays flexible
- Good visibility with white material
- Four mesh size options for different crop needs
- Very durable - Hortonova tensile ratings up to 70-78 lbs/ft
- Cost-effective, bulk rolls for heavy use rates

Item	★	Description	Qty
81900065		TENAX HORTONOVA TRELLIS NET SM 36" X 3280' WHITE 5.9"X5.9" MESH	1
81900304		TENAX HORTONOVA TRELLIS NET LG 39"X3280' WHITE 6"X6" MESH	1
81900076	•	TENAX HORTONOVA TRELLIS NET SM 48" X 3280' WHITE 5.9"X5.9" MESH	1
81900079		TENAX HORTONOVA TRELLIS NET LM 59" X 3280' WHITE 5.9"X6.7" MESH	1
81900305		TENAX HORTONOVA TRELLIS NET LG 60"X3280' WHITE 3.5"X3.5" MESH	1
81900081		TENAX HORTONOVA TRELLIS NET LM 67" X 3280' WHITE 5.9"X6.7" MESH	1
81900089		TENAX HORTONOVA TRELLIS NET LM 79" X 1000' WHITE 5.9"X6.7" MESH	1
81900090	•	TENAX HORTONOVA TRELLIS NET LM 79" X 3280' WHITE 5.9"X6.7" MESH	1
81900112		TENAX HORTONOVA TRELLIS NET LM 120" X 1500' WHITE 5.9"X6.7" MESH	1
81900113		TENAX HORTONOVA TRELLIS NET LM 120" X 3280' WHITE 5.9"X6.7" MESH	1
81900298	•	TENAX HORTONOVA TRELLIS NET SM 79"X 3280' WHITE 4X4 MESH	1
81900105		TENAX HORTONOVA TRELLIS NET LM 79"X1500' WHITE 5.9"X6.7" MESH	1
81900353		TENAX HORTONOVA TRELLIS EDGED 59"X3280' WHITE 5.9"X6.7" MESH	1

★ = Retail Store Best Seller



- A -

Acme Eng & MFG..... 23, 25
Adjuvant..... 90
Air flow fans..... 23-26
American Coolair..... 24
Anderson Injectors..... 38
Apogee Instruments..... 103
Aquatrols' Company..... 134-135
Aurora..... 56

- B -

Bacillus..... See crop protection
BASF..... 111, 122, 124-125, 130-131, 136
BCAs..... See beneficial insects
Beauveria..... See crop protection
Bee safety..... 107
Beneficial Insectary..... 129-131
Beneficial insects..... 129-131
Berry..... 17-18
BioBee..... 129-131
Bioline..... 129-131, 135
Biological control agents..... 127-129
Biopesticides..... See crop protection
BioSafe..... 97-98, 109, 111, 115-117, 125, 132-133
Biota Nutri..... 87
BioWorks..... 108, 110, 112-113, 116-117, 119,121-122, 124-125, 130-131, 136
Blister packs..... See beneficial insects
Bluelab..... 76-77, 101-102
Brandt..... 97, 110, 118

- C -

Carrier trays..... 80-82
Carts..... 51
Ceramic Metal Halide..... See lighting
Certis Biologicals..... 113, 117, 123-125
Chemical measuring kit..... 135
Cleaners..... 132
Cloth shading..... 22
CM Horticulture..... 32
Coast of Maine..... 58-59
Coir..... See media
Conley's..... 10-12
Containers..... 78-82
Controllers..... 29-30
Cooling System..... 27
Crop protection..... 105-138

- D -

DeWitt..... 22
Dosatron..... 37
Dissolved oxygen..... See meters
Domes..... See humidity domes
Douglas Plant Health..... 98
Dramm..... 25, 34, 36, 39-42, 48-49
Dribble rings..... 42
Drip irrigation..... 42-45
Drip tubing..... 42-45

- E -

EC meters..... See meters
Emitters..... 42
Environmental controllers..... 30-31
Evaporative pads..... 24
Evofactor..... 90
Exhaust fans..... 23

- F -

Fans..... 23-26
Fertilizer..... 84-100
Filters..... 45
Flat fillers..... 52
Flats and inserts..... 82
Flex Grow..... 98
Foamers..... 48
Foggers..... 48
Fox Farm..... 60, 74, 85
Fungicides..... 108-115

- G -

Germination mixes..... See media
Giles..... 97
Gowan..... 108-109, 116-117, 120-121, 123
Greenhouses..... 10-14
Grodan..... 62-64
Ground cloth..... 33
Ground cover..... 33
Grow cube..... 62-65, 68, 75
Grow Slabs..... 62-64
Growscape..... 78-79
Gutter system..... 31

- H -

Haifa..... 97-98
HAF Fans..... 25-26
Harnois..... 13-14
Herbicides..... 125
High Pressure Sodium..... See lighting
Hortonova..... 140
Hose accessories..... 39-40
Hoses..... 41
Housings..... 24
HPS..... See lighting
Humates..... 100
Humidity Domes..... 82
Hydraulic sprayers..... 48-50
Hydrodynamics International..... 65, 137

- I -

IAS..... 54
ICL..... 96, 99, 134
ihort..... 68
Injection molded pots..... 78-81
Injectors..... 38
Insecticides..... 115-125
Inserts..... 45
Irrigation..... See water delivery
Irrigation controllers..... 29-30
Irrigation tubing..... 42-45

- J -

JH Biotech Inc..... 109-110, 122
Jiffy..... 19, 66-67
JR Peters..... 88-89, 97-99, 104

- K -

Kirby AGRI..... 97

- L -

Lambert..... 68
LED..... See lighting
Lighting..... 20
Liner trays..... 82
Link4..... 31
Liquid Shading..... 21
Lubing..... 27, 31
Lumite..... 33

- M -

Master Plant Prod..... 95
Media..... 55-82
Metal Halide..... See lighting
Meters..... 54
MH..... See lighting
Mixers..... 52
Mycorrhizal Applications..... 122

- N -

NDS..... 37
Nematodes..... See beneficial insects
Netafim..... 42-43, 45
Netbow..... 42
Netting shade..... 22
NorCal..... 70
Nozzles..... 39-40
Nufarm..... 108, 111-112, 114, 118-119, 120, 123-124, 136
Nursery Supplies..... 80-81

Nusery pots 80-81
Nutrients ..... See fertilizers
Nutrient Injection 37-38
Nutritional supplements 100

- O -

OHP 113-117, 120-121, 123, 126, 137

- P -

Pace 49 Inc 132-133
Pack Mfg 52-53
Peat ..... See media
Perlite ..... See media
pH calibration 76-77, 101-102
pH control 76-77, 101-102
PL Lights 20
Plant Support 140
Plantex 91-95, 97-99
Plug trays 63, 65, 68, 82
Polyethylene film 15-18
Pots 78-81
Potting soil 56, 59-61
Predatory mites ..... See beneficial insects
Predatory wasps ..... See beneficial insects
Prefilled trays 67
Premier Tech 46, 70-73
Pressure Regulator 45
Production systems 31-32
Profarm 112, 114, 119, 125
Propagation domes ..... See humidity domes
Propagation trays 82
Pyrethrins ..... See crop protection

- R -

ReduSol 21
Reverse osmosis 30
Riococo worldwide 75
Rooting agents 137
Royal Gold 61, 86

- S -

Sachets ..... See beneficial insects
Salts ..... See fertilizer
SaniDate 133
Sanitation 105-138
Seeders 53
Seeds ..... See green goods
Senninger Irrigation Inc 45
SePro 108, 110, 115, 119, 124
Shading 21-22
Shutters 23-24
Siebring 50
Silica 100
Soil Meter 54
Spacer trays 82
Spray equipment 48-50
Spray stakes 42
SQM 98
Stabilized media ..... See media
Stakes 42
Stick sachets ..... See beneficial insects
Sticky Cards 135-136
Sun Master 15-16
Surfactants 134-135
Sustane 84
Syngenta 109-114, 117-120

- T -

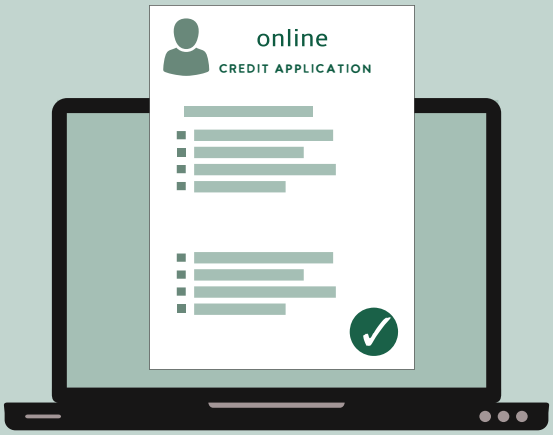
Tenax 140
Thermoformed pots 78-79
Thermostats 28
TO Plastics 82
Transportation 51
Trays 80-82
Trellis netting 140
Trichoderma ..... See crop protection

- V -

Valves 40, 45
Ventilation fans 23-24
Verano 90
Vermiculite ..... See media
V-flo fans 26
Vostermans 26

- W-Z -

Wadsworth 29
Wagons 51
Water breakers 39-40
Water Delivery 36
Water soluble fertilizers ..... See fertilizers
Water treatment 134-135
Watering tools 39-41
Watering wands 40
Wellmaster 51
Wetting agents 132-133
Whittemore 57
Yara 97
ZeroTol 115, 133



Credit Application

INTERESTED IN APPLYING FOR CREDIT?

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Email creditapplication@griffinmail.com to
receive an email with a link to our secure online portal.

If you are unable to access the online form you can call
us at 800.888.0054 and ask for the Credit Dept.

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If you see that a shipment is damaged upon receipt from UPS / Fed Ex, refuse shipment. UPS / Fed Ex will return the shipment to us, and we will file the claim and send a new shipment to you. If after opening the package you find concealed damage, call us at once. We will instruct UPS / Fed Ex to pick up the package and return it to us for a claim. We will reship your order.

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Offerings
Listed are made subject to being available. We will not be held responsible for delays in shipment caused by conditions beyond our control. Applicable substitutes will be made when necessary.

Terms
Are net 30 days unless otherwise stated. A 1 ½ % per month service charge is added on all overdue accounts. This is an 18% annual charge. Terms are COD where credit has not been established. Returned checks or ACH Debits will be assessed a $25.00 return fee. Delayed Payment Plan (dating) will only be extended to accounts with a satisfactory payment record.

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All special-order material that is shipped Direct from the manufacturer to the customer will require a 30% deposit before the order can be placed with the manufacturer. Customers who have not established a line of credit will be required to prepay the order before the order is sent to the vendor. Prepayment includes the merchandise total, sales tax, estimated freight and any miscellaneous charges. Depending on the size or complexity of the order you will be required to sign off on a bill of lading to ensure the accuracy and condition of the order.

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No merchandise may be returned without authorization from our office. Merchandise must be returned within 60 days of purchase. Invoice number and date of purchase is required for any/all returns. A restocking charge of 20% is charged on all returns unless merchandise is defective. Credits for returns paid via credit card will not receive a refund for the credit card fee. **ITEMS THAT ARE SPECIAL ORDERED, MADE TO CUSTOMER SPECIFICATIONS, NON-INVENTORY OR NON-STOCK ITEMS, CANNOT BE RETURNED FOR ANY CREDIT DUE TO THEIR SPECIAL NATURE.**

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Appropriate state tax will be charged based on the location of delivery. All items will be charged sales tax unless we have a copy of your sales tax license and a properly executed sales tax exemption certificate for the account and any associated ship to locations. In compliance with the law, we must charge the tax on all items; which the state designates as taxable even though you have provided us with your sales tax exemption certificate. If any items purchased are for company use please notify us so the appropriate tax can be charged.

Recommendations
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The following is made in lieu of all warranties expressed or implied. Seller's and manufacturer's only obligation shall be to replace such quantity of the product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising out of the use or the inability to use the product. Before using, user shall determine the suitability of the product for his intended use, and user assumes all risk and liability whatsoever in connection therewith. The foregoing may not be changed except by an agreement signed by officers of seller and manufacturer. All terms and conditions listed are subject to change.

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In order to provide you with the best service possible all deliveries made must be signed for, which will ensure the right product and quantities are received. All pallets are wrapped with black wrap and taped to ensure your order arrives complete. If your pallet is tampered with, please sign the bill of lading **"1 pallet received, tape and wrap has been broken."** Any shortages or missed shipments must be noted upon receipt of your delivery, so please try to be available on delivery date.

All orders for delivery must be placed 24 hours, or 2 working days, prior to your delivery day.

The original Bill of Lading attached to our invoice indicates that material shipped has now become your property and is an acknowledgment by the transportation company of the receipt of the property in good condition. Safe delivery of this shipment is now the responsibility of the carrier. Please examine your shipment carefully before signing the freight bill. We will be glad to assist in tracing or recovery of lost merchandise.

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If any damage is noted, or if the number of pieces received does not agree with the number on the bill of lading, **DO NOT** accept the shipment without shortage or damage notated on your freight bill and signed by the carrier's agent (driver). Failure to do so may jeopardize your recovery. If any concealed damage or shortage is discovered when unpacking, leave the material and the packing as is and notify the carrier for a concealed damage or shortage inspection. Consult the carrier for the necessary claim papers and disposition of damaged articles. When checking shipments, compare what was received with packing list or invoice. If there is a shortage or damage, **YOU MUST CONTACT US WITHIN 24 to 48 HOURS** and provide us with full details and pictures.

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Prices and terms are subject to change without notice.
Prices at time of shipment will prevail. For current quotations, please call us. Prices quoted are FOB Denver, CO; Cheshire, CT; Canton, GA; Tewksbury, MA; Gray, ME; Bridgeton, NJ; Auburn, NY; Brookhaven, NY; Schenectady, NY; Perrysburg, OH; Sparks, NV; Morgantown, PA; Richmond, VA; and Woodridge, IL. or FOB the factory unless otherwise stated.

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