73049-498 12/20/2013 1156

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Biopesticides and Pollution Prevention Division (7511P)
1200 Pennsylvania Avenue NW
Washington, DC 20460

EPA Reg. Number:	Date of Issuance:
73049-498	DEC 20 2013

Term of Issuance: **Unconditional**

NOTICE OF PESTICIDE:
_X_ Registration
___ Reregistration
(under FIFRA, as amended)

Name of Pesticide Product:
ProGibb LV PLUS Plant Growth Regulator Solution

Name and Address of Registrant (include ZIP Code):

Jayne Walz
Valent BioSciences Corporation
870 Technology Way
Libertyville, IL 60048

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This registration does not eliminate the need for continual reassessment of the pesticide. If EPA determines at any time that additional data are required to maintain in effect an existing registration, the Agency will require submission of such data under section 3(c)(2)(B) of FIFRA. This product is unconditionally registered in accordance with FIFRA Sec. 3(c)(5) provided you:

1. Submit and/or cite all data required for registration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.

2. Revise the EPA Registration Number to read, "EPA Reg. No. 73049-498."

3. Address the outstanding data requirements of Storage Stability (OCSPP Guideline 830.6317) and Corrosion Characteristics (OCSPP Guideline 830.6320) within one year of the date of this Notice of Pesticide Registration.

4. Submit two (2) copies of the final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of final printed labeling.

A stamped copy of the label is enclosed for your records.

Signature of Approving Official:

Robert McNally, Director,
Biopesticides and Pollution Prevention Division

Date: 12/20/13

CONCURRENCES

EPA Form 8570-6								
SYMBOL ▶	7511P	7511P	7511P	7511P				
SURNAME ▶	Burnett	Reilly	Hollis	Leavy				
DATE ▶	12/17/13	12/18/13	12/19	12/20/13				

EPA Form 1320-1A (1/90) *Printed on Recycled Paper* **OFFICIAL FILE COPY**

* U.S. Government Printing Office: 2005 206-899 (mac)

MASTER LABEL

Primary Product name: ProGibb LV PLUS Plant Growth Regulator Solution

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

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

For Organic Production.

Active Ingredient:	
Gibberellic Acid	5.7 % w/w
Other Ingredients	94.3 % w/w
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-XXX
EPA Establishment No.

Valent BioSciences Corporation
870 Technology Way
Libertyville, IL 60048

Net Contents: _____

ACCEPTED

DEC 20 2013

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

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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, blueberry, carrot, celery, cherries, citrus, collard greens, cotton, cranberry, cucumber, dry bean, grapes, hops, Italian prune, lettuce for seed, melon, mustard, peanut, pecan, pepper, pineapple, 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.....5.7 % w/w
Other Ingredients.....94.3 % w/w
Total.....100.0% w/w

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.
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Valent BioSciences Corporation
870 Technology Way
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Net Contents: _____

FIRST AID	
If in eyes	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If swallowed	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person

If inhaled	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.

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

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.

EXCEPTION: If the product is soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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

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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.

- 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.

- Compatibility: When considering tank mixing with other products, use the following compatibility jar test before mixing a whole tank.

- 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 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 CATEGORIES

□GRAPE

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	**APPLICATION TIMING**	
For cluster elongation and looser cluster forms. To reduce costs of thinning, allow better air circulation to aid in the control of bunch rot, and increase light penetration to aid in sugar development.	Make one to three applications before bloom when flower clusters are 2 to 7 inches long.	
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	**APPLICATION TIMING**	
For decreased berry set, reduced hand-thinning costs, and hastened maturity.	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 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	0.25-6

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**

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SEEDLESS TABLE GRAPE BERRY SIZING SPRAYS	
OBJECTIVE/BENEFIT	**APPLICATION TIMING**
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 diameter for the first application

NOTE:

- 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		
OBJECTIVE/BENEFIT	**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.	
CROP/ CULTIVAR	**Rate Per 5 Gallons Treatment Solution**	
	PPM AI	**Ounces Product**
Table Grapes	20 - 50	0.2 – 0.5

Note: To prepare dip solution, add 0.19 – 0.47 ounces (5.6 – 14 ml) PROGIBB 3V 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 BERRY 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 berry diameter range. Make the application as a whole vine spray or as a spray or dip directly to the cluster.	
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
* Predominant average berry diameter for this application.			

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**	
To increase berry size	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	**APPLICATION TIMING**	
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 on 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 gallons of water per acre.	
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. 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	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 (For California and Arizona use only)	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.
NOTE: • 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. • 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.			
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**	**APPLICATION TIMING**
Lemon/Lime	To decrease 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 ½ to full size, but still green.
NOTE: • When applied two years in a row, an even larger difference in harvest pattern and maturity has been reported			
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.
NOTE: • Do not apply if early harvest is planned. Do not apply after coloring as pre-harvest rind staining is possible. Application during coloring has been observed to result in variation in rind color development.			
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).
NOTE: • Do not spray groves that are to be harvested early since fruit coloring will be delayed. Treated 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**	**APPLICATION TIMING**
Star Ruby Grapefruit (Not for use in California)	To reduce early-season small fruit drop of Star Ruby Variety thereby increasing yields.	25-35 grams a.i. (12.5-17.5 oz)	Make a single dilute application during the bloom period.
NOTE: • Results vary from season to season depending on environmental conditions. Maintain a well-balanced fertilization and watering program.			
Tangerine Hybrids (Orlando, Robinson, Minneola, Sunburst, and others) (Not for use in California)	To increase fruit set and yield. The number of applications depends on desired fruit set.	8 – 30 grams a.i. (4-15 oz)	Make one to two applications during the bloom period. Apply as a dilute spray.
NOTE: • Fruit size has been known to be reduced and color development slightly retarded. A slight increase in mature leaf drop occurs sometimes in trees under stress.			
Navel, Valencia and Ambersweet Orange (For Florida use only)	To enhance fruit set and yield.	15-25 grams a.i. (7.5-12.5 oz)	Make a single dilute spray between mid December and late January using sufficient spray volume for adequate coverage of tree canopy
Grapefruit (Not for use in California)	To enhance fruit set, size and yield	15-25 grams a.i. (7.5-12.5 oz)	Make a single application in December - January. Apply in 125-175 gallons of water per acre with a pure organo-silicone type surfactant at 0.05% (6 fl. oz/100 gallons).

CITRUS: CLEMENTINE MANDARIN			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**RATE**	**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**	**USE RATE / ACRE**	**APPLICATION TIMING**
Processing oranges	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.

FRUIT CROPS

FRUIT CROPS			
CROP/CULTIVAR	**OBJECTIVE/BENEFIT**	**RATE**	**APPLICATION TIMING**
Banana	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.
		Ground 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.	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**	**APPLICATION TIMING**
Banana (con't)	Application by injection into the pseudostem		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 5 ml per plant of a 640-1280 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	Apply 50 – 400 ml per plant of a 250-1000 ppm solution	
	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	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.

Pineapple (con't)	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.
	To improve fruit set.	40-80 grams a.i. (20-40 oz)	Make a single application of 80 grams a.i. in 40 to 100 gallons of water/acre. Apply at full bloom (when 75% of the flowers are fully open). OR Make two applications at 40 grams a.i./acre in 40 to100 gallons of water. Make the first application at full bloom, and the second one within 10-14 days of the first one. To increase size of "shot" berries in Weymouth, delay the application up to two weeks after bloom.
Blueberry (Not for use in California) Highbush: Coville, Jersey, Stanley, Earliblue, Weymouth, Walcott, Berkeley, Blueray, Bluecrop, 1316A, Concord, and others	To improve fruit set.	40-80 grams a.i. (20-40 oz)	Make a single application of 40 to 80 grams a.i./acre in 40 to 100 gallons of water per acre when most of the flowers are elongated but not yet open (bloom Stage 5). OR Make two to four applications 10 to 14 days apart starting at bloom Stage 5. Spray 20 to 40 grams a.i./acre in 40 to 100 gallons of water per application.
Blueberry: (Not for use in California) Rabbiteye: Aliceblue, Beckyblue, Bonita, Brightwell, Climax, Delite, Tiftblue, Woodward, and others.	To improve fruit set.	40-80 grams a.i. (20-40 oz)	Make a single application of 40 to 80 grams a.i./acre in 40 to 100 gallons of water per acre when most of the flowers are elongated but not yet open (bloom Stage 5). OR Make two to four applications 10 to 14 days apart starting at bloom Stage 5. Spray 20 to 40 grams a.i./acre in 40 to 100 gallons of water per application.

FRUIT CROPS (con't)			
CROP/ CULTIVAR	**OBJECTIVE/ BENEFIT**	**RATE /A**	**APPLICATION TIMING**
Avocado	Benefit: To improve fruit set and yield	25 grams a.i. (12.5 oz)	Apply at the cauliflower stage of inflorescence development. (Not for use in California)
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 ½ 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.
NOTE: • Do not exceed 48 grams a.i./acre per season • Two applications should be used when crop maturity is uneven and a single spray will not be effective. • Color development and harvest date have occasionally been slightly delayed • Use higher rates with heavier crop loads.			
Sour Cherry (Not for use in California)	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 to ensure spur development and subsequent yield improvement year after year.	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 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: • This application has occasionally caused reduction in flower counts the year following the application, particularly if it is made during the months of May through July.			
Italian Prune (Not for use in California)	To reduce internal browning, improve quality, and increase size.	16-48 grams a.i. (8-24 oz)	Make a single application four to five weeks before expected harvest. Apply in sufficient water volume to ensure thorough wetting.
NOTE: • Color development and harvest have occasionally been slightly delayed. Observation of reduced bloom the following season is occasionally seen.			

FRUIT CROPS (con't)			
CROP/ VARIETY	**OBJECTIVE/ BENEFIT**	**RATE /acre**	**APPLICATION TIMING**
Pecan (Not for use in Arizona and California)	To extend leaf retention and maintain green foliage.	**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:

- Use sufficient water to achieve complete coverage. In most cases 100 gallons per acre has been shown to be effective.
- Do not make more than one application of PROGIBB LV PLUS in July. Using more than one application in July may result in reduced return bloom.
- PROGIBB LV PLUS may be tank mixed with Belay® Insecticide.

NON BEARING STONE FRUIT TREES			
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.

NOTE:

- Do not spray trees in the first year. Treat in the second season for reduction of flowering in the third season, and again in the third season if flower reduction and fruiting is desired in the fourth season. Treat only trees that are in good physiological condition. Discontinue treatment the year before desired harvest.

FRUIT CROPS (con't)			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**RATE /acre**	**APPLICATION TIMING**
Strawberry (Not for use in California)	To increase runner production of mother plants.	15-25 grams a.i. (7.5-12.5 oz)	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.
NOTE: • Not for use on fruiting plants. Treatments have not been as effective on plantings set out after mid-May. • Response varies with cultivar and location. Consult your Valent representative or local horticulturist for specific indications.			
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.
NOTE: • Applications made later than indicated have been known to result in no effect or actually result in increased fruit set (opposite effect). • Responses will vary with cultivar, age of the bog and location. Consult the Valent representative or local specialist for specific information.			

□VEGETABLE CROPS

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).
Carrots, Fresh and Processing	To delay leaf senescence. Maintaining vigorous foliage has been shown to help reduce the incidence of infection by *Alternaria dauci*.	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.
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**
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 by air in California. Do not apply earlier than 4 weeks before harvest as bolting has been known to occur.			
VEGETABLE CROPS (con't)			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**RATE/acre**	**APPLICATION TIMING**
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 benefits, vines must be in good condition, except for reduced rate of growth due to cool temperatures.			
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.
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 maximum benefits, vines must be in good condition, except for reduced rate of growth due to cool temperatures.			
Pepper (Not for use in California)	To promote plant 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 two-week intervals. Begin sprays 2 weeks after transplanting.
NOTE: This use is best for areas with short growing seasons, or when the low temperatures slow plant growth.			
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 is most efficacious for areas and/or varieties with pollination and/or fruit set problems.			
Pepper (Not for use in California)	To increase fruit size	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 is best for plants with heavy fruit loads.

VEGETABLE CROPS (con't)			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**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. (0.1-0.2 oz; 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 temperatures use the minimum concentration for dormant seed. Do not treat rested seed pieces.

Rhubarb	To break dormancy on plants receiving insufficient chilling and to increase marketable yield of forced rhubarb	10 – 20 grams a.i. (5-10 oz)	1) When the rest period is not completely broken, make a single application of 2 fluid ounces (60 ml) of a solution containing 20 grams a.i. in 10 gallons of water to each cleaned crown. 2) When the rest period is broken by cold weather, apply 2 fluid ounces (60 ml) of a solution containing 10 grams a.i. in 10 gallons of water to each cleaned crown.

NOTE:
- Keep forcing house temperatures at 40 – 50°F for 24 hours after application. If house is warmer than 50°F, cover crowns with plastic. Temperatures above 50°F lower yields and cause poor stalk color.

VEGETABLE CROPS (con't)			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**RATE/acre**	**APPLICATION TIMING**
Spinach (for use in California), 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.
NOTE: • Since the promotion of bolting has been known to occur, do not apply after the mid-winter period or if temperatures are expected to exceed 75° F within several days of application. Do not apply on spring plantings.			

CROP/VARIETY	**OBJECTIVE/BENEFIT**	**RATE /acre**	**APPLICATION TIMING**
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.
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**RATE /acre**	**APPLICATION TIMING**
Peanuts	To promote plant growth	2.5 – 5.0 grams a.i. (1.25-2.5 oz; 37-74 ml)	Make two to four applications on a two week interval. Begin sprays two weeks after emergence.

CROP/VARIETY	OBJECTIVE/ BENEFIT	RATE /acre)	APPLICATION TIMING
Seedling Applications (Early Season)			
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.	1 – 2 grams a.i. (0.5-1 fl oz; 15-30 ml)	Make one to two applications at the 1-2 and/or 4-5 leaf stages of growth.
Note: This growth promotion will permit earlier flooding (5 to 10 days earlier) of drill or broadcast-seeded rice and is particularly effective on semi-dwarf varieties. Early flooding reduces the additional flushing cost associated with delay in establishing the permanent flood, reduce weed infestations and the number of herbicide applications, and/or promote earlier and more uniform grain maturity.)			
Panicle Extension Applications (Late Season)			
Rice	To promote main culm and tiller panicle extension. Known to promote main culm	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)	To promote main culm and tiller panicle extension resulting in improved pollination and seed yield.	1-3 grams a.i. (0.5-1.5 oz; 15-44 ml)	Make 1-5 applications at regular intervals during the heading period to promote main culm and tiller panicle extension.

Note: Timing and dosage are to be based upon environmental conditions, tank mix combinations with herbicides, and preferred permanent flood practice in relation to rice leaf stage. **Do not** apply when rice is subjected to drought stress conditions. Foliage occasionally and temporarily appears lighter green in color due to accelerated growth rates following PROGIBB LV PLUS application.			
Rice	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. When applying PROGIBB LV PLUS in mixtures with Arrosolo, Riverside Propanil® 60DF, Stam® M4, Stam® 80EDF, or Wham!® EZ, plus one of their indicated adjuvants, use of an additional surfactant is not necessary. Do not apply PROGIBB LV PLUS with Whip® IEC or Whip® 360.

SEED TREATMENT APPLICATION

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

USE	OBJECTIVE/ BENEFIT	RATE (fl. oz.)	APPLICATION TIMING
Seed treatmentfo rice	To promote germinationand emergence for semi-dwarf and tall varieties. To help increase final stand density and uniformity whenseed are planted deeper t receive adequate moisture.	0.25 to 1 fl oz productin 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.

- **Do not** apply PROGIBB LV PLUS prior to a 24 hour presoak or to water used for the presoak.
- **Do not** exceed 1 fl oz product/100 lbs of seed (or 33 ml product/45 kg seed)

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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.

OK

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

V

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	OBJECTIVE/ BENEFIT	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.

SOYBEAN

USE	OBJECTIVE/ BENEFIT	RATE /acre	APPLICATION TIMING
Young plants	To improve mechanical harvest efficiency by elongating the first and second internode of young plants	10 – 20 grams a.i. (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: Differences in response by variety may be large. Caution should be used when using on untested varieties.			
V5-R3	To increase pod set and increase the growth of the plant	0.1 – 0.2 oz	Make a single application at R2--R3 growth stage.
Note: Differences in response by variety may be large. Caution should be used when using on untested varieties. Consult your Valent USA Representative.			

Dry Bean

USE	OBJECTIVE/ BENEFIT	RATE /acre	APPLICATION TIMING
Vegetative uses			
Young plants	To improve mechanical harvest efficiency by elongating the first and second internode of young plants	10 – 20 grams a.i. (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: Differences in response by variety may be large. Caution should be used when using on untested varieties.			

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 can not 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.

SUB LABEL II

PROGIBB LV PLUS T&O

Plant Growth Regulator Solution

For use on turf and ornamental plants.

PROGIBB LV PLUS T&O
Plant Growth Regulator
Solution
For use on turf and ornamental crops.

For Organic Production.

Active Ingredient:
Gibberellic Acid.....5.7 % w/w
Other Ingredients.....94.3 % w/w
Total.....100.0% w/w

PROGIBB LV PLUS T&O 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-XXX
EPA Establishment No.

Valent BioSciences Corporation
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	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If swallowed	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If inhaled	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.

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

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

A foliar application of PROGIBB LV PLUS T&O 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 T&O 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 T&O will not respond to the application.

An effective dose of PROGIBB LV PLUS T&O 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 T&O, 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 T&O due to differences in plant surfaces, leaf orientation, and plant structure are possible. PROGIBB LV PLUS T&O 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 T&O.

DETERMINING OPTIMAL APPLICATION RATES

The rates on this label are ranges and an optimum PROGIBB LV PLUS T&O 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 T&O rate.

Results from PROGIBB LV PLUS T&O applications are dependent upon timing, rate, frequency of application, and plant vigor at application. PROGIBB LV PLUS T&O 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 T&O 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 T&O 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 T&O to any food crop.
- Do not reuse soil from plants treated with PROGIBB LV PLUS T&O.

MIXING INSTRUCTIONS AND RATE CONVERSION TABLE

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

PROGIBB LV PLUS T&O 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 T&O for use as a foliar spray, fill tank to one half full; add the amount of PROGIBB LV PLUS T&O 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.

Rate Conversion Table*

ppm (parts per million, GA_3)	Milliliters (ml) of PROGIBB LV PLUS T&O per liter of spray solution	Milliliters (ml) of PROGIBB LV PLUS T&O per gallon of spray solution	Fl. oz. of PROGIBB LV PLUS T&O per gallon of spray 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 T&O 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 T&O 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 (ppm a.i.)**	**APPLICATION TIMING**
Azalea	**As a Partial Replacement of Cold Treatment to Break Flower Dormancy** Applications of PROGIBB LV PLUS T&O have been shown to partially replace a cold treatment needed to break flower dormancy of azalea.	250-500	For three consecutive weeks apply a single foliar application. Begin applications only after plants have received 3 to 4 weeks of chilling. Have plants at Stage 5 of floral development (i.e., style elongated and open) when treatment is initiated. A representative spray schedule consists of applications made at 3, 10, and 17 days after four weeks of chilling. Flowers will not develop properly if applied prior to Stage 5.
Note: • Thorough spray coverage is essential for uniform flowering. • Do not apply after flower buds show color. • Cultivars such as 'Gloria', 'Prize', and 'Redwing', a single spray of 1,000 ppm after 4 weeks of chilling has proven effective in breaking dormancy			
Azalea	**As a Complete Substitution of Cold Treatment to Break Flower Dormancy** Applications of PROGIBB LV PLUS T&O have been shown to completely substitute for a cold treatment that is needed to break flower dormancy of azalea.	1,000	For four to six consecutive weeks apply a single foliar application of 1,000 ppm. Plants must be at Stage 5 of floral development (i.e., style elongated and open) before first spray is applied. Flowers will not develop properly if applied prior to Stage 5 of floral development.
Note: • Thorough spray coverage is essential for uniform flowering. • Do not apply after flower buds show color.			

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 T&O have been shown to inhibit flower bud initiation during vegetative growth of azalea.	100-750	Apply a single foliar application of PROGIBB LV PLUS T&O 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 maximum of three applications			
CALLA LILY			
Calla Lily	**For increased flowering** Applications of PROGIBB LV PLUS T&O have been shown to increase the number of flowers per rhizome or tuber in Calla Lilies.	500	Soak rhizome or tuber in PROGIBB LV PLUS T&O at 500 ppm for 10 minutes prior to planting.
Note: • Some flower leaf or flower stretching has occasionally been seen on some cultivars. Reduce rates when this is noted. Changing soak time or concentration varies the response to PROGIBB LV PLUS T&O.			
CAMELLIA			
Camellia	**For Substitution of Chilling Requirements and to Increase Bloom Size** Applications of PROGIBB LV PLUS T&O have been shown to substitute for the chilling requirements and increase bloom size of camellia.	2.0% solution	Dilute PROGIBB LV PLUS T&O 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.
Note: • The addition of a deposition aid (such as carboxymethylcellulose) to thicken the solution will decrease run-off.			

CYCLAMEN			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**RATE (ppm a.i.)**	**APPLICATION TIMING**
Cyclamen	**For Uniform Flowering** Both bud and foliar applications of PROGIBB LV PLUS T&O have been shown to promote uniform flowering of cyclamen.	10 to 15	**Bud Application:** 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.
Note: Applications applied too late or at excessive rates sometimes result in weakened floral stems or poorly formed flowers.			
FUCHSIA			
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.
Note: • If treated plants become too leggy, stake after application. • Concentrations higher than 250 ppm have been observed to cause plants to become stretched and spindly, with weakened stems.			

GERANIUM			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**RATE (ppm a.i.)**	**APPLICATION TIMING**
CUTTINGS			
Geranium	**For increase in flower number and flower size.** Applications of PROGIBB LV PLUS T&O have been shown to increase flower number and flower size of geranium cuttings.	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			
Geranium	**For flowering advancement** Applications of PROGIBB LV PLUS T&O 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.
Note: • Treated plants occasionally require staking after application.			

HYDRANGEA			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**RATE (ppm a.i.)**	**APPLICATION TIMING**
Hydrangea	**For chilling substitution to break flower bud dormancy** Applications of PROGIBB LV PLUS T&O 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.
Note: Over-applications or concentrations higher than 5 ppm have resulted in stretched, spindly, and weakened stems.			
POMPOM CHRYSANTHEMUM			
Pompom Chrysanthemum	**For Elongated Peduncles** Applications of PROGIBB LV PLUS T&O have been shown to elongate peduncles of Pompom chrysanthemum	25-60	Apply a single foliar 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: Over-application or incorrect timing have caused stretched, spindly, and weakened stems.			
CHRYSANTHEMUM STOCK PLANTS			
Chrysanthemum Stock Plants	To elongate the cuttings prior to harvest	1-150	Use 125 – 150 gallons of water per acre. Repeat at 3-7 day intervals as needed.
SPATHIPHYLLUM AND OTHER ARACEAE			
Spathiphyllum	**To accelerate bloom and increase the number of flowers per plant** Applications of PROGIBB LV PLUS T&O have been shown to increase flowering of Spathiphyllum.	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.
Note: ♦ Some flower distortion or leaf stretching has been observed on cultivars such as 'Petite', 'Starlight', 'Tasson', and 'Mauna Loa'. Reduce rates when this is noted. On other cultivars, first evaluate PROGIBB LV PLUS T&O on a small number of plants **prior to** application of the product on a commercial basis.			

SPATHIPHYLLUM AND OTHER ARACEAE (con't)			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**RATE (ppm a.i.)**	**APPLICATION TIMING**
AGLAONEMA ANTHURIUM DIFFENBACHIA (Dumb Cane)	**To accelerate bloom and increase the number of flowers per plant.** Applications of PROGIBB LV PLUS T&O have been shown to increase flowering of Araceae	250-500 250-500 250-500	For 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.
SYNGONIUM	**To accelerate bloom and increase the number of flowers per plant.** Applications of PROGIBB LV PLUS T&O have been shown to increase flowering of Araceae	500-2,000	For 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 flower buds.

Note:

- Application of PROGIBB LV PLUS T&O has been shown to reduce the days to flowering and increase the number of flowers per plant. Apply 1 or 2 applications during the vegetative phase of plant development to induce bloom. On other cultivars, first evaluate PROGIBB LV PLUS T&O on a small number of plants **prior to** application of the product on a commercial basis.

APPLICATIONS TO CUT FLOWERS

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

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

CUT FLOWERS

ASTER			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**RATE (ppm a.i.)**	**APPLICATION TIMING**
Aster: *Callistephus chinensis* Monte Carlo-type Novi-type Belgi-type	**To promote stem elongation, and break dormancy.** Applications of PROGIBB LV PLUS T&O have been shown to increase stem elongation and reduce time to flowering.	50-100	Make 1-3 applications of 50-100 ppm during the early vegetative period. Apply when plants are 2"- 6" in height. Keep applications 2-3 weeks apart.
BABY'S BREATH (Gypsophila)			
Gypsophila	To accelerate plant growth, increase number of flowering stems, increase flower number and increase uniformity. Applications of PROGIBB LV PLUS T&O have been shown to promote uniform and increased flowering of Gypsophila.	150-500	Apply 3-4 applications of 150-500 ppm at 4 weeks of growth (after pinching). Keep applications 2 weeks apart.
BELLS OF IRELAND (Moluccella)			
Moluccella	**To accelerate plant growth and stem elongation** Applications of PROGIBB LV PLUS T&O have been shown to promote plant growth and stem elongation of Bells of Ireland.	50-100	Apply when plants are 4"- 8" in height. Keep applications 2-3 weeks apart.

CUT FLOWERS (con't)

BUPLUREUM			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**RATE (ppm)**	**APPLICATION TIMING**
Buplureum	**To promote plant growth and stem elongation** Applications of PROGIBB LV PLUS T&O have been shown to promote plant growth and stem elongation of *Buplureum sp.*	50-100	Apply as a foliar spray when plants are 4"- 8" in height. Keep applications 2-3 weeks apart.
CAMPANULA			
Campanula medium	**To promote plant growth and stem elongation.** Applications of PROGIBB LV PLUS T&O 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 TUFT (Iberis)			
Iberis oderata	**To promote plant growth and stem elongation.** Applications of PROGIBB LV PLUS T&O 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.

CUT FLOWERS (con't)

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 T&O have been shown to promote plant growth and stem elongation of *Matthiola incana*	50-100	Apply as a foliar spray when plants are 4"- 8" in height. Keep applications 2-3 weeks apart.
DELPHINIUM			
Delphinium species: including *D. elatum, D. grandiflorum, D. belladonna, D. bellamosum, D. cardinale, D. nudicale*, and Delphinium hybrids.	**To promote plant growth and stem elongation.** Applications of PROGIBB LV PLUS T&O 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	**To promote plant growth and stem elongation.** Applications of PROGIBB LV PLUS T&O 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.

CUT FLOWERS (con't)

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

CUT FLOWERS (con't)

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 T&O 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 (Ammi)			
Queen Anne's Lace	**To promote plant growth and stem elongation.** Applications of PROGIBB LV PLUS T&O 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)			
Safflower	**To promote plant growth and stem elongation.** Applications of PROGIBB LV PLUS T&O have been shown to promote plant growth and stem elongation of *Safflower*	50-100	Apply as a foliar spray when plants are 4"- 8" in height. Keep applications 2-3 weeks apart.

CUT FLOWERS (con't)

SOLIDASTER (Solidago)			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**RATE (ppm)**	**APPLICATION TIMING**
Solidaster	**To promote plant growth and stem elongation.** Applications of PROGIBB LV PLUS T&O 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 T&O 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).
Note: ◆ Do not exceed specified rates. ◆ Do not make more than one application. ◆ Accelerated flowering is also influenced by photoperiod, nutrition, and temperature.			
Statice	**To promote plant growth and stem elongation.** Applications of PROGIBB LV PLUS T&O have been shown to promote plant growth and stem elongation of Statice	50-100	Apply as a foliar spray when plants are 4"- 8" in height. Keep applications 2-3 weeks apart.

CUT FLOWERS (con't)

SUNFLOWER (Helianthus)			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**RATE (ppm)**	**APPLICATION TIMING**
Sunflower	**To promote plant growth and stem elongation.** Applications of PROGIBB LV PLUS T&O 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 WILLIAM (Dianthus)			
Sweet William	**To promote plant growth and stem elongation.** Applications of PROGIBB LV PLUS T&O 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

Foliar applications of PROGIBB LV PLUS T&O 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.

TURF (GOLF COURSES, PARKS AND TURF FARMS)			
Cool Weather Application			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**RATE /acre**	**APPLICATION TIMING**
Bermudagrass (Tifdwarf, Tifgreen, and other cultivars)	**To initiate or maintain growth and prevent color change during periods of cold stress and light frosts.**	10-25 grams a.i. (5-12.5 oz)	Apply 10 grams a.i./acre weekly or 25 grams a.i./acre biweekly in 25-to-100 gallons of water/acre.
NOTE: • Maintain adequate moisture and proper fertilization programs as required for the 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.			
Warm Weather Application			
Bermudagrass Tifdwarf, Tifgreen	**To maintain or enhance re-growth of golf course Bermudagrass during summer months.**	1-3 grams a.i. (0.5-1.5 oz)	Apply 1-to-3 grams a.i./acre weekly in 25-to-100 gallons of water/acre.
NOTE: • 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 T&O to bedding plants, annual and perennial potted crops, and bulb crops to promote plant growth. Applying PROGIBB LV PLUS T&O has the

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

- When applying PROGIBB LV PLUS T&O 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 T&O is very active and application at an excessive rate results in undesirable stem elongation. First evaluate PROGIBB LV PLUS T&O 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 can not 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 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, 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.