

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

March 23, 2018

Nicole Higgs Regulatory Affairs Manager 870 Technology Way Libertyville, IL 60048

Subject: Non-PRIA (Pesticide Registration Improvement Act) Labeling Amendment – Acceptable Revision to the Direction for Use on the Master and Supplemental Label. Product Name: ProGibb LV PLUS Plant Growth Regulator Solution EPA Registration Number: 73049-498 Application Date: 02/14/2018 OPP Decision Number: 539005

Dear Ms. Higgs:

The amended labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

This approval does not affect any terms or conditions that were previously imposed on this registration. You continue to be subject to existing terms or conditions on your registration and any deadlines connected with them.

The supplemental labeling contains some new and/or revised uses and/or directions that may be additional to the uses and/or directions found on the label on or attached to the container, but the supplemental labeling does not by itself constitute the complete set of use directions. The complete set of use directions is set forth on the container label as combined with the supplemental labeling.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release this product for shipment with the new labeling. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR § 152.3.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the U.S. Environmental Protection Agency (EPA). If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section

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12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA-approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Alex Horansky by phone at (703) 347-0128 or via email at horansky.alex@epa.gov.

Sincerely,

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Andrew Bryceland, Team Leader Biochemical Pesticides Branch Biopesticides and Pollution Prevention Division (7511P) Office of Pesticide Programs

Enclosure



#### LABEL AMENDMENT

[Text in brackets [] indicates optional language or language intended for explanatory purposes to facilitate label review. Thus, this language will often not appear on final printed labeling. Also, this page is present (page 1) to delineate sublabels and will not appear on the final printed labeling.]

#### **MASTER LABEL**

# Primary Product name:ProGibb LV PLUS Plant Growth Regulator SolutionAlternate Brand name:ProGibb LV PLUS T&O Plant Growth Regulator Solution

Sublabel I: PROGIBB LV PLUS Plant Growth Regulator Solution; For use on artichoke, avocado, banana, bell pepper, blueberry, carrot, celery, cherries, citrus, coffee, collard greens, cotton, cranberry, cucumber, dry bean, grapes, hops, Italian prune, leaf lettuce, lettuce for seed, melon, mustard greens, peanut, pecan, pepper, pineapple, plantain, potato seed, rhubarb, rice, soybean, spinach, stone fruit, strawberry, turnip greens, and watercress.

Sublabel II: PROGIBB LV PLUS Plant Growth Regulator Solution; For use on Turf and Ornamental Plants

For Organic Production.

Active Ingredient:	
Gibberellic Acid	5.7 % w/w
Other Ingredients	<u>94.3 % w/w</u>
Total	100.0% w/w

PROGIBB LV PLUS contains approximately 2.0 grams active ingredient per fluid ounce of formulated product.

## KEEP OUT OF REACH OF CHILDREN CAUTION - PRECAUCIÓN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail).

For MEDICAL and TRANSPORT Emergencies ONLY Call 24 Hours A Day 1-800-892-0099. For All Other Information Call 1-800-6-VALENT

EPA Registration No. 73049-498 EPA Establishment No.

Lot No.

Valent BioSciences LLC 870 Technology Way Libertyville, IL 60048

Net Contents:

# SUB LABEL I

# **PROGIBB LV PLUS Plant Growth Regulator Solution**

Sublabel I: PROGIBB LV PLUS Plant Growth Regulator Solution; For use on artichoke, avocado, banana, bell pepper, blueberry, carrot, celery, cherries, citrus, coffee, collard greens, cotton, cranberry, cucumber, dry bean, grapes, hops, Italian prune, leaf lettuce, lettuce for seed, melon, mustard greens, peanut, pecan, pepper, pineapple, plantain, potato seed, rhubarb, rice, soybean, spinach, stone fruit, strawberry, turnip greens, and watercress.

# PROGIBB LV PLUS

Plant Growth Regulator

# Solution For Agricultural Use.

For Organic Production.

Active Ingredient:	
Gibberellic Acid	
Other Ingredients	
Total	

PROGIBB LV PLUS liquid contains approximately 2.0 grams active ingredient per fluid ounce of formulated product.

# KEEP OUT OF REACH OF CHILDREN CAUTION - PRECAUCIÓN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail).

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EPA Registration No. 73049-498 EPA Establishment No.

Valent BioSciences LLC 870 Technology Way Libertyville, IL 60048

Net Contents:

	FIRST AID	
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
If swallowed	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>	
If inhaled	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice</li> </ul>	
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
HOT LINE NUMBER		
for treatment. You may	iner or label with you when calling a poison control center or doctor, or going y also call toll-free 1-800-892-0099 (24 hours) for emergency medical ort emergency information. For all other information, call 1-800-6-Valent.	

## HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergencies, you may also call toll-free 1-800-892-0099 for treatment information.

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

# CAUTION

Harmful if absorbed through the skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before reuse.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category C on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

- Long sleeved shirt
- Long pants
- Chemical resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, and viton
- Shoes plus socks
- Protective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

# USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- User should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS**

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

Do not use treated seed for food, feed, or oil purposes. Exposed treated seed may be hazardous to birds and other wildlife. Treat only those seeds needed for immediate use and planting. Do not store excess treated seed beyond planting time. Dispose of all excess treated seed and seed packaging by burial away from bodies of water.

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

# AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours unless wearing appropriate PPE

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, and viton
- Shoes plus socks
- Protective eyewear

# GENERAL USE INSTRUCTIONS

Use only as directed. Read the label thoroughly and understand it before making applications. Keep out of reach of children.

Do not apply this product through any type of irrigation system, unless otherwise permitted on the label.

# **Application Instructions:**

- PROGIBB LV PLUS Plant Growth Regulator Solution (hereafter referred to as PROGIBB LV PLUS) contains gibberellic acid, which is an extremely potent plant growth regulator; when applying plant growth regulators, deviations from the label directions in the rates, timings, water volumes, or the adoption of untested spray mixes, results in undesirable effects. Always consult the Valent agricultural specialist in your area for the spray regimen best suited to your conditions.
- Do not apply to plants under pest, nutritional, or water stress.
- Void drift or accidental application to other crops.

• When a range of rates is indicated, use the concentration and spray volume directed locally by the Valent agricultural specialist.

• For optimum effectiveness, thorough spray coverage must be achieved; all parts of the plant or crop must receive the spray or desired results will not occur. Prepare solution concentrations by mixing the required amount of product with water in a clean, empty spray tank. Dispose of any unused spray material at the end of each day following local, state or federal law.

• For most efficacious results, use water with a pH of 4.0 to 8.5. Use a buffer for water with pH above or below this range.

• PROGIBB LV PLUS applications made under slow drying conditions (cool to warm temperatures, medium to high relative humidity, and no wind) will increase absorption by the plant, thus optimizing effectiveness. Night time applications are encouraged when day time conditions are not conducive to slow drying conditions.

• Rain fastness: Re-apply PROGIBB LV PLUS if significant rain occurs within 2 hours of application.

• Do not apply using ULV application methods. For aerial applications spray volumes must be greater than 2 gallons per acre (10 gallons per acre for tree crops).

- No pre-harvest interval is required for this product.
- Compatibility: When considering tank mixing with other products, use the following compatibility jar test before mixing a whole tank.

# COMPATIBILITY WITH OTHER AGRICULTURAL PRODUCTS

Compatibility and performance data for PROGIBB LV PLUS with other agricultural products are not necessarily available.

Do not tank mix PROGIBB LV PLUS with other products unless compatibility has been verified. If considering tank mixing PROGIBB LV PLUS with other products use the following **compatibility jar test** before mixing a whole tank:

Add water from the same water source to a clear glass or plastic jar. Add the pesticides in correct proportions. Mix thoroughly and let stand for a minimum 15 minutes. Separation, gelling, or generation of heat are all signs of incompatibility.

Even if a mix passes the jar test for compatibility, it is imperative to test it on a designated area to evaluate for phytotoxicity or ineffectiveness.

Always read and follow all label directions and precautions of each product. When using combinations of products the most restrictive of label limitations and precautions must be followed. Do not mix with any pesticide that has a prohibition against tank mixing. For further information consult your Valent agricultural specialist.

#### **DIRECTIONS FOR CHEMIGATION**

Fill the supply tank with the desired amount of water. Then add the amount of PROGIBB LV PLUS required in order to achieve the final solution rate recommended for the specific crop to be treated. Agitate the mixture of PROGIBB LV PLUS frequently during the chemigation period to assure a uniform distribution throughout the system. Apply PROGIBB LV PLUS continuously for the duration of the water application but do not exceed recommended rates and volumes as outlined on the product label.

# **CHEMIGATION PRECAUTIONS**

Apply this product only through the following systems:

Overhead sprinklers such as impact, micro-sprinklers, or booms.

Do not apply this product through any other type of irrigation system. Crop injury or lack of effectiveness can result from non-uniform distribution of treated water. If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Prior to application ensure that the chemigation system meets the following requirements:

The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid- operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection

pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

In addition to the above use rates and recommendations, the following precautions must be observed when using this product in any type of irrigation system:

#### CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days of the year. Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water systems should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid- operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where the pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

# SPRAY INSTRUCTIONS FOR CROP

## CATEGORIESGRAPE

For all grapes, application by ground sprayer provides the best coverage. Apply as a concentrate or dilute spray in sufficient water volume to ensure thorough wetting. It is important to wet all flower clusters or berries thoroughly. For cultivar specific spray rates and timings, see accompanying tables.

SEEDLESS TABLE GRAPE			
CLUSTER STRETCH SPRAYS			
OBJECTIVE/BENEFIT	APPLICATI	ON TIMING	
For cluster elongation and looser cluster forms. To reduce costs of thinning, allow better air	forms. To Make one to three applications before bloom when flower clusters are 2 to 7 inches long.		
circulation to aid in the control of bunch rot, and increase light penetration to aid in sugar development.		2 00 / 1101100 10118	
CROP/CULTIVAR	RATE Grams a.i. /acre	RATE Ounces Product /acre	
Perlette Seedless	8-24	4-12	
Flame Seedless	8-24	4-12	
Thompson Seedless	8-24	4-12	
Raisin	8-24	4-12	
Other Seedless Grapes	No data is available at this time.		

SEEDLESS TABLE GRAPE BERRY THINNING SPRAYS			
			OBJECTIVE/BENEFIT
For decreased berry set, reduced hand- thinning costs, and hastened maturity.	Only 1-2 applications f Grape". When the blo	Make one to four applications during bloom. Only 1-2 applications for "Other Seedless Grape". When the bloom period is extended, make subsequent sprays 1 to 7 days after the first application	
CROP/CULTIVAR	RATE Grams a.i. /acre	RATE Ounces Product /acre	
Perlette Seedless	No data is available for this time.	No data is available for this variety/timing at this time.	
Flame Seedless	3-16	1.5-8	
Thompson Seedless	8-20	4-10	
Raisin	3-12	1.5-6	
Other Seedless Grapes	0.5-12	0.5-12 0.25-6	
NOTE	•		

NOTE:

• Higher amounts or multiple applications have sometimes resulted in an excess of shot berries or over-thinning, especially in young vines or vines with high vigor.

• For "Other Seedless Grapes" use caution as some of the new cultivars are very responsive and are known to over-thin easily. Consult a Valent representative or local specialist before thinning unfamiliar cultivars.

SEEDLESS TABLE GRAPE BUMP SPRAY		
OBJECTIVE/BENEFIT APPLICATION TIMING		
To help initiate the beginning of the berry growth period	Make one application during the period between the last thinning spray and the first sizing spray.	
CROP/CULTIVAR	RATE Grams a.i. /acre	RATE Ounces Product /acre
Seedless Grapes	16-24	8-12

		ABLE GRAPE	
	BERRY SIZ	ING SPRAYS	
<b>OBJECTIVE/BENEFIT</b>		APPLICATION TIM	
For larger berries and larger clusters when used in conjunction with established girdling and thinning practices		Make one to four applications beginning when the average berry size reaches "target" diameter (See below). Timing of the subsequent sprays will be dictated by experience in the vineyard and temperatures occurring between sprays. Sprays made after 15-20 days from the first sizing spray are less effective.	
CROP/CULTIVAR	Target Berry Diameter *	RATE Grams a.i. /acre	RATE Ounces Product /acre
Perlette Seedless	4-5 mm	32-128	16-64
Flame Seedless	6-9 mm	20-128	10-64
Thompson Seedless	3-5 mm	32-128	16-64
Raisin	3-5 mm	4-20	2-10
Other Seedless Grapes	3-14 mm	8-128	4-64
*Target average berry diam NOTE:		ion , high amounts of gibberg	

• In some growing regions and for some cultivars, high amounts of gibberellic acid have occasionally been observed to:

- reduce fruitfulness (cluster counts) the following year,
- delay berry skin color development, sugars accumulation and overall maturation.
- Consult a Valent representative or local specialist before sizing unfamiliar cultivars.

BERRY SIZING CLUSTER DIP – SEEDED and SEEDLESS TABLE GRAPE			
<b>OBJECTIVE/BENEFIT</b>	APPLICATION TIMING		
To increase berry size.	Apply 20 - 50 ppm GA3 solution as a dip or direct spray to the cluster when berries reach 3-14 mm.		
	Rate Per 5 Gallons Treatment Solution		
CROP/ CULTIVAR	PPM AI	<b>Ounces Product</b>	
Table Grapes	20 - 50 0.2 - 0.5		
Note: To prepare dip solution, add $0.19 - 0.47$ ounces (5.6 - 14 ml) PROGIBB LV PLUS for every 5 gallons of solution needed. Consult the Valent representative or local specialist before sizing cultivars with which there is no familiarity.			

		SEEDED GRAPES RRY SIZING SPRAYS	
OBJECTIVE/BENEFIT         APPLICATION TIMING           To increase berry size in listed cultivars; and also to reduce berry shrivel in Emperor.         Make one application during the indicated diameter range. Make the application as a vine spray or as a spray or dip directly to the spray or as a spra		during the indicated berry the application as a whole	
CROP/ CULTIVAR	Berry Diameter (mm)*	Whole vine spray. Rate in grams a.i. /acre	Direct spray to the cluster only or dip the clusters. Rate in ppm's of a.i.
Emperor	12-16	20	40-50
Red Globe	12-18	20	40-50
Calmeria	12-16	20	40-50
Christmas Rose	12-16	20	40-50
Rogue	12-16	20	40-50
Queens	12-15	20	40-50
Other varieties	12-15	-	40-50

Tredominant average berry die

NOTE:

• The whole vine application has sometimes reduced fruitfulness (cluster counts) the following year.

• High amounts of gibberellic acid have occasionally delayed berry skin color development, sugars accumulation and overall maturation.

• Consult a Valent representative or local specialist before sizing unfamiliar cultivars.

OBJECTIVE/BENEFIT	APPLICATION TIMING	APPLICATION TIMING	
To increase berry size	Make one application 3-5 day before shatter begins.	Make one application 3-5 days after full bloom, but before shatter begins.	
CROP/CULTIVAR	RATE Grams a.i. /acre	RATE Product/acre	
Black Corinth (Zante Currant)	1-12	0.5 – 6 oz (15-177 ml)	

WINE GRAPE		
OBJECTIVE/BENEFIT	<b>APPLICATION TIMING</b>	
To increase cluster length and improve air circulation and light penetration within the cluster. Under certain conditions this application is known to help reduce the incidence of bunch rot and sour rot. ALWAYS consult the Valent representative or the local agricultural specialist before making this application if there is no prior experience with this application.	Make a single spray. Apply when the clusters found in the dominant shoots arising from buds of count spurs are starting to elongate and show separation of the uppermost flower groups. This timing usually coincides with average cluster length of 3-4 inches (1-5 inch overall cluster length range). For each cultivar, follow the rate directions given on the table below. Use 100	
CROP/CULTIVAR	RATE Grams a.i. /acre	RATE Product/acre
Palomino Sauvignon Blanc Tinta Madeira	0.4-1	0.2-0.5 oz (6-15 ml)
Aleatico Carignane Chardonney Chenin Blanc French Colombard Pinot Noir Valdepenas	1-2	0.5-1 oz (15- 30 ml)
Barbera Petite Sirah Zinfandel	2-4	1-2 oz (30-59 ml)
Green Hungarian	4-8	2-4 oz
Grenache Alicante	8	4 oz
Salvadore	8-16	4-8 oz

NOTE:

• DO NOT make this application less than three weeks before anticipated bloom.

This application will most likely cause some reduction in yield of seeded wine grape cultivars. This reduction in yield results from: a) increase in shot berries in the year of application; b) reduction in fruitfulness (cluster counts) in the first and second year following the application.

# **CITRUS**

For citrus, apply in sprays of sufficient water volumes to ensure thorough fruit wetting. In most cases, this application will cause some drop of older mature leaves; this drop of older leaves is inconsequential. However, application to trees of low vigor or under stress (pest, nutritional, or water, etc.) has sometimes caused severe leaf and/or fruit drop. Dilute spray rates are expressed as the amount of product per 100 gallons of water. Do not apply in white wash sprays in which lime or other caustic material has produced a high pH in the spray tank. Applications of copper fungicides and/or oils within three weeks (before or after) the PROGIBB LV PLUS application has been known to result in significant leaf drop and fruit drop.

CITRUS: FIELD APPLICATIONS			
CROP/VARIETY	OBJECTIVE/BENEFIT	RATE /acre	APPLICATION TIMING
Navel Orange and other orange cultivars (except Valencia)	To delay rind aging, reduce physiological disorders (e.g., rind staining, water spotting, sticky or tacky surface, puffy rind and rupture under pressure), and produce a more orderly harvesting pattern.	16-48 grams a.i. (8-24 oz)	Make one or two applications as a concentrate or dilute spray. 1) Early application: spray approximately 2 weeks prior to color break (typically August – November). This timing causes the greatest delay in rind aging and produces the firmest rind possible. AND/OR 2) Late spray: one application after marketable color (typically October – December). This late spray has been known to cause re- greening.
Valencia Orange	To reduce rind creasing and to delay rind aging and softening	40-80 grams a.i. (20-40 oz)	Make a single application as a concentrate or dilute spray in August to October to target crop of young fruit.
<ul> <li>NOTE:</li> <li>In groves that will be harvested early do not apply the early spray as fruit coloring will be delayed. Do not apply from January through July, as production has occasionally been observed to be reduced the following year.</li> <li>Slower color development is to be expected in the target crop. Increased re-greening of mature fruit has been observed to occur. After marketable color is achieved, treatment effects are possibly dissipated the longer treated fruit remain on the tree.</li> </ul>			
All Round Oranges (For Florida use only)	To delay aging and softening of the rind, and to reduce creasing and puffiness.	20-60 grams a.i. (10-30 oz)	Make a single application in August to October to trees with a target crop of young fruit. The addition of pure organo-silicone type surfactant at 0.05% (6 oz / 100 gallons) has been shown to be beneficial.

CITRUS: FIELD APPLICATIONS (con't)				
CROP/VARIETY	OBJECTIVE /BENEFIT	RATE / ACRE	APPLICATION TIMING	
Lemon/Lime	To decrease rind aging, yellowing and the amount of small ripe fruit and produce a more desirable production pattern relative to market demand.	10 – 32 grams a.i. (5-16 oz)	Make a single application when target crop is <sup>1</sup> / <sub>2</sub> to full size, but still green.	
NOTE: • When applied tw been reported	vo years in a row, an even large	r difference in	harvest pattern and maturity has	
Tangerine Hybrids (Orlando, Robinson, Minneola, Sunburst, and others)	To delay disorders associated with rind aging, puffiness, and softening, and to increase peel strength, of tangerine hybrids	20 – 40 grams a.i. (10-20 oz)	Make one spray application two weeks prior to color break. Apply as a dilute spray.	
	early harvest is planned. Do no n during coloring has been obs		oloring as pre-harvest rind staining is in variation in rind color	
Grapefruit (Not for use in California)	To delay disorders associated with rind aging (e.g., puffiness, softening, and orange coloration), prevent preharvest drop of mature fruit, increase peel strength, reduce water loss during storage, and produce a more orderly harvesting pattern.	16 – 48 grams a.i. (8-24 oz)	Make one or two dilute spray applications in sufficient volume to ensure coverage. Do not exceed 20 ppm a.i. in spray solution. EARLY: Make application two weeks prior to color break. Apply as a dilute spray (AUG-SEP). AND/OR LATE: Make application after marketable color has developed (OCT-DEC).	

• Do not spray groves that are to be harvested early since fruit coloring will be delayed. I reated fruit has been known to re-green if allowed to remain on the tree for extended periods. Applications made after December, or when trees begin to break dormancy, have been observed to adversely affect the new crop. Do not use concentrate sprays. Results have been known to vary from season to season depending on environmental conditions. The delay in rind aging is greatest when spray is applied before color change. This spray timing produces the firmest rind possible.

	CITRUS: FIELD APPLICATIONS (con't)				
CROP/VARIETY	OBJECTIVE/ BENEFIT	RATE / ACRE	<b>APPLICATION TIMING</b>		
Star Ruby	To reduce	25-35	Make a single dilute application		
Grapefruit (Not for	small fruit drop	grams a.i.	during the bloom period.		
use in California)	Ruby Variety				
	increasing	(12.5-			
	yields.	17.5 oz)			
NOTE:					
• Results vary from season balanced fertilization and wa		g on environme	ental conditions. Maintain a well-		
Tangerine and Mandarins	To increase	8-30	Make one to two applications during the		
Hybrids	fruit set and	grams a.i.	bloom period. Apply as a dilute spray.		
(Not for use in California)	yield. The	<i></i>			
	number of	(4-15 oz)			
	applications depends on				
	desired fruit				
	set.				
in mature leaf drop occurs so Navel, Valencia* and	To enhance yield.	15-25	Make a single dilute spray between mid-December and late		
valencia <sup>+</sup> and	yleid.	grams a.i.	between mid-December and late		
Ambersweet*			January using sufficient spray		
Orange					
~		(7.5-12.5	volume for adequate coverage of		
		(7.5-12.5 oz)	volume for adequate coverage of tree canopy		
-			~		
Not for use in California NOTE: Many blocks of Amb crops. In these blocks, it app	ears that tree resourd port early fruit grow	oz) orange in Floric ces are wasted b th, and carry fru	tree canopy la tend to flower very heavily, yet set poor by heavy flowering, compromising the uit to harvest. Productivity of heavily		
Not for use in California NOTE: Many blocks of Aml crops. In these blocks, it app trees' ability to set fruit, sup	ears that tree resourd port early fruit grow	oz) orange in Florid ces are wasted b th, and carry fru lower formation	tree canopy la tend to flower very heavily, yet set poor by heavy flowering, compromising the uit to harvest. Productivity of heavily		
Not for use in California NOTE: Many blocks of Amb crops. In these blocks, it app trees' ability to set fruit, supp blooming blocks is often inc	ears that tree resource port early fruit grown reased by reducing f	oz) orange in Floric ces are wasted b th, and carry fru	tree canopy la tend to flower very heavily, yet set poor by heavy flowering, compromising the hit to harvest. Productivity of heavily n.		
Not for use in California NOTE: Many blocks of Amb crops. In these blocks, it app trees' ability to set fruit, supj blooming blocks is often inc Grapefruit	ears that tree resourd port early fruit grown reased by reducing f To enhance fruit	oz) orange in Floric ces are wasted b th, and carry fru lower formation 8-30 grams	tree canopy la tend to flower very heavily, yet set poor by heavy flowering, compromising the uit to harvest. Productivity of heavily n. Make a single application in December - January. Apply in125-175 gallons of		

CITRUS: CLEMENTINE MANDARIN				
CROP/VARIETY	OBJECTIVE/ BENEFIT	RATE/ ACRE	APPLICATION TIMING	
Clementine Mandarin	To increase fruit set and yield	1-40 grams a.i. (0.5-20 oz)	Make one to four applications from early bloom up to 4 weeks after petal fall. Allow a minimum of three days between sprays. Use a dilute spray with sufficient spray volume for adequate coverage of tree canopy.	

#### NOTE:

The number of applications depends upon amount of desired fruit set. Generally, more fruit will be set by 2 applications, earlier applications, higher rates, and climactic conditions more favorable to set. Differences in the crop strain have been observed to interact with the above factors to affect the degree of fruit set achieved. Reductions in final fruit size have on occasion occurred as a result of excessive fruit set.

CITRUS – INCREASE JUICE YIELD			
CROP/ VARIETY	OBJECTIVE/ BENEFIT	RATE / ACRE	APPLICATION TIMING
Processing oranges (Not for use in California)	To increase juice extraction yield in late- harvested processing oranges.	20 gram a.i. (10 oz)	Make a single application at fruit color break in sufficient volume to ensure complete coverage of the fruits.

	FRU	JIT CROPS	
CROP/ CULTIVAR	OBJECTIVE/ BENEFIT	RATE/ACRE	APPLICATION TIMING
Banana (Not for use in California)	To stimulate plant growth, and to overcome the effects of stress caused by insect, disease or adverse weather. These applications have been observed to improve fruit size and quality and overall yield.	Aerial spray: Apply 6 to 20 grams a.i. (3-10 oz) per acre per spray. Use sufficient water volume to achieve adequate coverage of the canopy	Make applications every 3-4 weeks throughout the year. Use higher rates prior to, and during the periods of intense stress. It is permissible to tank-mix with the standard pesticide treatments applied by air.
		<u>Ground spray:</u> Apply 6 to 20 grams a.i. (3-10 oz) per acre per spray. Use sufficient water volume to achieve adequate coverage of the canopy.	Direct applications to the daughter plants. Make first application when the daughter plant is selected. Make applications every 3-4 weeks throughout the year as needed. Use higher rates prior to, and during the periods of intense stress. It is permissible to tank- mix the product with pesticides.
	To stimulate early growth in new plantations, increase plant vigor and accelerate the time to flowering.	Apply 2-16 grams a.i (1- 8 oz). per acre per spray. Use sufficient water volume to achieve adequate coverage of the canopy	Make the first application a few days after transplanting, when plants are established. Repeat applications at 3-4 weeks intervals.

	FRUIT	CROPS (con't)	
CROP/ CULTIVAR	OBJECTIVE/ BENEFIT	RATE/ACRE	APPLICATION TIMING
Banana (con't)	Application by injection into the pseudostem	Apply 5 ml per plant of a 640- 1280 ppm solution.	NOTE: Make sure that the needle tip does not touch the growing tissue at the center of the pseudostem.
	1. To promote plant growth:	Apply 50 – 400 ml per plant of a 250-1000 ppm solution	Apply to plants over 5 feet tall on a monthly basis until flowering occurs. Make one application per generation
	2. To promote healthy root system		
Banana (con't)	To stimulate bunch fruit development, improving fruit size and quality, and overall yield.	Apply a solution of 200 – 500 ppm. Use sufficient water volume to achieve adequate coverage of bunch and fruit.	Make 1-2 applications prior to bunch bagging program or approximately 7-14 days after floral bunch emergence. It is permissible to tank-mix with the standard pesticide treatments
	To improve fruit size.	Apply 125- 250 grams a.i. per application.	Apply after flowering. Make 2 applications at 3-5 weeks intervals. Direct sprays to the fruit. Use sufficient water to achieve adequate coverage.
Pineapple (Not for use in California)	To improve fruit size as a single spray	Apply 400 grams a.i.	Apply 14-18 weeks post- flowering
	To improve uniformity of fruit maturity and enhance harvest efficiency.	Apply 12-24 grams a.i. per application.	Make the first application a few days after planting when plants are established. Repeat applications at 3-4 weeks intervals.

	FRUIT	CROPS (con't)	
CROP/ CULTIVAR	OBJECTIVE/ BENEFIT	RATE/ACRE	APPLICATION TIMING
Blueberry Highbush:	To improve fruit set.	40-80 grams a.i.	Make a single application of 40 to 80 grams a.i./acre in 40 to 100
Coville, Jersey, Stanley, Earliblue, Weymouth, Walcott,		(20-40 oz)	gallons of water per acre. The application should be made at full bloom (when 75% of the flowers are fully open).
Berkeley, Blueray,			OR
Bluecrop, 1316A, Concord, and others (Not for use in California)			Make 2-4 applications of 40 Grams A.I. per acre in 40 to 100 gallons of water. Make the first application at full bloom, and the second application within 10-14 days of the first spray. For Weymouth, application can be delayed up to two weeks after bloom to increase size of "shot" berries
Blueberry: (Not for use in	To improve fruit set.	40-80 grams a.i.	Make a single application of 40 to 80 grams a.i./acre in 40 to 100
California) <u>Rabbiteye:</u> Aliceblue, Beckyblue, Bonita,		(20-40 oz)	gallons of water per acre. The application should be made at full bloom (when 75% of the flowers are fully open). OR
Brightwell, Climax, Delite, Tiftblue, Woodward, and others.			Make 2-4 applications of 40 Grams A.I. per acre in 40 to 100 gallons of water. Make the first application at full bloom, and the second application within 10-14 days of the first spray.

CROP/ CULTIVAR Avocado (Not for use in	OBJECTIVE/ BENEFIT	RATE/ACRE	APPLICATION TIMING
(Not for use in	DCT		
California)	Benefit: To improve fruit set and yield	25 grams a.i. (12.5 oz)	Apply at the cauliflower stage of inflorescence development.
Sweet Cherry	To produce larger, brighter colored, firmer fruit	16-48 grams a.i. (8-24 oz)	Make 1 to 2 applications when fruit is translucent green to straw colored. If making two applications, apply $1/3$ to $\frac{1}{2}$ of the total desired amount when the majority of the fruit is translucent green. Apply the remaining material 3-7 days later, when the majority of the fruit is straw colored.
-	nent and harvest date have occass with heavier crop loads.	asionally been sligh	tly delayed
• Use higher rates Sour Cherry (Not for use in California)	s with heavier crop loads. To maintain and extend high fruiting capacity of sour cherry trees by promoting spur formation and reducing the occurrence of "blind" nodes. Spur formation is apparent the year after application. Therefore, changes in shoot, spur, and flower production will not be evident until two or three years after program initiation. Applications must be applied annually	4-18 grams a.i. (2-9 oz)	Apply one spray 14-to-28 days after bloom. Optimum timing is defined as that stage when 3-to-5 terminal leaves have fully expanded, or, at least 1-to-3 inches of terminal shoot extension has occurred. Use 4 to 18 grams a.i./acre, depending on tree age and vigor (See Table below). Apply as a dilute spray in sufficient water to ensure thorough wetting, or as a concentrate spray ensuring uniform coverage.

NOTE: Rates are based on expected normal tree vigor at various ages. Adjust rate according to tree vigor. If trees are vigorous, use lowest indicated rates. Use lowest rates on trees that have been heavily pruned or hedged. Use higher rates for trees low in vigor and weak in shoot and spur production. Excessive application rates will increase vegetative growth at the expense of fruit production the following year. Applications will not improve growth of trees under stress conditions, such as nutritional, moisture, or pest. Best results will be obtained when combined with good cultural practices.

# APPLICATION RATES (GRAMS A.I./ACRE(or fl.oz.)) FOR TART SOUR CHERRY TREES BY AGE

Tree Age (years)	Rate /acre)
6-10	4-6 grams a.i. (2-4 oz)
11-15	8-10 grams a.i. (4-5 oz)
16-20	10-14 grams a.i. (5-7 oz)
20 + years	14-18 grams a.i. (7-9 oz)

	FRUIT	CROPS (con't)	
CROP/VARIETY	OBJECTIVE/ BENEFIT	RATE/ACRE	APPLICATION TIMING
Stone Fruit Group	To increase fruit firmness and improve fruit quality in the season of application	16-32 grams a.i. (8-16 oz)	Apply as a single spray one to 4 weeks prior to the beginning of the harvest period. Use sufficient water to achieve complete coverage of fruits and foliage.
NOTE:	•	•	-
	has occasionally caused red arly if it is made during the n		
Italian Prune (Not	To reduce internal	16-48	Make a single application
for use in	browning, improve	grams a.i. (8-24	<b>e</b> 11
California)	quality, and increase		expected harvest. Apply
	size.	oz)	in sufficient water volume to ensure thorough wetting.
	nent and harvest have occasio		yed. Observation of
	following season is occasiona	-	
Pecan (Not for use in Arizona, California and New Mexico)	To extend leaf retention and maintain green foliage.	n 10 grams a.i. (5 oz)	Make 1-4 applications of 10 g a.i. beginning in July and continuously through October as needed.
Note:	I		
	ent water to achieve complete to be effective.	e coverage. In most cases	s 100 gallons per acre has
application	te more than one application in July may result in reduced LV PLUS may be tank mixed	l return bloom.	in July. Using more than one le.

CROP/VARIETY	OBJECTIVE/ BENEFIT	RATE/ACRE	APPLICATION TIMING
Non Bearing Stone Fruit (Not for use in California)	To reduce flowering and fruiting in young stone fruit trees in order to minimize the competitive effect of early fruiting on tree development.	20 – 80 grams a.i. (10-40 oz)	Make a single application during the period of flower bud initiation for the following year. Consult with the Valent representative or local horticulturist for timings and rates for specific cultivars in your area. Use sufficient water to achieve good coverage of the canopy.
Non Bearing Blueberry (Not for use in California)	To reduce flowering and fruiting in young blueberry plants in order to minimize the competitive effect of early fruiting on plant development.	20 – 80 grams a.i. (10-40 oz)	Make one to four applications during the period of flower bud initiation for the following year. Use sufficient water to achieve good coverage of the canopy.
season, and again in t	the first year. Treat in the seco he third season if flower reduct re in good physiological condit	ion and fruiting is desir	red in the fourth season.

desired harvest.

	FRUIT CR	OPS (con't)	
<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	RATE /ACRI	E APPLICATION TIMING
Strawberry (Not for use in California)	To increase runner production of mother plants.	15-25 grams a. (7.5-12.5 oz)	<ul> <li>Make a single application to mother plants 10 – 30 days after planting. Efficacy is best when plants have 1-6 leaves at spraying. Apply 100 gallons spray/acre to point of run-off.</li> </ul>
mid-May.	ith cultivar and location. Cor		tive on plantings set out after representative or local
Cranberry (Not for use in California)	To reduce or completely eliminate the crop in the year of application	10-50 grams a.i. (5-10 oz)	Make a single application at early bloom (2-5% scatter bloom). Use sufficient water to ensure thorough coverage.
<ul><li>in increased fruit set (c</li><li>Responses will van</li></ul>		g and location. Co	
Plantain (Not for use in California)	ESTABLISHED PLANTINGS: To stimulate plant growth and to reduce the effects of stresses caused by insect, disease or adverse weather. These applications may help improve fruit size, quality and overall yields.	GROUND FOLIAR SPRA Apply 6 – 20 Grams A.I. per acre per spray.	and pre-bloomed mother plants. Make applications every 1 to 3 weeks throughout the year as needed. Use higher dose rates and shorter spray frequency during periods of intense stress. Use sufficient water volume to achieve adequate canopy coverage Tank mixing with standard pesticides is permissible.
	NEW PLANTINGS: To stimulate early growth in new plantings, increase plant vigor and accelerate development to flowering.	FOLIAR PLAN SPRAYS: Add 1 gram A.I per gallon of water.	the 1 <sup>st</sup> application timing at 3-

VEGETABLE CROPS			
CROP/VARIETY	OBJECTIVE/BENEFIT	RATE /ACRE	APPLICATION TIMING
Artichoke	To accelerate maturity and shift harvest to an earlier date	10 – 20 grams a.i. (5-10 oz)	For perennials: apply one to three applications at bud initiation stage. For annuals: apply one to four applications at 2-week intervals, beginning at the fourth true leaf. Use sufficient water volume to ensure thorough wetting of the entire plant (leaves, stems and buds).
Bell Peppers	To promote plant height and leaf size, thus protecting developing fruit from sunburn	1 – 2 gram a.i. (0.5 – 1.0 oz)	Begin applications after plants have recovered from transplant shock and are actively growing. Apply 1 – 2 applications at 1 to 2 week intervals. Use sufficient water volume to ensure thorough coverage.
Carrots, Fresh and Processing	To delay leaf senescence. Maintaining vigorous foliage has been shown to help reduce the incidence of infection by <i>Alternaria</i> <i>dauci</i> .	1-6 grams a.i. (0.5- 3 oz)	Make the first application 4 – 6 weeks after emergence using commercial ground or aerial equipment with spray concentrations of 20-30 ppm. In severe disease situations or cool weather a second spray 14 days later is sometimes required to achieve the desired amount of foliar recovery. Do not apply more than twice per crop.

	VEGETA	BLE CROPS	
<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	RATE /ACRE	APPLICATION TIMING
Celery	To increase plant height and yield and to overcome stress due to cold weather conditions or saline soils, and obtain earlier maturity.	2.5 – 10 grams a.i. (1.25-5 oz)	Make a single application one to four weeks prior to harvest. Use 25-to-50 gallons of water per acre by ground application or 5-to-10 gallons of water per acre for aerial application (except in California). Use lower concentrations if applying 3-to-4 weeks before harvest and higher concentrations within 1-to-2 weeks before harvest.
NOTE: Do not apply has been known to oc		pply earlier than 4 we	eks before harvest as bolting
Cucumber (Not for use in California)	To stimulate fruit set during periods of cool temperatures.	1-4 grams a.i. (0.5-2 oz)	Make one application prior to bloom followed by two additional applications at intervals of 10-to-14 days. It is acceptable to use up to four applications. Use sufficient water volume for thorough coverage of exposed foliage.
NOTE: For maximum to cool temperatures.	benefits, vines must be in go	ood condition, except	for reduced rate of growth due
Leaf Lettuce	To promote plant height and increase leaf length.	0.5 – 1.0 gram a.i. (0.25-0.5 oz)	Apply a single application between the cotyledon stage and prior to harvest. Use sufficient water volume to ensure thorough coverage.
foliage. Response to	luct may cause a slight and te this product may vary by cult treating unfamiliar cultivars.	ivar. Consult your V	
Lettuce for Seed	To obtain uniform bolting and increase seed production	1-4 grams a.i. (0.5-2 oz)	Apply one to four applications at two-week intervals, beginning at the fourth true leaf. Use sufficient water volume to ensure thorough wetting.

	VEGETAE	BLE CROPS	
CROP/VARIETY	<b>OBJECTIVE/BENEFIT</b>	RATE / ACRE	APPLICATION TIMING
Melon (Not for use in California)	To stimulate fruit set during periods of cool temperatures	1-4 grams a.i. (0.5-2 oz)	Make one application prior to bloom followed by two additional applications at intervals of 10-to-14 days on cantaloupes and watermelons.
NOTE: For maximur to cool temperatures.		od condition, except	for reduced rate of growth due
Pepper	To promote plant	1-3 grams a.i.	Apply one to two sprays in
(Not for use in California)	growth	(0.5-1.5 oz)	25-to-50 gallons of water per acre at two-week intervals.
Camorina)		02)	Begin sprays 2 weeks after transplanting.
NOTE: This use is temperatures slow p	best for areas with short growi blant growth.	ng seasons, or when	the low
Pepper (Not for use in California)	To increase fruit set and promote fruit growth	1-3 grams a.i. (0.5-1.5 oz)	Apply one to two sprays in 25-to-50 gallons of water per acre at weekly intervals during the flowering period.
NOTE: The high rate problems.	e is most efficacious for areas	and/or varieties with	pollination and/or fruit set
Pepper (Not for use in California)	To increase fruit size and yield	1-3 grams a.i. (0.5- 1.5 oz)	Apply in 25-50 gals of water per acre at the beginning of the picking period.
NOTE: The high rate	e is best for plants with heavy	fruit loads	1

<b>CROP/VARIETY</b>	VEGETABLE CROPS (con't)			
CRUF/VARIE I I	<b>OBJECTIVE/BENEFIT</b>	RATE/ACRE	APPLICATION TIMING	
Potato seed	To stimulate uniform sprouting to aid in maximum production, more uniform development, fewer late maturing plants, and to break dormancy of newly harvested potatoes that have not had a full rest period.	0.2- 0.4 grams a.i. (0.1- 0.2oz; 3-6 ml)	Dip whole or cut seed pieces in a solution containing 0.2- to-0.4 grams a.i. in 100 gallons of water prior to planting.	
NOTE: Under high soil temp seed pieces. Rhubarb	To break dormancy on plants receiving insufficient chilling and to increase marketable yield of forced rhubarb	ncentration for dorma 10 – 20 grams a.i. (5-10 oz)	<ul> <li>ant seed. Do not treat rested</li> <li>1) When the rest period is no completely broken, make a single application of 2 fluid ounces (60 ml) of a solution containing 20 grams</li> </ul>	

Keep forcing house temperatures at  $40 - 50^{\circ}$ F for 24 hours after application. If house is warmer than  $50^{\circ}$ F, cover crowns with plastic. Temperatures above  $50^{\circ}$ F lower yields and cause poor stalk color.

	VEGETABL	E CROPS (con't)	
<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	RATE/ACRE	APPLICATION TIMING
Spinach	To promote plant height and increase leaf length.	2.5 – 10.0 grams a.i. (1.25-5.0 oz)	Apply a single application between the 1 <sup>st</sup> true leaf and prior to harvest. Use sufficient water volume to ensure thorough coverage
Note: Use of this pro	oduct may cause a slight and te	emporary reduction in	the coloration of the foliage.
Spinach Mustard greens, Collard greens and Turnip greens. (Not for use in California)	To facilitate harvest, increase yield and improve quality of fall and over-winter crops.	4-10 grams a.i. (2-5 oz)	Apply a single spray 10-to-18 days before each anticipated harvest on fall or over-winter crops, ideally when daytime temperatures are 40° F-to-70° F and during early morning hours when dew is present on crop. Make applications in 10- to-50 gallons of water per acre by ground sprayer or in a minimum of 5-to-10 gallons of water per acre by air. When applied to promote growth of second cutting, wait until some re-growth has started before spraying. Maximum benefit is obtained when below normal temperatures prevail following application and growth would be otherwise slowed in untreated crops.
	of bolting has been known to xpected to exceed 75 <sup>°</sup> F withi		
Watercress	1) To enhance growth in adverse weather conditions; 2) To help plants resume growth after insect and disease attacks; 3) To increase root free stem length during low light/short day conditions.	15-25 grams a.i. (7.5-12.5 oz)	Make one or two applications per acre per crop 3 to 7 days before harvest. Use 50-100 gallons of water per acre.

CROP/VARIETY	OBJECTIVE/BENEFIT	RATE /ACRE	APPLICATION TIMING
Hops: Seeded and seedless Fuggle hops and similar varieties adapted to the Northwestern states.	To increase fruit set and yield.	4 – 6 grams a.i. (2-4 oz)	Make a single application in 100-150 gallons of water per acre when vine growth is 5-8 feet in length.
	o plants that are under drough oid drift or accidental applic		during stem elongation may
Peanuts (Not for Use in California)	To promote plant growth	2.5 – 5.0 grams a.i. (1.25-2.5 oz; )	Make two to four applications on a two week interval. Begin sprays two weeks after emergence.
	To enhance post- emergence grass control	5 – 20 grams a.i. (2.5 – 10 oz)	Apply with SelectMax <sup>®</sup> herbicide for enhanced control of Johnsongrass and volunteer corn in peanuts.

Note: Differences in response by variety may be large. Caution should be used when using on untested varieties. For specific variety information, consult your Valent Representative.

SelectMax<sup>®</sup> registered trademark of Valent U.S.A. LLC

USE	OBJECTIVE/ BENEFIT	RATE/ ACRE	APPLICATION TIMING
SOIL APPLICAT	TION		
(Not for Use in California)	To promote early Palmer amaranth and/or waterhemp seed germination to better synchronize their sensitivity.	5 – 20 grams a.i. (2.5 – 10 oz).	Apply with a pre-emergence herbicide that has activity on Palmer amaranth and/or waterhemp (e.g. Valor <sup>®</sup> , Valor XLT, Gangster <sup>®</sup> , and Fierce <sup>®</sup> )

Valor<sup>®</sup>, Valor<sup>®</sup> XLT, Gangster<sup>®</sup>, and Fierce<sup>®</sup> are registered trademarks of Valent USA LLC..

CROP/VARIETY	OBJECTIVE/ BENEFIT	RATE/ACRE	APPLICATION TIMING
Seedling Application			
Rice with use of a non-ionic surfactant or in tank mix combination with rice herbicides	To promote early season plant vigor and more uniform seedling growth prior to permanent flood establishment. To aid in rice water weevil control use ProGibb® 40% in a tank mixture combination with a neonicotinoid insecticide such as Belay® at recommended label rates	1 – 3 grams a.i. (0.5-1.5 fl oz; 15-45 ml)	Make one to two applications at the 1-2 and/or 4-5 leaf stages of growth.
<ul> <li>rice and is particul</li> <li>Early flooding red permanent flood, n earlier and more u</li> <li>Do not apply prior</li> <li>Timing and dosag herbicides, and prior</li> <li>Do not apply whet</li> </ul>	larly effective on semi-dwarf luces the additional flushing c	varieties. osts associated with a the number of herbicion berellin seed treatmen numental conditions, ta ice in relation to rice l stress conditions.	le applications, and/or promote t is used. nk mix combinations with
	pplications (Late Season)	1 1	
Rice (Not for use in California)	To promote main culm and tiller panicle extension resulting in improved pollination and seed yield.	3 – 8 grams a.i. (1.5-4 oz; 44 to 118 ml)	Make a single application between split-boot and 100% panicle heading. Heading applications to the first crop also has been observed to accelerate re- growth of second crop rice.
Rice (Hybrid Seed Production) (Not for use in California)	To promote main culm and tiller panicle extension resulting in improved pollination and seed yield.	20-100 grams a.i. (10-50 oz)	Make 1-5 applications at regular intervals during the heading period to promote main culm and tiller panicle extension.
herbicides, and prefer is subjected to droug	sage are to be based upon env rred permanent flood practice	in relation to rice leaf ccasionally and tempo	stage. Do not apply when rice prarily appears lighter green in

Panicle Extension Applications (Late Season)			
USE	OBJECTIVE/ BENEFIT	RATE/ ACRE	APPLICATION TIMING
Rice (Not for use in California)	Promote yield enhancement of ratoon crop rice by increasing ratoon tiller growth and aiding ratoon stand establishment	4 – 7 grams a.i. (2-3.5 oz; 59-207 ml)	Apply single application at post flowering through soft dough stage to primary rice crop to initiate enhanced growth of following ratoon crop.

# For Foliar and Hybrid Rice Seed Production: Mixing Instructions

Fill the treatment tank with half of the final tank mix volume. Add the required amount of PROGIBB LV PLUS and mix thoroughly while adding water to the desired final volume. Dispose of any unused spray material at the end of the day.

# **Application Equipment**

Apply PROGIBB LV PLUS by aerial or ground spray equipment. As an aerial spray, use a spray system capable of producing a uniform spray pattern of medium to fine spray droplets at 10 gallon per acre (GPA). Apply no less than 3 GPA of total spray volume. Use low pressure ground sprayers equipped with boom and flat fan nozzles using 10 to 15 GPA spray volume. Compatibility with Other Chemicals: It is permissible to tank-mix PROGIBB LV PLUS with most commonly used rice herbicides and fungicides.

# SEED TREATMENT APPLICATION

PROGIBB LV PLUS stimulates seed germination and promotes faster and more uniform stand establishment.

USE	OBJECTIV E/ BENEFIT	RATE (fl. oz.)	APPLICATION TIMING
Seed treatment for rice (Not for Use in California)	To promote germination and emergence for semi-dwarf and tall varieties. To help increase final stand density and uniformity whenseed are planted deeper to receive adequate moisture.	0.5 to 2 Grams A.I. 0.25 to 1 fl oz product in 8 – 20 fl oz water/100 lbs seed (Equivalent to 7 to 33m in 237 to 591 ml water/45 kg seed)	For use with drill or broadcast seeding systems.

# **Mixing Instructions**

Apply PROGIBB LV PLUS to seed with standard mist treating equipment. For best results, higher treatment volume of 6 to 10 fl oz per 100 pounds of seed (177 to 296 ml/45 kg seed) ensures complete and uniform coverage.

Fill the treatment tank with half of the final tank mix volume. Add the required amount of PROGIBB LV PLUS and mix thoroughly while adding water and other co-applied seed treatment products (see Compatibility with Other Chemicals section) to the desired final volume.

An approved dye must be added to distinguish PROGIBB LV PLUS treated seed and prevent inadvertent use for food, feed, or oil purposes. Treated seed must be labeled in accordance with the requirements of the Federal Seed Act.

#### **Use Restriction**

Do not use treated seed for food, feed or oil purposes.

# COTTON:

**PROGIBB** LV PLUS has been shown to help shorten the vegetative growth "lag" phase. This benefit reduces the time interval needed to develop optimum leaf area and plant height, thus maximizing the potential for earliness and improved yields.

USE	<b>OBJECTIVE/ BENEFIT</b>	RATE /ACRE	APPLICATION TIMING
On young cotton plants	Promote growth and increase seedling vigor	0.5 to 3 fl oz (15 to 89 ml).	In-furrow application to seed, or as a foliar application from the cotyledon leaf stage through the 7 leaf/node stage. Repeat applications as needed to a maximum of 3 applications. Applying more often than necessary to achieve the desired height results in excessive vegetative growth.

#### Notes:

Use higher rates (within the indicated range) when temperatures will likely average 75°F or less during the 14 days following application(s).

Application equipment: As an aerial spray, use a spray system capable of producing a uniform spray pattern of medium to fine spray droplets at 10 gallons per acre (GPA).

Apply no less than 3 GPA of total spray volume. Use low pressure ground sprayers equipped with boom and flat fan nozzles using 10 to 15 GPA spray volume.

Do not apply PROGIBB LV PLUS to cotton plants that are under drought stress. If the cotton plants are under continuous stress, delay the application of PROGIBB LV PLUS until the stress is alleviated and the plants are beginning to recover.

Avoid drift or accidental application to other crops

# **Compatibility with Other Chemicals**

Data regarding the compatibility of PROGIBB LV PLUS with herbicides used in cotton are not available.

CROP/VARIETY	OBJECTIVE/ BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Cotton	Promote early season growth and increase seedling vigor	1 to 6 Grams A.I. 0.5 to 4 Ounces products	Apply 1 – 2 applications as a foliar broadcast spray during the 3 to 7 leaf/node stage. If applying as a banded spray, reduce rates accordingly. Complete coverage of leaf tissue is essential. Use higher rates when temperatures will likely average 75°F or less during the 14 days following application(s).

#### Notes:

- Do not apply PROGIBB<sup>®</sup> LV PLUS to plants that are under drought stress. If the plants are under continuous stress, delay the application of PROGIBB<sup>®</sup> LV PLUS until the stress is alleviated and the plants are beginning to recover.
- Applying more often that necessary to achieve the desired height, results in excessive vegetative growth.

USE	<b>OBJECTIVE/ BENEFIT</b>	RATE /acre	APPLICATION TIMING
Young plants	To improve mechanical harvest efficiency by elongating the first and second internode of young plants	1 – 20 grams a.i. (0.5-10 oz)	V1-V4 Apply 1-2 applications as a foliar broadcast spray during growth stages V1-V4 (1-2 sets of unfolded trifoliolate leaves). If applying as a banded spray, reduce rates accordingly. Complete coverage of leaf tissue is essential. Make applications in 20-40 gal water/A.
Note: Difference untested varietie	es in response by variety may l	be large. Caution sho	uld be used when using on
V2-R5	To enhance post- emergence grass control.	1 – 20 Grams A.I. 0.5 –10 Ounces product.	V2-R5: Apply with SelectMax <sup>®</sup> herbicide for enhanced control of Johnsongrass and volunteer corn in soybeans.
V5-R3	To increase pod set and increase the growth of the plant	2-4 Grams A.I. 1-2 Ounces product	Make a single application at V5-R3 growth stage.
	s in response by variety may be la t your Valent USA Representative	-	used when using on untested

#### SOYBEAN (Not for Use in California)

<b>OBJECTIVE/BENEFIT</b>	<b>USE RATE/ACRE</b>	APPLICATION TIMING
Promotes early season growth, increased seedling vigor, and increased plant height allowing for improved harvesting efficiency.	1 – 6 Grams A.I. 0.5 – 3 Ounces product	Apply 1 – 2 applications as a foliar broadcast spray during the 3 to 7 leaf/node stage. If applying as a banded spray, reduce rates accordingly. Complete coverage of leaf tissue is essential. Use higher rates when temperatures will likely average 75°F or less during the 14 days following application(s).

#### DRY BEAN (Not for Use in California)

NOTE:

- Do not apply plants that are under drought stress. If plants are under continuous stress, delay the application until the stress is alleviated and the plants are beginning to recover.
- Applying more often than necessary to achieve the desired height results in excessive vegetative growth.
- Highly variable responses based on genetic background or variety are known to occur. Caution should be used when applying to varieties where there is no prior knowledge of the response.

#### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Pesticide Storage: Store in a cool, dry place. Keep containers tightly closed when not in use. Keep away from heat and open flame.

Pesticide Disposal: To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

Container Disposal: Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

#### **NOTICE TO USER:**

To the extent permitted by applicable law, seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with accompanying directions.

ProGibb<sup>®</sup> 40% Plant Growth Regulator is a registered trademark of Valent BioSciences LLC. SelectMax<sup>®</sup> registered trademark of Valent USA LLC. Valor<sup>®</sup>, Valor<sup>®</sup> XLT, Gangster<sup>®</sup>, and Fierce<sup>®</sup> are registered trademarks of Valent USA LLC Products That Work, From People Who Care is a trademark of Valent U.S.A. LLC.

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# **SUB LABEL II**

# **PROGIBB LV PLUS Plant Growth Regulator Solution**

[Alternate Brand Name: PROGIBB LV PLUS T&O Plant Growth Regulator Solution]

For use on Turf and Ornamental Plants.

#### PROGIBB LV PLUS Plant Growth Regulator Solution

#### [Alternate Brand Name: PROGIBB LV PLUS T&O Plant Growth Regulator Solution]

#### For use on turf and ornamental crops

For Organic Production

	e
Active Ingredient:	
Gibberellic Acid	5.7 % w/w
Other Ingredients	94.3 % w/w
Total	

PROGIBB LV PLUS liquid contains approximately 2.0 grams active ingredient per fluid ounce of formulated product.

#### KEEP OUT OF REACH OF CHILDREN CAUTION -PRECAUCIÓN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail).

For MEDICAL and TRANSPORT Emergencies ONLY Call 24 Hours A Day 1-800-892-0099. For All Other Information Call 1-800-6-VALENT

EPA Registration No. 73049-498 EPA Establishment No.

Valent BioSciences LLC 870 Technology Way Libertyville, IL 60048

Net Contents: \_\_\_\_\_ This container will treat acres at the maximum use rate, as indicated for use on\_\_\_.

FIRST AID			
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
If swallowed	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>		
If inhaled	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice</li> </ul>		
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
HOT LINE NUMBER			
for treatment. You may	iner or label with you when calling a poison control center or doctor, or going y also call toll-free 1-800-892-0099 (24 hours) for emergency medical ort emergency information. For all other information, call 1-800-6-Valent.		

#### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if absorbed through the skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before reuse.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category C on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

- Long sleeved shirt
- Long pants
- Chemical resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, and viton
- Shoes plus socks
- Protective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- User should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

• Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS**

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, and viton
- Shoes plus socks
- Protective eyewear

#### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Do not enter without appropriate protective clothing until sprays have dried.

#### DIRECTIONS FOR USE ON ORNAMENTAL CROPS, CUT FLOWERS AND TURFGRASS

#### **PRODUCT INFORMATION**

PROGIBB LV PLUS Plant Growth Regulator Solution (hereafter referred to as PROGIBB LV PLUS) is an extremely active plant growth regulator. Care must be used in measuring, diluting, and applying PROGIBB LV PLUS.

A foliar application of PROGIBB LV PLUS supplies plants with an additional source of the naturally occurring plant growth regulator gibberellin. Gibberellins are involved in numerous plant development processes. Adding gibberellic acid (GA3) promotes a number of desirable effects in floriculture crops including increased flower size, increased flower number, uniform flowering, increased stem elongation, and a decrease in time to flower. Additionally, gibberellin applications have been shown to reduce the minimum temperature required to initiate plant growth and will overcome bud and seed dormancy. In Bermuda grass turf, adding PROGIBB LV PLUS will initiate and/or maintain growth and prevent color change during periods of cold stress and will maintain and/or enhance re-growth during summer months.

#### **GENERAL INSTRUCTIONS**

When applying plant growth regulators, deviations from the label directions, in rates, timings, or water volumes has been known to result in undesirable effects.

For optimum effectiveness, thorough spray coverage must be achieved; only plant parts covered with spray solution will be affected. Plant parts not directly covered with PROGIBB LV PLUS will not respond to the application.

An effective dose of PROGIBB LV PLUS is strongly dependent on application volume. Variation in plant response is possible if a given rate is applied at different spray volumes. Uniformity of spray solution is equally important.

When applying foliar applications of PROGIBB LV PLUS; spray plants to run-off. The actual spray application rate will vary depending on plant size and spacing density. A spray application rate which is effective for 6-inch potted plants spaced at a density of 1 pot per square foot is 2 quarts of finished spray solution per 100 square feet of bench area.

Differences in plant response to PROGIBB LV PLUS due to differences in plant surfaces, leaf orientation, and plant structure are possible. PROGIBB LV PLUS is most efficacious when applied during morning or late afternoon hours or when plants are not under environmental stress as extreme temperatures can influence plant response to PROGIBB LV PLUS.

#### DETERMINING OPTIMAL APPLICATION RATES

The rates on this label are ranges and an optimum PROGIBB LV PLUS rate will depend on desired expectations as well as physical and environmental factors. Specific growing practices such as watering, potting media, fertilization, temperature, and light conditions will affect plant responses to a given PROGIBB LV PLUS rate.

Results from PROGIBB LV PLUS applications are dependent upon timing, rate, frequency of application, and plant vigor at application. PROGIBB LV PLUS applications made under slow drying conditions (cool temperatures, low air movement and medium to high relative humidity) will increase absorption by the plant, thus optimizing effectiveness.

To determine optimum use rates, conduct trials on a small number of plants under actual use conditions using the lowest indicated rate. When a range of rates is indicated, use the lowest concentration directed until familiarity is gained.

#### LIMITATIONS

- For optimum effectiveness, thorough spray coverage must be achieved; all parts of the plant or crop must receive the spray or desired results will not occur.
- Do not apply to plants under pest, nutritional, or water stress. PROGIBB LV PLUS will not correct or substitute for treatment of pest, nutrient, or water stresses.
- Do not apply after flower buds show color.
- Do not apply through any type of irrigation system.
- Avoid drift onto non-target species.

• Do not mix PROGIBB LV PLUS with pesticides, fertilizers, wetting agents, spreader stickers or other adjuvants.

- Over-application has the potential to result in accelerated plant growth/development.
- Do not apply PROGIBB LV PLUS to any food crop.
- Do not reuse soil from plants treated with PROGIBB LV PLUS.

#### MIXING INSTRUCTIONS AND RATE CONVERSION TABLE

Apply with standard spray equipment set according to manufacturer's indications.

PROGIBB LV PLUS mixes readily with water. For best results, have the water pH at 7.0 and always below 8.5.

**Foliar Applications:** Always make sure application equipment is thoroughly clean before mixing. When preparing PROGIBB LV PLUS for use as a foliar spray, fill tank to one half full; add the amount of PROGIBB LV PLUS according to the rate conversion table below. Complete filling the tank. Dispose of any unused spray material at the end of each application following local, state or federal law.

<b>Rate Conversion Table*</b>					
ppm (parts per million,	Milliliters (ml) of	Milliliters (ml) of	Fl. oz. of PROGIBB		
GA3)	PROGIBB LV	PROGIBB LV	LV PLUS per		
	PLUS per liter	PLUS per	gallon of spray		
	of spray	gallon of spray	solution		
	solution	solution			
1	0.016	0.06	0.002		
5	0.08	0.30	0.01		
10	0.16	0.59	0.02		
25	0.39	1.48	0.05		
50	0.78	2.96	0.10		
100	1.56	5.91	0.20		
250	3.91	14.79	0.50		
500	7.81	29.57	1.00		
750	11.72	44.36	1.50		
1,000	15.63	59.15	2.00		

\*PROGIBB LV PLUS is a liquid. Each fluid ounce contains approximately 2.0 grams of active ingredient.

#### **ORNAMENTAL CROPS, CUT FLOWERS AND TURFGRASS**

• The following use rates are based on results with common cultivars. Differences in responsiveness vary between cultivars, growing conditions, and cultural management systems. Therefore, prior to widespread usage, test a small number of plants from each cultivar under a specific set of growing and cultural management conditions to verify desired efficacy.

• PROGIBB LV PLUS is an extremely potent plant growth regulator. The general effects on floriculture crops are to increase plant size through increased stem elongation and leaf and petal expansion. If applied at an improper time, at excessive rates, or too frequently, plants have the potential to become long and spindly with weak stems.

#### SPRAY INSTRUCTIONS FOR ORNAMENTALS

	AZALEA			
CROP/VARIETY	OBJECTIVE/BENEFIT	RATE	APPLICATION TIMING	
		(ppm a.i.)		
Azalea	As a Partial	250-500	For three consecutive weeks	
	Replacement of Cold		apply a single foliar	
	Treatment to Break		application. Begin	
	Flower Dormancy		applications only after plants	
	Applications of		have received 3 to 4 weeks of	
	PROGIBB LV PLUS		chilling. Have plants at Stage	
	have been shown to		5 of floral development (i.e.,	
	partially replace a cold		style elongated and open)	
	treatment needed to		when treatment is initiated.	
	break flower dormancy		A representative spray	
	of azalea.		schedule consists of	
			applications made at 3, 10,	
			and 17 days after four weeks	
			of chilling. Flowers will not	
			develop properly if applied	
Note:			prior to Stage 5.	
	as proven effective in breal		le spray of 1,000 ppm after 4 cy	
Azalea	As a Complete	1,000	For four to six consecutive	
	Substitution of Cold		weeks apply a single foliar	
	Treatment to Break		application of 1,000 ppm.	
	<b>Flower Dormancy</b>		Plants must be at Stage 5 of	
	Applications of		floral development (i.e., style	
	PROGIBB LV PLUS		elongated and open) before	
	have been shown to		first spray is applied.	
	completely substitute		Flowers will not develop	
	for a cold treatment that		properly if applied prior to	
	is needed to break		Stage 5 of floral	
	flower dormancy of		development.	
	azalea.			
Note:	•		•	
• Thorough spra	iy coverage is essential for u	uniform flow	vering.	
	y coverage is essential for u fter flower buds show color		vering.	

	AZALEA (con't)				
CROP/VARIETY	OBJECTIVE/BENEFIT	RATE (ppm a.i.)	APPLICATION TIMING		
Azalea	To Inhibit Flower Bud Initiation During Vegetative Growth Applications of PROGIBB LV PLUS have been shown to inhibit flower bud initiation during vegetative growth of azalea.	100-750	Apply a single foliar application of PROGIBB LV PLUS at 100 to 750 ppm beginning 2 to 3 weeks after each pinch. Continue applications on a weekly basis for 1 to 2 weeks after the first application.		
Note: • Apply a maxim	num of three applications				
	CALLA	LILY			
	this is noted. Changing so		Soak rhizome or tuber in PROGIBB LV PLUS at 500 ppm for 10 minutes prior to planting.		
1	CAME	LLIA			
Camellia	For Substitution of Chilling Requirements and to Increase Bloom Size Applications of PROGIBB LV PLUS have been shown to substitute for the chilling requirements and increase bloom size of camellia.	2.0% solution	Dilute PROGIBB LV PLUS by mixing 1 part product and 3 parts water. Remove the vegetative bud immediately adjacent to or below the floral bud. Place a single drop of the prepared solution to the vegetative bud scar.		
<ul><li>Note:</li><li>The addition of solution will decrease</li></ul>	f a deposition aid (such as c ase run-off.	arboxymeth	ylcellulose) to thicken the		

CROP/VARIET	Y OBJECTIVE/BENEFIT	RATE	APPLICATION TIMING
Cyclamen	For Uniform Flowering Both bud and foliar applications of PROGIBB LV PLUS have been shown to promote uniform flowering of cyclamen.	(ppm a.i.) 10 to 15	<b>Bud Application:</b> With a dropper apply 8 ml (0.25 fl. oz.) of a 10 to 15 ppm solution directly to the crown when buds are pinhead size in the leaf axils (generally when there are 10 to 12 unfolded leaves). Earlier applications are sometimes ineffective in promoting uniform flowering
		25	Foliar Application: Apply a single foliar application of 25 ppm directly toward the crown and adjacent leaves when buds are pinhead size in the leaf axils (generally when there are 10 to 12 unfolded leaves). Thoroughly wet the crown.
11 1	plied too late or at excessive r formed flowers. FUCH		es result in weakened floral
Fuchsia	For Tree Forms: The following directions are for the production of the tree forms of common fuchsia cultivars by stem elongation.	250	For four consecutive weeks apply a single foliar application of 250 ppm. Begin applications after the plant has reached desired size. Spray the entire plant to the point of run-off.

stretched and spindly, with weakened stems.

(ppm a.i.)CUTTINGSGeraniumFor increase in flower number and flower size. Applications of PROGIBB LV PLUS have been shown to increase flower number and flower size of geranium cuttings.1-5Apply a single foliar application of 1 to 5 ppm when inflorescence first begins to show color. Direct spray at the developing inflorescence.Note: Treatments prior to inflorescence showing color or concentrations higher than 5 ppm have occasionally caused peducel stretching.5-15Apply a single foliar application of 5 to 15 ppm when first flower bud set is noted. Spray the entire plant to the point of run-off.GeraniumFor flowering advance flowering 10 to 21 days depending upon variety of geranium.5-15Apply a single foliar application of 5 to 15 ppm when first flower bud set is noted. Spray the entire plant to the point of run-off.Note: • Incorrect timing or concentrations above 15 ppm have caused plant stretching.For four consecutive weeks apply a single foliar application of 250 ppm. Spray the entire plant to the point of run-off.Reference forms of common geranium cultivars by stem elongation.250For four consecutive weeks apply a single foliar application of 250 ppm. Spray the entire plant to the point of run-off.		GERANIUM				
CUTTINGS         Geranium       For increase in flower number and flower size.       1-5       Apply a single foliar application of 1 to 5 ppm when inflorescence first begins to show color. Direct spray at the developing inflorescence.         Note:       Treatments prior to inflorescence showing color or concentrations higher than 5 ppm have occasionally caused peduncle stretching.         SEEDLINGS       For flowering advancement Application of 5 to 15 ppm when first flower bud set is noted. Spray the entire plant to the point of run-off.         Note:       For flowering advance flowering 10 to 21 days depending upon variety of geranium.       5-15       Apply a single foliar application of 5 to 15 ppm when first flower bud set is noted. Spray the entire plant to the point of run-off.         Note:       •       Incorrect timing or concentrations above 15 ppm have caused plant stretching.         TREE FORMS       250       For four consecutive weeks apply a single foliar application of 250 ppm. Spray the entire plant to the point of run-off.         Stem clongation.       Stem clongation.       Spray the entire plant to the point of run-off.	<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	RATE	APPLICATION TIMING		
Geranium       For increase in flower number and flower size.       1-5       Apply a single foliar application of 1 to 5 ppm when inflorescence first begins to show color. Direct spray at the developing inflorescence.         Note:       Treatments prior to inflorescence showing color or concentrations higher than 5 ppm have occasionally caused peduncle stretching.         SEEDLINGS       For flowering advancement Applications of PROGIBB LV PLUS have been shown to advance flowering 10 to 21 days depending upon variety of geranium.       5-15       Apply a single foliar application of 5 to 15 ppm when first flower bud set is noted. Spray the entire plant to the point of run-off.         Note:       •       Incorrect timing or concentrations above 15 ppm have caused plant stretching.         TREE FORMS       Geranium       For Tree Forms: The following directions are for the production of the tree forms of common geranium cultivars by stem elongation.       250       For four consecutive weeks apply a single foliar application of 250 ppm. Spray the entire plant to the point of run-off.			(ppm a.i.)			
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Geranium       For flowering advancement       5-15       Apply a single foliar application of 5 to 15 ppm when first flower bud set is noted. Spray the entire plant to the point of run-off.         Note:       •       Incorrect timing or concentrations above 15 ppm have caused plant stretching. <b>TREE FORMS</b> 250       For four consecutive weeks apply a single foliar         Geranium       For Tree Forms: The following directions are for the production of the tree forms of common geranium cultivars by stem elongation.       250       For four consecutive weeks apply a single foliar application of 250 ppm. Spray the entire plant to the point of run-off.         Note:       •       Spray the entire plant to the point of run-off.	Note: Treatments prior to inflorescence showing color or concentrations higher than 5 ppm have occasionally caused peduncle stretching. SEEDLINGS					
Note:       Incorrect timing or concentrations above 15 ppm have caused plant stretching.         TREE FORMS       For Tree Forms:       250         Geranium       For Tree Forms:       250         The following directions are for the production of the tree forms of common geranium cultivars by stem elongation.       Spray the entire plant to the point of run-off.         Note:       Note:	Geranium	advancement Applications of PROGIBB LV PLUS have been shown to advance flowering 10 to 21 days depending upon variety of	5-15	application of 5 to 15 ppm when first flower bud set is noted. Spray the entire plant		
TREE FORMSGeraniumFor Tree Forms: The following directions are for the production of the tree forms of common geranium cultivars by stem elongation.250For four consecutive weeks apply a single foliar application of 250 ppm. Spray the entire plant to the point of run-off.Note:Note:250For four consecutive weeks apply a single foliar application of 250 ppm. Spray the entire plant to the point of run-off.	Note:		•	•		
TREE FORMSGeraniumFor Tree Forms: The following directions are for the production of the tree forms of common geranium cultivars by stem elongation.250For four consecutive weeks apply a single foliar application of 250 ppm. Spray the entire plant to the point of run-off.Note:Note:250For four consecutive weeks apply a single foliar application of 250 ppm. Spray the entire plant to the point of run-off.	• Incorrect timir	g or concentrations above	15 ppm have	caused plant stretching.		
GeraniumFor Tree Forms: The following directions are for the production of the tree forms of common geranium cultivars by stem elongation.250For four consecutive weeks apply a single foliar application of 250 ppm. Spray the entire plant to the point of run-off.Note:Note:250For four consecutive weeks apply a single foliar application of 250 ppm. Spray the entire plant to the point of run-off.		0	11	1 0		
Note:	Geranium	The following directions are for the production of the tree forms of common geranium cultivars by	250	apply a single foliar application of 250 ppm. Spray the entire plant to the		
• Treated plants occasionally require staking after application.	Note:		·			
		occasionally require staking	g after applic	ation.		

HYDRANGEA			
CROP/VARIETY	<b>OBJECTIVE/BENEFIT</b>	RATE	APPLICATION TIMING
		(ppm a.i.)	
Hydrangea	For chilling substitution to break flower bud dormancy Applications of PROGIBB LV PLUS have been shown to substitute for chilling requirements to break flower bud dormancy of hydrangea.	2-5	For one to four consecutive weeks apply a single foliar application of 2 to 5 ppm. Begin applications at the start of forcing. For best results, thoroughly cover all growing points containing flower buds.
		her than 5 pp	om have resulted in stretched,
spindly, and weake	POMPOM CHRYS	SANTHEM	UM
Pompom	For Elongated	25-60	Apply a single foliar
Chrysanthemum	Peduncles Applications of PROGIBB LV PLUS have been shown to elongate peduncles of Pompom chrysanthemum		application of 25 to 60 ppm 4 to 5 weeks after initiation of short days. Apply directing the spray solution towards the flower buds.
Note:	omysunnennum		
Over-application of			, spindly, and weakened stems.
Characathaman	CHRYSANTHEMUN	1-150	
Chrysanthemum Stock Plants	To elongate the cuttings prior to harvest	1-130	Use 125 – 150 gallons of water per acre. Repeat at 3-7 day intervals as needed.
	SPATHIPHYLLUM AN	D OTHER A	ARACEAE
Spathiphyllum	To accelerate bloom and increase the number of flowers per plant Applications of PROGIBB LV PLUS have been shown to increase flowering of <u>Spathiphyllum</u> .	150-250	Apply a single foliar application of 150 to 250 ppm approximately 9 to 12 weeks prior to expected date of sale. Spray to the point of run-off and thoroughly wet all growing points.
'Starlight', '' cultivars, firs	distortion or leaf stretching h Tasson', and 'Mauna Loa'. R st evaluate PROGIBB LV PLU of the product on a commercia	educe rates w US on a small	

AGLAONEMA ANTHURIUMTo accelerate bloom and increase the number of flowers per plant. Applications of PROGIBB LV PLUS have been shown to increase flowering of Araceae250-500For one to four consecutive weeks apply a single foliar application of 250 to 500 ppm. Begin applications at the start of forcing. For best results, thoroughly cover all growing points containing flower buds.	CROP/VARIETY	<b>OBJECTIVE/BENEFIT</b>	RATE (ppm a.i.)	<b>APPLICATION TIMING</b>
ANTHURIUMand increase the number of flowers per plant. Applications of PROGIBB LV PLUS 	AGLAONEMA	To accelerate bloom		For one to four consecutive
ANTHURIUM DIFFENBACHIA (Dumb Cane)number of flowers per plant. Applications of PROGIBB LV PLUS have been shown to increase flowering of Araceae250-500application of 250 to 500 ppm. Begin applications at the start of forcing. For best results, thoroughly cover all growing points containing flower buds.SYNGONIUMTo accelerate bloom and increase the number of flowers per plant. Applications of PROGIBB LV PLUS have been shown to increase flowering of500-2,000For one to four consecutive weeks apply a single foliar application of 500 to 2,000 ppm. Begin applications at the start of forcing. For best results, thoroughly cover all growing points containing application of 500 to 2,000 ppm. Begin applications at the start of forcing. For best results, thoroughly cover all growing points containing				weeks apply a single foliar
DIFFENBACHIA (Dumb Cane)PROGIBB LV PLUS have been shown to increase flowering of Araceae250-500the start of forcing. For best results, thoroughly cover all growing points containing flower buds.SYNGONIUMTo accelerate bloom and increase the number of flowers per plant. Applications of PROGIBB LV PLUS have been shown to increase flowering of500-2,000For one to four consecutive weeks apply a single foliar application of 500 to 2,000 ppm. Begin applications at the start of forcing. For best growing points containing	ANTHURIUM	number of flowers per	250-500	
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Araceaeflower buds.SYNGONIUMTo accelerate bloom and increase the number of flowers per plant. Applications of PROGIBB LV PLUS have been shown to increase flowering of500-2,000For one to four consecutive weeks apply a single foliar application of 500 to 2,000 ppm. Begin applications at the start of forcing. For best results, thoroughly cover all growing points containing	(Dumb Cane)	have been shown	230-300	results, thoroughly cover all
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and increase the number of flowers per plant. Applications of PROGIBB LV PLUS have been shown to increase flowering ofweeks apply a single foliar application of 500 to 2,000 ppm. Begin applications at the start of forcing. For best results, thoroughly cover all growing points containing		Araceae		flower buds.
number of flowers per plant. Applications of PROGIBB LV PLUS have been shown to increase flowering ofapplication of 500 to 2,000 ppm. Begin applications at the start of forcing. For best results, thoroughly cover all growing points containing	SYNGONIUM	To accelerate bloom	500-2,000	For one to four consecutive
plant. Applications of PROGIBB LV PLUS have been shown to increase flowering ofppm. Begin applications at the start of forcing. For best results, thoroughly cover all growing points containing		and increase the		weeks apply a single foliar
PROGIBB LV PLUSthe start of forcing. For besthave been shownresults, thoroughly cover allto increase flowering ofgrowing points containing	<b>number of flowers per</b> application of 500 to 2,000			
have been shown to increase flowering ofresults, thoroughly cover all growing points containing				
to increase flowering of growing points containing				e
Araceae flower buds.		<u> </u>		
		Araceae		flower buds.

applications during the vegetative phase of plant development to induce bloor On other cultivars, first evaluate PROGIBB LV PLUS on a small number of plants **prior to** application of the product on a commercial basis.

#### **APPLICATIONS TO CUT FLOWERS**

Apply PROGIBB LV PLUS to ornamental plants grown for cut flowers to promote stem elongation and flowering. Applying PROGIBB LV PLUS has the potential to dramatically promote flowering in many dicot and some monocot plants.

**NOTE:** PROGIBB LV PLUS is very active and application at an excessive rate results in undesirable effects. First evaluate PROGIBB LV PLUS on a small number of plants **prior to** application of the product on a widespread basis.

	ASTER				
CROP/VARIETY	<b>OBJECTIVE/BENEFIT</b>	RATE	APPLICATION TIMING		
		(ppm a.i.)			
Aster:	To promote stem	50-100	Make 1-3 applications of 50-		
Callistephus	elongation, and break		100 ppm during the early		
chinensis	dormancy.		vegetative period. Apply		
Monte Carlo-type	Applications of		when plants are 2"- 6" in		
Novi-type	PROGIBB LV PLUS		height. Keep applications 2-3		
Belgi-type	have been shown to		weeks apart.		
	increase stem		1		
	elongation and reduce				
	time to flowering.				
	BABY'S BREAT	H (Gynsonh	ila)		
Gypsophila	To accelerate plant	150-500	Apply 3-4 applications of		
Gypsopiina	growth, increase	150 500	150-500 ppm at 4 weeks of		
	number of flowering		growth (after pinching). Keep		
	stems, increase flower		applications 2 weeks apart.		
	number and increase		applications 2 weeks apart.		
	uniformity.				
	Applications of				
	PROGIBB LV PLUS				
	have been shown to				
	promote uniform and				
	increased flowering of				
	Gypsophila.				
	BELLS OF IRELA	· · · · · · · · · · · · · · · · · · ·			
Moluccella	To accelerate plant	50-100	Apply when plants are 4"- 8"		
	growth and stem		in height. Keep applications		
	elongation		2-3 weeks apart.		
	Applications of				
	PROGIBB LV PLUS				
	have been shown to				
	promote plant growth				
	and stem elongation of				
	Bells of Ireland.				

#### **CUT FLOWERS**

	BUPLU	REUM	
CROP/VARIETY	OBJECTIVE/BENEFIT	RATE (ppm)	APPLICATION TIMING
Buplureum	To promote plant growth and stem elongation Applications of PROGIBB LV PLUS have been shown to promote plant growth and stem elongation of <i>Buplureum sp.</i>	50-100	Apply as a foliar spray when plants are 4"- 8" in height. Keep applications 2-3 weeks apart.
	CAMPA	NULA	
Campanula medium	<b>To promote plant</b> <b>growth and stem</b> <b>elongation.</b> Applications of PROGIBB LV PLUS have been shown to promote plant growth and stem elongation of Campanula	50-100	Apply as a foliar spray when plants are 4"- 8" in height. Keep applications 2-3 weeks apart.
	CANDY TU	FT (Iberis)	
Iberis oderata	To promote plant growth and stem elongation.Applications of PROGIBB LV PLUS have been shown to promote plant growth and stem elongation of Candy Tuft.	50-100	Apply as a foliar spray when plants are 4"- 8" in height. Keep applications 2-3 weeks apart.

COLUMN STOCK (Matthiola)			
CROP/VARIETY	OBJECTIVE/BENEFIT	RATE (ppm a.i.)	APPLICATION TIMING
Stock	To promote plant growth and stem elongation. Applications of PROGIBB LV PLUS have been shown to promote plant growth and stem elongation of <i>Matthiola incana</i>	50-100	Apply as a foliar spray when plants are 4"- 8" in height. Keep applications 2-3 weeks apart.
	DELPHI	NIUM	
Delphinium species: including D. elatum, D. grandiflorum, D. belladonna, D. bellamosum, D. cardinale, D. nudicale, and Delphinium hybrids.	<b>To promote plant</b> <b>growth and stem</b> <b>elongation.</b> Applications of PROGIBB LV PLUS have been shown to promote plant growth and stem elongation of Delphinium	50-100	Apply as a foliar spray when plants are 4"- 8" in height. Keep applications 2-3 weeks apart.
	DIDISCUS (	Trachyme)	
Trachyme	<b>To promote plant</b> <b>growth and stem</b> <b>elongation.</b> Applications of PROGIBB LV PLUS have been shown to promote plant growth and stem elongation of Didiscus	50-100	Apply as a foliar spray when plants are 4"- 8" in height. Keep applications 2-3 weeks apart.

	HYDRANGEA				
CROP/VARIETY	OBJECTIVE/BENEFIT	RATE (ppm a.i.)	APPLICATION TIMING		
Hydrangea	<b>To promote plant</b> <b>growth and stem</b> <b>elongation.</b> Applications of PROGIBB LV PLUS have been shown to promote plant growth and stem elongation of Hydrangea	50-100	Apply as a foliar spray when plants are 4"- 8" in height. Keep applications 2-3 weeks apart.		
	LARKS	SPUR			
Larkspur Consolida ambigua, C. orientalis, Delphinium ajacis	<b>To promote plant</b> <b>growth and stem</b> <b>elongation.</b> Applications of PROGIBB LV PLUS have been shown to promote plant growth and stem elongation of Larkspur	50-100	Apply as a foliar spray when plants are 4"- 8" in height. Keep applications 2-3 weeks apart.		
	LISIANTHU	S (Eustoma)			
Lisianthus	<b>To promote plant</b> <b>growth and stem</b> <b>elongation.</b> Applications of PROGIBB LV PLUS have been shown to promote plant growth and stem elongation of <i>Eustoma grandiflora.</i>	50-100	Apply as a foliar spray when plants are 4"- 8" in height. Keep applications 2-3 weeks apart.		

	PHLOX				
CROP/VARIETY	OBJECTIVE/BENEFIT	RATE (ppm a.i.)	APPLICATION TIMING		
Phlox Phlox paniculata and Drummondi hybrida	To promote plant growth and stem elongation. Applications of PROGIBB LV PLUS have been shown to promote plant growth and stem elongation of Phlox	50-100	Apply as a foliar spray when plants are 4"- 8" in height. Keep applications 2-3 weeks apart.		
	QUEEN ANNE'S	LACE (Am	imi)		
Queen Anne's Lace	To promote plant growth and stem elongation. Applications of PROGIBB LV PLUS have been shown to promote plant growth and stem elongation of Queen Anne's Lace	50-100	Apply as a foliar spray when plants are 4"- 8" in height. Keep applications 2-3 weeks apart.		
	SAFFLOWER	(Carthamus	s)		
Safflower	To promote plant growth and stem elongation. Applications of PROGIBB LV PLUS have been shown to promote plant growth and stem elongation of <i>Safflower</i>	50-100	Apply as a foliar spray when plants are 4"- 8" in height. Keep applications 2-3 weeks apart.		

	SOLIDASTER (Solidago)				
CROP/VARIETY	OBJECTIVE/BENEFIT	RATE (ppm)	APPLICATION TIMING		
Solidaster	<b>To promote plant</b> <b>growth and stem</b> <b>elongation.</b> Applications of PROGIBB LV PLUS have been shown to promote plant growth and stem elongation of Solidago.	50-100	Apply as a foliar spray when plants are 4"- 8" in height. Keep applications 2-3 weeks apart.		
	STATICE (Limonium)				
Statice	For earlier flowering and increased flower yield. Applications of PROGIBB LV PLUS have been shown to decrease the time to flower, increase stem elongation, and increase flower yield of Statice.	400-500	Apply as a foliar spray 10 ml (0.33 fl. oz.) of a 400 to 500 ppm solution to each plant when plants are 10 inches or more in diameter (approximately 90 to 110 days after sowing).		
• Do not mak	eed specified rates. te more than one application flowering is also influence <b>To promote plant</b> growth and stem elongation. Applications of PROGIBB LV PLUS have been shown to promote plant growth		Apply as a foliar spray when plants are 4"- 8" in height. Keep applications 2-3 weeks apart.		
	and stem elongation of Statice				

SUNFLOWER (Helianthus)			
CROP/VARIETY	OBJECTIVE/BENEFIT	RATE (ppm)	APPLICATION TIMING
Sunflower	<b>To promote plant</b> <b>growth and stem</b> <b>elongation.</b> Applications of PROGIBB LV PLUS have been shown to promote plant growth and stem elongation of Sunflower	50-100	Apply as a foliar spray when plants are 4"- 8" in height. Keep applications 2-3 weeks apart.
	SWEET WILLIA	AM (Dianth	us)
Sweet William	To promote plant growth and stem elongation. Applications of PROGIBB LV PLUS have been shown to promote plant growth and stem elongation of Sweet William	50-100	Apply as a foliar spray when plants are 4"- 8" in height. Keep applications 2-3 weeks apart.

#### APPLICATIONS TO TURFGRASS

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Foliar applications of PROGIBB LV PLUS have been shown to initiate or maintain growth and/or prevent color change during periods of cold stress on Bermudagrass grown in golf courses, parks and turf farms.

Cool Weather Application				
<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	RATE	APPLICATION TIMING	
		./acre		
Bermudagrass	To initiate or maintain	10-25	Apply 10 grams a.i./acre	
(Tifdwarf,	growth and prevent	grams a.i.	weekly or 25 grams a.i./acre	
Tifgreen, and	color change during	(5-12.5	biweekly in 25-to-100 gallons	
other cultivars)	periods of cold stress	oz)	of water/acre.	
	and light frosts.			
NOTE:				
• Maintain adeq	uate moisture and proper fer	tilization pro	ograms as required for the local	
area.				
• Keep applications of the high rate at least two weeks apart.				
• Do not use on dormant turf				
	-		purt.	
• Do not use on	dormant turf		-	
<ul><li>Do not use on</li><li>Discontinue tra</li></ul>	dormant turf eatments if thinning is obser		-	
• Do not use on	dormant turf eatments if thinning is obser ssary.		-	
<ul> <li>Do not use on</li> <li>Discontinue tre occasionally necessionally</li> </ul>	dormant turf eatments if thinning is obser ssary.		-	
<ul> <li>Do not use on</li> <li>Discontinue tra occasionally necess</li> <li>Warm Weather App</li> </ul>	dormant turf eatments if thinning is obser sary. pplication	wed. More	frequent mowing is	
<ul> <li>Do not use on</li> <li>Discontinue tra occasionally necess</li> <li>Warm Weather App</li> </ul>	dormant turf eatments if thinning is obser sary. pplication <b>To maintain or</b>	ved. More	frequent mowing is Apply 1-to-3 grams a.i./acre	
<ul> <li>Do not use on</li> <li>Discontinue tra occasionally necess</li> <li>Warm Weather App</li> <li>Bermudagrass</li> </ul>	dormant turf eatments if thinning is obser sary. pplication <b>To maintain or</b> enhance re-growth of	ved. More 1-3 grams a.i.	frequent mowing is Apply 1-to-3 grams a.i./acre weekly in 25-to-100 gallons	
<ul> <li>Do not use on</li> <li>Discontinue tra occasionally necess</li> <li>Warm Weather App</li> <li>Bermudagrass</li> <li>Tifdwarf,</li> </ul>	dormant turf eatments if thinning is obser sary. pplication <b>To maintain or</b> enhance re-growth of golf course	1-3 grams a.i. (0.5-1.5	frequent mowing is Apply 1-to-3 grams a.i./acre weekly in 25-to-100 gallons	

• Maintain adequate moisture and proper fertilization programs as instructed for your local area.

- Keep applications of the high rate at least two weeks apart.
- Do not use on dormant turf
- Discontinue treatments if thinning is observed. More frequent mowing is occasionally necessary.

BEDDING PLANTS, ANNUAL AND PERENNIAL POTTED CROPS (for example: Tree Form Azalea, Flowering Chrysanthemum, Poinsettia) FIELD-GROWN ORNAMENTALS AND BULB CROPS

#### **Application Instructions for Promotion of Plant Growth**

Apply PROGIBB LV PLUS to bedding plants, annual and perennial potted crops, and bulb crops to promote plant growth. Applying PROGIBB LV PLUS has the

potential to dramatically promote plant growth of most dicot and some monocot plants. Additionally, utilize a foliar PROGIBB LV PLUS application to overcome overapplications of a gibberellin-inhibiting plant growth regulator.

- When applying PROGIBB LV PLUS to promote plant growth, start with 1 ppm unless previous experience warrants higher use rates.
- If desired plant results are not achieved, a reapplication or an increase in rate is often warranted.

**NOTE:** PROGIBB LV PLUS is very active and application at an excessive rate results in undesirable stem elongation. First evaluate PROGIBB LV PLUS on a small number of plants **before** application of the product on a widespread basis.

Rate (ppm) (parts per million)	Timing	Method
1 to 25	Apply a single application directly to plant foliage	Foliar application

#### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Pesticide Storage: Store in a cool, dry place. Keep containers tightly closed when not in use. Keep away from heat and open flame.

Pesticide Disposal: To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Triple remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container <sup>1</sup>/<sub>4</sub> full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

#### NOTICE TO USER

To the extent permitted by applicable law, seller makes no warranty, express or implied, or merchantability, fitness or otherwise concerning the use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with accompanying directions.

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73049-00498.20180214.ProGibbLVPLUS.Amendment

# **Supplemental Label**



ACCEPTED 03/23/2018 Under the Federal Insecticide, Fungicide

and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 73049-498



## EPA Reg. No. 73049-498

#### ProGibb® LV PLUS PLANT GROWTH REGULATOR SOLUTION FOR USE ON BELL PEPPER, LEAF LETTUCE AND SPINACH.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

THIS LABELING MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF APPLICATION. READ THE LABEL AFFIXED TO THE CONTAINER FOR ProGibb LV PLUS PLANT GROWTH REGULATOR SOLUTION BEFORE APPLYING. USE OF ProGibb LV PLUS PLANT GROWTH REGULATOR SOLUTION ACCORDING TO THIS LABELING IS SUBJECT TO THE USE PRECAUTIONS AND LIMITATIONS IMPOSED BY THE LABEL AFFIXED TO THE CONTAINER FOR ProGibb LV PLUS PLANT GROWTH **REGULATOR SOLUTION.** 

#### DATE OF EXPIRATION OF PRESENT SUPPLEMENTAL LABEL: MARCH 2021

	VEGETABLE CROPS				
CROP/VARIETY	OBJECTIVE/BENEFIT	RATE / acre)	APPLICATION TIMING		
Bell Peppers	To promote plant height and leaf size, thus protecting developing fruit from sunburn.	1 – 2 gram a.i. (0.5 – 1.0 oz)	Begin applications after plants have recovered from transplant shock and are actively growing. Apply 1 – 2 applications at 1 to 2 week intervals. Use sufficient water volume to ensure thorough coverage.		
NOTE: Dilutions of greater concentration can increase the risk of excessive top growth, particularly with a second application.					

CROP/VARIETY	OBJECTIVE/BENEFIT	RATE / acre)	APPLICATION TIMING	
Leaf Lettuce	To promote plant height and increase leaf length.	0.5 – 1.0 gram a.i. (0.25-0.5 oz)	Apply a single application between the cotyledon stage and prior to harvest. Use sufficient water volume to ensure thorough coverage.	
Note: Use of this product may cause a slight and temporary reduction in the coloration of the foliage. Response to this product may vary by cultivar. Consult your Valent representative or local specialist before treating unfamiliar cultivars.				
Spinach	To promote plant height and increase leaf length.	2.5 – 10.0 grams a.i. (1.25-5.0 oz)	Apply a single application between the 1 <sup>st</sup> true leaf and prior to harvest. Use sufficient water volume to ensure thorough coverage	
Note: Use of this product may cause a slight and temporary reduction in the coloration of the foliage.				

# PLEASE CONTACT VALENT U.S.A. LLC AT 800-6-VALENT (682-5368) TO DETERMINE IF THIS USE IS REGISTERED IN YOUR STATE.

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