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

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

June 9, 2017

Maria Herrero
Valent BioSciences LLC
870 Technology Way
Libertyville, IL 60048

Subject: Non-PRIA (Pesticide Registration Improvement Act) Labeling Amendment – Amendment to Modify Application Timing for Berries and Cotton
Product Name: ProGibb 40% Plant Growth Regulator, Water Soluble Granule
EPA Registration Number: 73049-1
Application Date: 4/10/17
OPP Decision Number: 528438

Dear Ms. Herrero:

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

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

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

Should you wish to add/retain a reference to your company’s website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the U.S. Environmental Protection Agency (EPA). If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains false

or misleading statements or claims substantially differing from the EPA-approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

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

If you have any questions, please contact Chris Pfeifer of my team by phone at (703) 308-0031 or via email at pfeifer.chris@epa.gov.

Sincerely,

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

Enclosure

LABEL AMENDMENT

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

PROGIBB® 40% PLANT GROWTH REGULATOR, WATER SOLUBLE GRANULE

[Alternate Brand Names: RyzUp® SmartGrass® Plant Growth Regulator, Water Soluble Granule, RyzUp® SmartCorn™, Plant Growth Regulator, Water Soluble Granule]

MASTER LABEL

Sublabel I: ProGibb® 40%, Plant Growth Regulator, Water Soluble Granule;
For agricultural use on artichoke, avocado, banana, bell peppers, blueberry, carrot, celery, cherries, citrus, coffee, collard greens, cotton, cranberry, cucumber, grapes, dry bean, hops, Italian prune, leaf lettuce, lettuce for seed, melon, mustard greens, peanut, pecan, pepper, pineapple, potato seed, rhubarb, rice, seed treatment for turf grass, soybean, spinach, stone fruit, strawberry, turnip greens, and watercress. For post-harvest use on citrus, banana, plantain, and pineapple

Sublabel II: ProGibb Plant Growth Regulator, Water Soluble Granule For agricultural use on pastures, forage crops, corn and soybean.

Sublabel III: ProGibb Plant Growth Regulator, Water Soluble For Agricultural Use on Corn

For Organic Production

Active Ingredient	
Gibberellin A_3	40.0% w/w
Other Ingredients	60.0% w/w
Total	100.0% w/w

Contains a total of 4.5 ounces (128 grams) of Gibberellic Acid in 11.3 ounces (320 grams) of product.

KEEP OUT OF REACH OF CHILDREN

CAUTION

EPA Registration No. 73049-1
EPA Establishment No.

Valent BioSciences Corporation
870 Technology Way
Libertyville, IL 60048

PROGIBB® 40%
Plant Growth Regulator
Water Soluble Granule

[SUB-LABEL I]

For Organic Production

Active Ingredient
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Other Ingredients..... 60.0% w/w
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Contains a total of 4.5 ounces (128 grams) of Gibberellic Acid in 11.3 ounces (320 grams) of product.

KEEP OUT OF REACH OF CHILDREN

CAUTION

See succeeding panel for First Aid, additional Precautionary Statements, Directions for Use and Storage/Disposal Statements

EPA Registration No. 73049-1
EPA Establishment No.

Valent BioSciences Corporation
870 Technology Way, Suite 100
Libertyville, IL 60048
1-847-968-4700

Net Contents: 0.09, 3, 12 and 30 ounces by weight (2.5 grams, 80 grams, 320 grams, and 850 grams) (.)

This container will treat _____acre at the maximum use rate, as directed 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 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. You may also call toll-free 1-800-892-0099 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-6-Valent.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

Caution: Causes moderate eye irritation. Harmful if absorbed through 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)
Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Waterproof gloves.
- Shoes plus socks.

Follow the 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.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

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

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

DIRECTIONS FOR USE

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

AGRICULTURAL USE REQUIREMENTS

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

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

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.
- Waterproof gloves.
- Shoes plus socks.

GENERAL DIRECTIONS FOR USE

Use only as directed. Read the label thoroughly and make sure it is understood before making applications. Keep out of reach of children.

Application Instructions:

- ProGibb® 40% Plant Growth Regulator water soluble granule (hereafter referred to as ProGibb 40%) 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 local Valent representative in your area for the spray regimen best suited to your conditions.
- Do not apply to plants under pest, nutritional, or water stress.
- Avoid drift or accidental application to other crops.
- When a range of rates is indicated, use the concentration and spray volume indicated by the local Valent representative.
- For optimum effectiveness, thorough spray coverage of the target area must be achieved. Prepare solution concentrations by mixing the required amount of product with water in a clean, empty spray tank. Discard any unused spray material at the end of each day following local, state or federal law.
- For most efficacious results, the use water with a pH of 4.0 to 8.5. Use buffer for water with pH above or below this range.
- Applications made under slow drying conditions (cool to warm temperatures, medium to high relative humidity, and no wind) will increase absorption of the active ingredient 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 if significant rain occurs within 2 hours of application.
- Start with a clear glass or plastic quart jar. Add water from the same water source that will be used for the larger tank mix. Add the pesticides in correct proportions. Mix thoroughly and let stand for a minimum 15 minutes. Heat, separation, gelling are all signs of incompatibility. Before using any mixes that pass the jar tests for compatibility, it is imperative to test the mixture on a designated area as it may result either in phytotoxicity or ineffectiveness. For further information, consult your local Valent representative.
- For aerial applications spray volumes must be greater than 2 gallons per acre (10 gallons per acre for tree crops).
- No pre-harvest interval is required for this product.
- Compatibility: When considering tank mixing with other products, use the following compatibility jar test before mixing a whole tank.

COMPATIBILITY WITH OTHER AGRICULTURAL PRODUCTS

Compatibility and performance data for ProGibb® 40% with other agricultural products are not necessarily available.

Do not tank mix ProGibb® 40% with other products unless compatibility has been verified. If considering tank mixing ProGibb® 40% 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® 40% required in order to achieve the final solution rate recommended for the specific crop to be treated. Agitate the mixture of ProGibb® 40% frequently during the chemigation period to assure a uniform distribution throughout the system.

Apply ProGibb® 40% 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.

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

Pesticide Storage
Keep containers tightly closed when not in use.

Pesticide Disposal
Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Container Disposal:
(3 oz [80 g] or 12 oz [320 g] or 30 oz [850 g] bottles)
Non-refillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty remaining contents into application equipment or mix tank. Fill container ¼ full with water and recap. Shake 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use or disposal. Drain for 10 seconds after flow begins to drip. Repeat this procedure two more times. Then offer for recycling or dispose of in a sanitary landfill, or incineration, if allowed by state and local authorities by burning. If burned, stay out of smoke.

(0.09 oz [2.5] sachets)
Non-refillable container. Do not reuse or refill this container. Offer for reconditioning if appropriate or dispose of in a sanitary landfill, or incineration, if allowed by state and local authorities by burning. If burned, stay out of smoke.

SPRAY GUIDELINES FOR GRAPE

For all grapes, application by ground sprayer gives the most efficacious coverage. Apply as a concentrate or dilute spray in sufficient water volume to ensure complete coverage of all flower clusters or berries. For cultivar specific spray rates and timings, see accompanying tables.

SEEDLESS TABLE GRAPE

CLUSTER STRETCH SPRAYS – SEEDLESS TABLE GRAPE			
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	**Grams A.I./Acre**	**Grams Product/Acre**	**Ounces Product/Acre**
Perlette Seedless	8 – 24	20 – 60	0.7 – 2.2 oz
Flame Seedless	8 – 24	20 – 60	0.7 – 2.2 oz
Thompson Seedless	8 – 24	20 – 60	0.7 – 2.2 oz
Raisin	8 – 24	20 – 60	0.7 – 2.2 oz
Other Seedless Grapes	No indications are available at this time.		

BERRY THINNING SPRAYS - SEEDLESS TABLE GRAPE			
OBJECTIVE/BENEFIT	**APPLICATION TIMING**		
For decreased berry set, reduced hand-thinning costs, and hastened maturity.	Make one to four applications during bloom. Make only 1-2 applications for “Other Seedless Grapes.” When the bloom period is extended, subsequent sprays are to be made 1 to 7 days after the first application.		
CROP/CULTIVAR	**Grams A.I./Acre**	**Grams Product/Acre**	**Ounces Product/Acre**
Flame Seedless	3 – 16	7.5 – 40	0.3 – 1.4 oz
Thompson Seedless	8 – 20	20 – 50	0.7 – 1.8 oz
Raisin	3 – 12	7.5 – 30	0.3 – 1.1 oz
Other Seedless Grapes	0.5 – 12	1.3 – 30	0.1 – 1.1 oz
NOTE: At the high end of the prescribed range of rates and number of applications, expect significantly more thinning in young vines or vines with high vigor. For “Other Seedless Grapes” use caution as some of the new cultivars are very responsive and over-thin easily. Consult the Valent representative or local specialist before thinning cultivars with which there is no familiarity.			

BUMP SPRAY – SEEDLESS TABLE GRAPE			
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	**Grams A.I./Acre**	**Grams Product/Acre**	**Ounces Product/Acre**
Thompson Seedless	16 – 24	40 – 60	1.4 – 2.2 oz

BERRY SIZING SPRAYS - SEEDLESS TABLE GRAPE				
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***	**Grams A.I./Acre**	**Grams Product/Acre**	**Ounces Product/Acre**
Perlette Seedless	4–5 mm	32 – 128	80 – 320	2.9 – 11.5 oz
Flame Seedless	6–9 mm	20 – 128	50 – 320	1.8 – 11.5 oz
Thompson Seedless	3–5 mm	32 – 128	80 – 320	2.8 – 11.5 oz
Raisin	3–5 mm	4 – 20	10 – 50	0.4 – 1.8 oz
Other Seedless Grapes	3–14 mm	8 – 128	20 –320	0.7 –11.5 oz
*Target average berry diameter for the first application.				
NOTE: In some growing regions and for some cultivars, the higher amounts of gibberellic acid indicated will reduce fruitfulness (cluster counts) the following year. At the high end of the prescribed range of rates and number of applications, a delay in berry skin color development, sugar accumulation and overall maturation has been observed. Consult the Valent representative or local specialist before sizing cultivars with which there is no familiarity.				

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 12-15 mm.		
	Rate Per 5 Gallons Treatment Solution		
CROP/CULTIVAR	**PPM A.I.**	**Grams Product**	**Ounces Product**
Seedless Grapes	20 – 50	1 – 2.5	0.1 – 0.25
NOTE: To prepare dip solution, add 1 – 2.5 gram ProGibb® 40% for every 5 gallons of solution needed. Consult the Valent representative or local specialist before sizing cultivars with which there is no familiarity.			

BERRY SIZING SPRAYS – SEEDED TABLE GRAPE				
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 to the entire vine.		
CROP/CULTIVAR	**BERRY DIAMETER (mm)***	**Rate**		
		Grams A.I./Acre	**Grams Product/Acre**	**Ounces Product/Acre**
Emperor	12 -16	20	50	1.8
Red Globe	12 -18			
Calmeria	12 -16			
Christmas Rose	12 -16			
Rogue	12 -16			
Queens	12 -15			
*Predominant average berry diameter for this application.				

NOTE:

- Whole vine applications have been known to reduce 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.

BERRY SIZING SPRAYS – BLACK CORINTH			
OBJECTIVE/BENEFIT	**APPLICATION TIMING**		
To increase berry size.	Make one application 3-5 days after full bloom, but before shatter begins.		
CROP/CULTIVAR	**Grams A.I./Acre**	**Grams Product/Acre**	**Ounces Product/Acre**
Black Corinth (Zante Currant)	1 – 12	2.5 – 30	0.1 – 1.1

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	1-2.5 Grams product 0.04 – 0.1 oz product
Aleatico Carignane Chardonnay Chenin Blanc French Colombard Pinot Noir Valdepenas	1-2	2.5 – 5 grams product 0.1 – 0.2 oz product
Barbera Petite Sirah Zinfandel	2-4	5-10 grams product 0.2 – 0.4 oz product
Green Hungarian	4-8	10 – 20 Grams product 0.4 -0.7 oz product
Grenache Alicante	8	20 grams product 0.7 oz product
Salvadore	8-16	20-40 grams product 0.7 – 1.4 oz product
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.		

SPRAY GUIDELINES FOR CITRUS

- For citrus, apply in sprays of sufficient water volume to ensure thorough fruit wetting. In most cases, this application will cause some drop of oldest (most 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 been known to causes severe leaf and/or fruit drop.
- Dilute spray rates are expressed as the amount of product per 100 gallons of water.
- Do not apply in white wash sprays in which lime or other caustic material has produced a high pH in the spray tank. Applications of copper fungicides and/or oils within three weeks (before or after) the ProGibb® 40% application often results in significant leaf drop and fruit drop.

CITRUS: FIELD APPLICATIONS

CITRUS – INCREASE FRUIT SET			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**APPLICATION TIMING**
Naval, Valencia*, and Ambersweet Orange* *(Not for use in California)	To enhance fruit set and yield.	15 – 25 Grams A.I. 37.5 – 62.5 Grams product 1.4 – 2.3 Ounces product	Make a single dilute spray between mid-December and late January using sufficient spray volume for adequate coverage of tree canopy
NOTE: Many blocks of Ambersweet and Navel orange in Florida tend to flower very heavily, yet set poor crops. In these blocks, it appears that tree resources are wasted by heavy flowering, compromising the trees' ability to set fruit, support early fruit growth, and carry fruit to harvest. Productivity of heavily blooming blocks is often increased by reducing flower formation.			
Clementine Mandarin (Limit of 1-3 full applications in California)	To increase fruit set and yield	1-40 Grams A.I. 2.5 – 100 Grams product 0.1 – 3.6 Ounces product	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 between sprays.
Tangerines and Mandarin Hybrids (Not for use in California)	To increase fruit set and yield.	8 – 30 Grams A.I. 20 – 75 Grams product 0.7 – 2.7 Ounces product	Make one to two applications during the bloom period. Apply as a dilute spray.

CITRUS – INCREASE FRUIT SET (Cont.)			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**APPLICATION TIMING**
Grapefruit (Not for use in California)	To enhance fruit set, size and yield	8 – 30 Grams A.I. 20 – 75 Grams product 0.7 – 2.7 Ounces product	Make a single application in December - January. Use a dilute spray with sufficient spray volume for adequate coverage of tree canopy. Typically 125 – 175 gallons of water per acre has been sufficient.
NOTE: The rate and number of applications depends upon amount of desired fruit set. Generally, more fruit will be set by 2 applications (except grapefruit), earlier applications, higher rates, and climactic conditions more favorable to set. Differential responses to the PGR across citrus cultivars also interact with the above factors to affect the degree of fruit set achieved. Reductions in final fruit size are known to occur as a result of excessive fruit set. Increases in mature leaf drop occur in trees under stress.			

CITRUS – REDUCE FRUIT DROP			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**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. 62.5 – 87.5 Grams product 2.3 – 3.2 Ounces product	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.			

CITRUS – DELAY RIND AGING			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**APPLICATION TIMING**
Navel and other orange cultivars (except Valencia)	To delay rind aging, reduce physiological disorders (e.g., rind staining, water spotting, sticky or tacky surface, oleocellosis), and produce a more orderly harvesting. pattern	16 – 48 Grams A.I. 40 – 120 Grams product 1.4 – 4.3 Ounces product	Make one or two applications as a concentrate or dilute spray. Early application: spray approximately 2 weeks prior to color break (typically AUG. – NOV.). This timing causes the greatest delay in rind aging and produces the firmest rind possible. AND/OR Late application: one application after marketable color (typically OCT. – DEC.). This late spray has been known to cause re-greening.
Valencia Orange	To reduce rind creasing and to delay rind aging and softening	40 – 80 Grams A.I. 100 – 300 Grams product 3.6 – 7.2 Ounces product	Make a single application as a concentrate or dilute spray in August to October to target crop of young fruit.
NOTE: • Do not apply the early spray to groves that will be harvested early, as fruit coloring will be delayed. Do not apply from January through July, as production is often reduced the following year. • Slower color development is to be expected in the target crop. Increased re-greening of mature fruit has been known to occur. After marketable color is achieved, treatment effects are reduced 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. 50 – 150 grams product 1.8 – 5.4 ounces product	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 – DELAY RIND AGING (Cont.)			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**APPLICATION TIMING**
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. 50 – 100 Grams product 1.8 – 3.6 Ounces product	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 and re-greening has been known to occur. Application during coloring sometimes causes 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 pre-harvest drop of mature fruit, increase peel strength, reduce water loss during storage, and produce a more orderly harvesting pattern.	16 – 48 Grams A.I. 40 – 120 Grams product 1.4 – 4.3 Ounces product	Make one or two dilute spray applications in sufficient volume to ensure coverage. Do not exceed 20 ppm A.I. (8 Grams A.I. /100 gallons) in spray solution. EARLY: Make application two weeks prior to color break. Apply as a dilute spray (AUG. – SEPT). AND/OR LATE: Make application after marketable color has developed (OCT – DEC).
NOTE: Do not spray groves that will be harvested early, as fruit coloring will be delayed. Treated fruit will 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 vary from season to season depending on environmental conditions. For maximum effect on rind firmest and delay in rind aging, make applications before color change.			
Lemon/Lime	To decrease rind aging, yellowing, and the amount of small ripe fruit, and to produce a more desirable production pattern relative to market demand.	10 – 32 Grams A.I. 25 – 80 Grams product 0.9 – 2.9 Ounces product	Make a single application when target crop is 1/2 to full size, but still green.
NOTE: When applied two years in a row, an even larger difference in harvest pattern and maturity have been known to occur.			

CITRUS – INCREASE JUICE YIELD			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**APPLICATION TIMING**
Processing oranges (Not for use in California)	To increase juice extraction yield in late-harvested processing oranges.	20 Grams A.I. 50 Grams product 1.8 Ounces product	Make a single application at fruit color break in sufficient volume to ensure complete coverage of the fruits.

SPRAY GUIDELINES FOR TEMPERATE FRUIT CROPS

For temperate fruit crops, apply in sprays of sufficient water volumes to ensure thorough fruit wetting. Application to plants or trees of low vigor or under stress (pest, nutritional, or water, etc) causes severe leaf and/or fruit drop. Applications of copper fungicides and/or oils within three weeks (before or after) the ProGibb® 40% application often results in significant leaf drop and fruit drop.

TEMPERATE FRUIT CROPS: FIELD APPLICATIONS

TEMPERATE FRUIT CROPS – FRUITSET			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**APPLICATION TIMING**
Highbush Blueberry Coville, Jersey, Stanley, Earliblue, Weymouth, Walcott, Berkeley, Blueray, Bluecrop, 1316A, Concord, and others (Not for use in California)	To improve fruit set.	40 – 80 Grams A.I. 100 – 200 Grams product 3.6 – 7.2 Ounces product	Make a single application of 40-80 Grams A.I. per acre in 40 to 100 gallons of water. The application should be made at full bloom (when 75% of the flowers are fully open). OR Make 2-4 applications of 40 Grams A.I. per acre in 40 to 100 gallons of water. Make the first application at full bloom, and the second application within 10-14 days of the first spray. For Weymouth, application can be delayed up to two weeks after bloom to increase size of “shot” berries.

TEMPERATE FRUIT CROPS – FRUITSET (Cont.)			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**APPLICATION TIMING**
Rabbiteye Blueberry: Aliceblue, Beckyblue, Bonita, Brightwell, Climax, Delite, Tiftblue, Woodward and others. (Not for use in California)	To improve fruit set.	40 – 80 Grams A.I. 100 – 200 Grams product 3.6 – 7.2 Ounces product	Make a single application of 40 to 80 Grams A.I. in 40 -to-100 gallons of water per acre. The application should be made at full bloom (when 75% of the flowers are fully open). OR Make 2-4 applications of 40 Grams A.I. per acre in 40 to 100 gallons of water. Make the first application at full bloom, and the second application within 10-14 days of the first spray.
Melon (Not for use in California)	To stimulate fruit set during periods of cool temperatures	1 - 4 Grams A.I. 2.5 – 10 Grams product 0.1 – 0.4 Ounces product	Make application just prior to bloom. For cantaloupes and watermelons two additional applications should be made at intervals of 10-to-14 days.
NOTE: For maximum benefits, vines must be in good condition, except for reduced rate of growth due to cool temperatures.			

TEMPERATE FRUIT CROPS – SPUR FORMATION			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**APPLICATION TIMING**
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.	4 – 18 Grams A.I. 10 – 45 Grams product 0.4 – 1.6 Ounces product	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 – 18 Grams A.I. per 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:

- Applications must be applied annually to ensure spur development and subsequent yield improvement year after year.
- Rates are based on expected normal tree vigor at various ages. Adjust rate according to tree vigor. If trees are vigorous, use lowest recommended rates. Lowest rates should also be used 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 FOR SOUR CHERRY TREES BY AGE

TREE AGE (YEARS)	GRAMS A.I./ACRE	GRAMS PRODUCT/ACRE	OUNCES PRODUCT/ACRE
6-10	4 – 6	10 – 15	0.4 – 0.5
11-15	8 – 10	20 – 25	0.7 – 0.9
16-20	10 – 14	25 – 35	0.9 – 1.3
20 + years	14 – 18	35 – 45	1.3 – 1.6

TEMPERATE FRUIT CROPS – FRUIT QUALITY			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**APPLICATION TIMING**
Sweet Cherry (one application ONLY in the state of California)	To produce larger, brighter colored, firmer fruit	16 – 48 Grams A.I. 40 – 120 Grams product 1.4 – 4.3 Ounces product	Make 1-2 applications depending on crop development. If crop development is uniform, make one application when the fruit is translucent green to straw colored. If cultivars or conditions cause non-uniform crop development make two applications. When using 2 applications apply 1/3 to 1/2 of the total desired amount when the majority of the fruit is translucent green. Apply the remaining material 3-7 days later, when the majority of the fruit is straw colored. Use sufficient water volume to ensure thorough wetting.

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 is often slightly delayed.
- Use higher rates with heavier crop loads.

TEMPERATE FRUIT CROPS – FRUIT QUALITY (Cont.)			
CROP/ VARIETY	**OBJECTIVE/BENEFIT**	**USE 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. 40 – 80 Grams product 1.4 – 2.9 Ounces product	Apply as a single spray one to four weeks prior to the beginning of the harvest period. Use sufficient water to achieve complete coverage of fruits and foliage.
NOTE: • This application has been known to cause 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. 40 – 100 Grams product 1.4 – 4.3 Ounces product	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.			

TEMPERATE FRUIT CROPS			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**APPLICATION TIMING**
Pecan (Not for use in AR, CA, & NM)	To extend leaf retention and maintain green foliage.	10 Grams A.I. 25 Grams product 0.9 Ounces product	Make 1-4 applications of 10 g A.I. beginning in July and continuing 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® 40% in July. Using more than one application in July may result in reduced return bloom. • ProGibb® 40% may be tank mixed with Belay® Insecticide or with fungicides.

TEMPERATE FRUIT CROPS – NON BEARING USES			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE 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. 50 – 200 Grams product 1.8 – 7.2 Ounces product	Make a single application during the period of flower bud initiation for the following year. Use sufficient water to achieve good coverage of the canopy.
Non Bearing Blueberry (Not for use in California)	To reduce flowering and fruiting in young blueberry plants in order to minimize the competitive effect of early fruiting on plant development.	20 – 80 Grams A.I. 50 – 200 Grams product 1.8 – 7.2 Ounces product	Make one to four applications during the period of flower bud initiation for the following year. Use sufficient water to achieve good coverage of the canopy.
NOTE: Do not spray plants/trees in their 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 plants/trees that are in good physiological condition. Discontinue treatment the year before desired harvest. Consult with the Valent representative or local horticulturist for timings and rates for specific cultivars in your area.			
Strawberry (Not for use in California)	To increase runner production of mother plants.	15 – 25 Grams A.I 37.5 – 62.5 Grams product 1.4 – 2.3 Ounces product	Make a single application to mother plants 10 – 30 days after planting. Plants should 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 always been effective on plantings set out after mid-May. Response varies with cultivar and location. Consult your Valent representative or local horticulturist for specific recommendations.			
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.			

SPRAY GUIDELINES FOR TROPICAL FRUIT CROPS

CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Avocado (Not for use in California)	To improve fruit set and yield	25 Grams A.I. 65 Grams product 2.2 oz product	Apply at the cauliflower stage of inflorescence development.
TROPICAL FRUIT CROPS – FIELD USES			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**APPLICATION TIMING**
Pineapple (Not for use in California)	To improve fruit size.	125 – 250 Grams A.I. 312.5 – 625 Grams product 11.3 – 22.5 Ounces product	Apply after flowering. Make 2 applications at 2-5 weeks intervals. Direct sprays to the fruit. Use sufficient water to achieve adequate coverage.
	To improve uniformity of fruit maturity and enhance harvest efficiency.	12 – 24 Grams A.I. 30 – 60 Grams product 1.1 – 2.2 Ounces product	Make the first application a few days after planting when plants are established. Repeat applications at 3-4 weeks intervals.
Coffee (Not for use in California)	To induce flower bud break	10 – 50 Grams A.I. 25 – 125 Grams product 0.9 – 4.5 oz product	Apply in sufficient water volume to assure total coverage of developing buds along all laterals (arrange nozzles for coverage from bottom up as well as top down of laterals and leaves). Multiple applications at 3 to 7 day frequency may be required over a period of 10 to 14 days Use a non-ionic surfactant at 0.05% v/v to enhance performance.

TROPICAL CROPS – FIELD USES			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**APPLICATION TIMING**
Sugarcane (Not for use in California)	To maintain yields in older plantings, increase bio-mass and stimulate growth before harvest of cane in	1.0 – 2.0 Grams A.I. 2.5 – 5 Grams product	Apply at 1st to 5th internode stage to ratoon crop in at least 20 gal/A. Addition of non-ionic surfactant may

	older production fields (>3 years).	0.1 – 0.2 oz product	increase activity.
TROPICAL CROPS – FIELD USES (Cont.)			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**APPLICATION TIMING**
Banana (Not for use in California)	ESTABLISHED PLANTINGS: To stimulate plant growth and to reduce the effects of stresses caused by insect, disease or adverse weather. These applications have been known help improve fruit size, quality and overall yields.	AERIAL FOLIAR SPRAY: 2.5 – 12 Grams A.I. per acre per spray. 6 – 30 g product 0.25 – 1.1 oz product	Make applications at 1 to 3 weeks frequency throughout the year. Use higher dose rates and shorter spray frequency prior to and during the periods of stress. Use sufficient water volume to achieve adequate canopy coverage. Tank mixing with the standard pesticide treatments applied by air is permissible.
		GROUND FOLIAR SPRAY: 2.5 – 12 Grams A.I. per acre per spray. 6 – 30 Grams product 0.25 – 1.1 oz product	Direct applications to developing daughter plants and pre-bloomed mother plants. Make applications every 1 to 3 weeks throughout the year as needed. Use higher dose rates and shorter spray frequency during periods of intense stress. Use sufficient water volume to achieve adequate canopy coverage Tank mixing with standard pesticides is permissible.
	NEW PLANTINGS: To stimulate early growth in new plantings, increase plant vigor and accelerate development to flowering.	FOLIAR PLANT SPRAYS: Add 1 gram A.I. per gallon of water.	Make 2 to 3 foliar applications, beginning with the 1st application timing at 3-5 weeks after planting, followed by a 2nd and 3rd application at 2 to 3 week frequency. Use sufficient spray water volume to achieve adequate canopy coverage.

TROPICAL CROPS – FIELD USES (Cont.)			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**APPLICATION TIMING**
(Cont.) Banana (Not for use in California)	BUNCH SPRAYS: To stimulate bunch fruit development, improving fruit size and quality and overall yields.	FOLIAR BUNCH SPRAY: Add 1 - 2 Grams A.I. per gallon of water.	Make applications immediately after floral bunch emergence when hands and fingers are exposed through bunch bagging program. Use sufficient water volume to achieve adequate canopy coverage Tank mixing with standard pesticides is permissible. Add non-ionic surfactant at 0.05% v/v to enhance coverage and uptake.
		PSEUDOSTEM INJECTIONS: Add 2.0 to 5.0 Grams A.I. per gallon of water.	Utilize a 5 ml volume per injection. Make 2 to 4 injections from the 14th true leaf to 5 weeks before shooting. Make the first injection beginning at the 14th to 15th true leaves measured from the 10th Filiform leaf development

TROPICAL CROPS – FIELD USES (Cont.)			
CROP/CULTIVAR	**OBJECTIVE/BENEFIT**	**DOSE RATE**	**APPLICATION TIMING**
Plantain (Not for use in California)	ESTABLISHED PLANTINGS: To stimulate plant growth and to reduce the effects of stresses caused by insect, disease or adverse weather. These applications may help improve fruit size, quality and overall yields.	GROUND FOLIAR SPRAY: Apply 6 − 20 Grams A.I. per acre per spray.	Direct applications to developing daughter plants and pre-bloomed mother plants. Make applications every 1 to 3 weeks throughout the year as needed. Use higher dose rates and shorter spray frequency during periods of intense stress. Use sufficient water volume to achieve adequate canopy coverage Tank mixing with standard pesticides is permissible.
	NEW PLANTINGS: To stimulate early growth in new plantings, increase plant vigor and accelerate development to flowering.	FOLIAR PLANT SPRAYS: Add 1 gram A.I. per gallon of water.	Make 2 to 3 foliar applications, beginning with the 1st application timing at 3-5 weeks after planting, followed by a 2nd and 3rd application at 2 to 3 week frequency. Use sufficient spray water volume to achieve adequate canopy coverage.

SPRAY GUIDELINES FOR VEGETABLE CROPS

For vegetable crops, apply in sprays of sufficient water volumes to ensure thorough fruit wetting. Foliage of treated plants occasionally and temporarily appears lighter green in color due to accelerated growth rates following application. Application to plants of low vigor or under stress (pest, nutritional, or water, etc) causes severe leaf yellowing, poor performance and/ or undesirable effects. Tank-mixing with surfactants, fertilizers, and/or other pesticides should not be done unless compatibility and phytotoxicity testing is done first using appropriate methods.

VEGETABLE CROPS			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**APPLICATION TIMING**
Artichoke	To accelerate maturity and shift harvest to an earlier date.	10 – 20 Grams A.I. 25 – 50 Grams product 0.9 – 1.8 Ounces product	For perennials: apply one to three applications at bud initiation stage. For annuals: apply one to four applications at 2-week intervals, beginning at the fourth true leaf. Use sufficient water volume to ensure thorough wetting of the entire plant (leaves, stems and buds).
Bell Peppers	To promote plant height and leaf size, thus protecting developing fruit from sunburn and leading to an increase in marketable yield.	1 – 2 g a.i. 2.5 – 5.0 g product 0.1 – 0.2 oz product	Begin applications after plants have recovered from transplant shock and are actively growing. Apply 1 – 2 applications at 1 to 2 week intervals. Use sufficient water volume to ensure thorough coverage.
Carrots Fresh and Processing	To delay leaf senescence. Maintaining vigorous foliage has been shown to help reduce the incidence of infection by Alternaria dauci.	1 – 6 Grams A.I. 2.5 – 15 Grams product 0.1 – 0.5 Ounces product	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.			
VEGETABLE CROPS (Cont.)			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE 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. 6.3 – 25 Grams product 0.2 – 0.9 Ounces product	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.			
Cucumber (Not for use in California)	To stimulate fruit set during periods of cool temperatures.	1 – 4 Grams A.I. 2.5 – 10 Grams product 0.1 – 0.4 Ounces product	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.			
Leaf Lettuce	To promote plant growth and improve stand establishment.	0.5 – 1.0 g a.i. 1.25 – 2.5 g product 0.05 – 0.1 oz product	Apply a single application of ProGibb® 40% between the cotyledon stage and prior to harvest. Use sufficient water volume to ensure thorough coverage.
Note: Use of ProGibb® 40% may cause a slight and temporary reduction in the coloration of the foliage. Response to ProGibb® 40% may vary by cultivar. Consult your Valent representative or local specialist before treating unfamiliar cultivars.			
Lettuce for Seed	To obtain uniform bolting and increase seed production.	1 – 4 Grams A.I. 2.5 – 10 Grams product 0.1 – 0.4 Ounces product	Apply one to four applications at two-week intervals, beginning at the fourth true leaf. Use sufficient water volume to ensure thorough wetting.

VEGETABLE CROPS (Cont.)			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**APPLICATION TIMING**
Pepper (Not for use in California)	To promote plant growth	1-3 grams A.I. 2.5 – 7.5 Grams product 0.1 – 0.27 Ounces product	Apply one to two sprays in 25-to-50 gallons of water per acre at two-week intervals. Begin sprays 2 weeks after transplanting.
Pepper (Not for use in California)	To increase fruit set and promote early season fruit growth.	1 – 3 Grams A.I. 2.5 – 7.5 Grams product 0.1 – 0.27 Ounces product	Apply one to two sprays of 25 to 50 gallons per acre at weekly intervals during the flowering period.
NOTE: This use is best for areas with short growing seasons, or when temperatures slow plant growth low. 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 and yield.	1 – 3 Grams A.I. 2.5 – 7.5 Grams product 0.1 – 0.27 Ounces product	Apply in 25-to-50 gallons of water per acre at the beginning of the picking period.
NOTE: The high rate is best for plants with heavy fruit loads.			
Potato Seed (Not for use in California)	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. 0.5 – 1.0 Grams product 0.02 – 0.04 Ounces of product	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.			

VEGETABLE CROPS (Cont.)			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**APPLICATION TIMING**
Rhubarb	To break dormancy on plants receiving insufficient chilling and to increase market-able yield of forced rhubarb.	10 – 20 Grams A.I. 25 – 50 Grams product 0.9 – 1.8 Ounces product	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.			
Spinach	To promote plant growth and improve stand establishment.	2.5 – 10.0 g a.i. 6.25 – 25 g product 0.23 – 0.9 oz product	Apply a single application of ProGibb® 40% between the 1st true leaf and prior to harvest. Use sufficient water volume to ensure thorough coverage.
Note: Use of ProGibb® 40% may cause a slight and temporary reduction in the coloration of the foliage.			
Spinach, Mustard greens, Collard greens and Turnip greens. (Not for use in California)	o facilitate harvest, increase yield and improve quality of fall and over-winter crops.	4 – 10 Grams A.I. 10 – 25 Grams product 0.4 – 0.9 Ounces product	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.			

RICE

CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Seedling Applications (Early Season)			
Rice	To promote early season plant vigor and more uniform seedling growth prior to permanent flood establishment. To aid in rice water weevil control use ProGibb® 40% in a tank mixture combination with a neonicotinoid insecticide such as Belay® at recommended label rates.	1 – 3 Grams A.I. 2.5 – 7.5 Grams product 0.1 – 0.3 Ounces product	Make one to two applications at the 1-2 and/or 4-5 leaf stages of growth.

Note:

- Early flooding reduces the additional flushing costs associated with a delay in establishing the permanent flood, reduce weed infestations and the number of herbicide applications, and/or promote earlier and more uniform grain maturity.
- Do not apply prior to the 2-to-3 leaf stage if gibberellin seed treatment is used.
- 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.
- The use of a non-ionic surfactant has been seen to improve uptake.

RICE (Cont.)

CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Panicle Extension Applications (Late Season)			
Rice (Not for Use in California)	To promote main culm and tiller panicle extension which has been seen to result in improved pollination and seed yield.	3 – 8 Grams A.I. 7.5 – 20 Grams product 0.3 – 0.7 Ounces product	Make a single application between split-boot and 100% panicle heading. Heading applications to the first crop also has been observed to accelerate re-growth of second crop rice.
Rice (Hybrid Seed Production) (Not for use in California)	To promote main culm and tiller panicle extension resulting in improved pollination and seed yield.	0.5 – 2 Grams A.I. 1.25 – 6 Grams product 0.05 – 0.2 Ounces product	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® 40% application.			
Rice (Not for use in California)	Promote yield enhancement of ratoon crop rice by increasing ratoon tiller growth and aiding ratoon stand establishment.	4 – 7 Grams A.I. 10 – 17.5 Grams product 0.4 – 0.6 Ounces product	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® 40% 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® 40% 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® 40% with most commonly used rice herbicides and fungicides.

3) SEED TREATMENT APPLICATION

Mixing Instructions

Apply ProGibb® 40% 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) ensure complete and uniform coverage.

Fill the treatment tank with half of the final tank mix volume. Add the required amount of ProGibb® 40% 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® 40% treated seed and prevent inadvertent use for food, feed, or oil purposes. Treated seed must be labeled in accordance with the requirements of the Federal Seed Act.

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

ProGibb® 40% stimulates seed germination and promotes faster and more uniform stand establishment.			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**APPLICATION TIMING**
Seed treatment for rice (Not for use in California)	To promote germination and emergence for semi-dwarf and tall varieties. To help increase final stand density and uniformity when seed are planted deeper to receive adequate moisture.	0.5 to 2 g A.I. (0.05 – 0.2 oz product) per 100 lbs seed.	For use with drill or broadcast seeding systems.
• **Do not** apply ProGibb® 40% prior to a 24 hour presoak or to water used for the presoak. • **Do not** exceed 0.2 oz of product/100 lbs of seed.			

CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Cotton	Promote early season growth and increase seedling vigor	1 to 6 Grams A.I. 2.5 to 15 Grams product 0.1 to 0.5 Ounces products	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 2 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® 40%to plants that are under drought stress. If the plants are under continuous stress, delay the application of ProGibb® 40% until the stress is alleviated and the plants are beginning to recover.
- Applying more often that necessary to achieve the desired height, results in excessive vegetative growth.
- Avoid drift or accidental application to other crops.

TEMPERATE FIELD CROPS – FIELD USES			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**APPLICATION TIMING**
Dry Bean (Not for use in California)	Promotes early season growth, increased seedling vigor, and increased plant height allowing for improved harvesting efficiency.	1 − 6 Grams A.I. 2.5 − 15 Grams product 0.1 − 0.5 Ounces products	Apply 1 – 2 applications as a foliar broadcast spray during the 3 to 7 leaf/node stage. If applying as a banded spray, reduce rates accordingly. Complete coverage of leaf tissue is essential. Use higher rates when temperatures will likely average 75°F or less during the 14 days following application(s).
NOTE: • Do not apply plants that are under drought stress. If plants are under continuous stress, delay the application until the stress is alleviated and the plants are beginning to recover. • Applying more often than necessary to achieve the desired height results in excessive vegetative growth. • Highly variable responses based on genetic background or variety are known to occur. Caution should be used when applying to varieties where there is no prior knowledge of the response.			
Hops Seeded and seedless Fuggle hops and similar varieties adapted to the North-western states.	To increase fruit set and yield.	4 − 6 Grams A.I. 10 − 15 Grams product 0.4 −0.5 Ounces product	Make a single application in 100-150 gallons of water per acre when vine growth is 5-8 feet in length.
Note: Do not apply ProGibb® 40% to plants that are under drought stress. Applications during stem elongation may increase lodging. Avoid drift or accidental application to other crops.			

TEMPERATE FIELD CROPS – FIELD USES			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**APPLICATION TIMING**
Soybean (Not for Use in California)	To improve mechanical harvest efficiency by elongating the first and second internode of young plants.	1 − 20 Grams A.I. 2 − 50 Grams product 0.1 −1.8 Ounces product	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 gallons water/A.I.
Note: Differences in response by variety may be large. Caution should be used when using on untested varieties.			
	To enhance post-emergence grass control.	1 − 20 Grams A.I. 2 − 50 Grams product 0.1 −1.8 Ounces product.	V2-R5: Apply with SelectMax® herbicide for enhanced control of Johnsongrass and volunteer corn in soybeans.
V5-R3	To increase pod set and increase the growth of the plant.	2 − 4 Grams A.I. 6 − 11 Grams product 0.2 − 0.4 Ounces product	Make a single application at V5-R3 growth stage.
Note: Differences in response by variety may be large. Caution should be used when using on untested varieties. Consult your Valent representative.			
Peanuts (Not for use in California)	To promote plant growth.	2.5 – 5.0 Grams A.I 6 − 12 Grams product 0.2 − 0.4 Ounces product	Make two to four applications on a two week interval. Begin sprays two weeks after emergence.
	To enhance post-emergence grass control.	5 – 20 Grams A.I. 12 − 50 Grams product 0.4 −1.8 Ounces product.	Apply with SelectMax® herbicide for enhanced control of Johnsongrass and volunteer corn in peanuts.
Note: Differences in response by variety may be large. Caution should be used when using on untested varieties. For specific variety information, consult your Valent representative.			

SelectMax® registered trademark of Valent USA Corporation.

GENERAL PRE-PLANT USE: For Use in pre-plant burndown herbicide applications.

USE	OBJECTIVE/BENEFIT	RATE/ACRE	APPLICATION TIMING
Soil application			
(Not for use in California)	To promote early Palmer amaranth and/or waterhemp seed germination to better synchronize their sensitivity.	5 – 20 Grams A.I 12 − 50 Grams product 0.4 −1.8 Ounces product.	Apply with a pre-emergence herbicide that has activity on Palmer amaranth and/or waterhemp (e.g. Valor®, Valor® XLT, Gangster®, and Fierce®).

Valor®, Valor® XLT, Gangster®, and Fierce® are registered trademarks of Valent USA Corporation.

SPRAY GUIDELINES FOR WATERCRESS:

Watercress			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE 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. 37.5 – 62.5 Grams product 1.4 – 2.3 Ounces product	Make one or two applications per acre per crop 3 to 7 days before harvest. Use 50-100 gallons of water per acre.

TURF GRASS – SEED TREATMENT

CROP/VARIETY	OBJECTIVE/ BENEFIT	USE RATE/100 LB. OF SEED	APPLICATION TIMING
Grasses grown for seed production (For use in AZ, GA, MO and OR only)	To promote germination, emergence and stand uniformity	0.5 - 2.1 Grams A.I 1.25 - 5.25 Grams product 0.05 - 0.2 Ounces product	For every 100 lbs turf grass seed to be treated, mix the desired amount of product into 8 - 20 fl ounces of water to form treatment solution
Note: • Do not apply product prior to a 24 hour presoak or to water used for the presoak. • Do not exceed 2.1 grams a.i./100 lbs of seed.			

CITRUS: POST-HARVEST APPLICATIONS

CITRUS – DELAY SENESCENCE			
CROP/ VARIETY	**OBJECTIVE/ BENEFIT**	**USE RATE**	**APPLICATION METHOD**
Lemon	To delay fruit senescence and prolong storage life. The delay in senescence has been shown to reduce the incidence of infection by sour rot (Geotrichum candidum).	50-100 PPM	Dilute 0.07 to 0.14 oz (2 to 4 grams) a.i. per 10 gallons of final post-harvest application solution. Apply post-harvest application solution to the entire fruit as a spray or drench.
Yellow lemons and other mature citrus fruit	To delay aspects of rind senescence and color changes	50-100 PPM	Dilute 0.07 to 0.14 (2 to 4 grams) a.i. per 10 gallons of final post-harvest application solution. Apply post-harvest application solution to the entire fruit as a spray or drench.

BANANA/PLANTAIN: POST-HARVEST APPLICATION

Not for Use in California

CITRUS – DELAY SENESCENCE			
CROP/ VARIETY	**OBJECTIVE/ BENEFIT**	**USE RATE**	**APPLICATION METHOD**
Banana	To extend fruit green life	Apply a solution of 750 to 1500 ppm. The solution can be sprayed or brushed to the crown.	Apply after washing the fruit and before packing. It is permissible to tank-mix with other protectants.
Plantain	To extend fruit green life	Apply a solution of 1500 ppm . The solution can be sprayed or brushed to the crown.	Apply after washing the fruit and before packing. It is permissible to tank-mix with other protectants.

PINEAPPLE: POST-HARVEST APPLICATION

Not for Use in California

PINEAPPLE – DELAY SENESCENCE			
CROP/ VARIETY	**OBJECTIVE/ BENEFIT**	**USE RATE**	**APPLICATION METHOD**
Pineapple	To maintain the quality of the crown (greenness, turgidity), delay desiccation, discoloration, and browning, and improve overall appearance during transit, storage and shelf life.	Apply at the rate of 250 – 500 ppm as a spray directed to the crown	Apply after harvest and prior to packing. Make sure all leaves are thoroughly covered with the spray without excessive runoff.

PROGIBB® 40% CONVERSIONS

ProGibb® 40% contains 0.04 ounces (1.0 gram) of active ingredient (A.I) per 0.09 ounces (2.5 Grams) of product.

To convert from Grams A.I. to Grams Product – Multiply Grams A.I. x 2.5
(i.e. 32 g A.I. x 2.5 = 80 g ProGibb® 40%)

To convert from Grams A.I. to Dry Ounces Product – Multiply Grams A.I. x 0.09
(i.e. 32 g A.I. x 0.09 = 2.9 oz ProGibb® 40%)

CONVERSION TABLE *(for the 11.3 oz [320 g] size)*

Grams of Active Ingredient	Ounces of Active Ingredient	Grams of ProGibb® 40%	Ounces of ProGibb® 40%
2	0.07	5	0.2
4	0.14	10	0.4
5	0.18	12.5	0.5
6	0.21	15	0.6
8	0.28	20	0.7
10	0.35	25	0.9
15	0.53	37.5	1.4
20	0.71	50	1.8
30	1.06	75	2.7
40	1.41	100	3.6
50	1.76	125	4.5
60	2.12	150	5.4
80	2.82	200	7.2
100	3.53	250	9.0
128	4.52	320	11.5

Ounces of ProGibb® 40% for given ppm's of Gibberellic Acid at Different Water Volumes.

Gallons of Water	PPM GA3									
	4	5	6	8	10	15	20	30	40	50
75	0.10	0.13	0.15	0.20	0.25	0.38	0.51	0.76	1.02	1.27
100	0.13	0.16	0.20	0.26	0.32	0.49	0.65	0.97	1.30	1.62
125	0.16	0.20	0.25	0.32	0.41	0.61	0.82	1.23	1.63	2.04
150	0.20	0.25	0.30	0.40	0.51	0.76	1.02	1.52	2.03	2.53
200	0.26	0.32	0.40	0.52	0.65	0.97	1.30	1.95	2.60	3.24
250	0.33	0.41	0.50	0.66	0.81	1.22	1.62	2.43	3.25	4.06
300	0.40	0.51	0.61	0.78	1.02	1.52	2.03	3.05	4.06	5.08
400	0.52	0.65	0.80	1.00	1.30	1.95	2.60	3.89	5.19	6.49
500	0.65	0.81	1.00	1.30	1.62	2.43	3.24	4.88	6.49	8.11
600	0.77	1.02	1.20	1.55	2.03	3.05	4.10	6.10	8.13	10.16
750	1.00	1.22	1.50	2.0	2.43	3.65	4.87	7.30	9.73	12.17

Note: The numbers inside the table are the Grams of ProGibb® 40% needed to obtain the desired ppm's for each gallonage.

Ounces of ProGibb® 40% for given ppm's of Gibberellic Acid at Different Water Volumes.

Gallons of Water	Desired parts per million (ppm) gibberellic acid							
	25	50	75	100	250	500	750	1500
10	0.10	0.18	0.28	0.35	0.88	1.76	2.65	5.29
20	0.18	0.35	0.53	0.71	1.76	3.53	5.29	10.58
25	0.21	0.46	0.67	0.88	2.22	4.41	6.63	13.23
50	0.46	0.88	1.34	1.76	4.41	8.82	13.23	26.46
100	0.88	1.76	2.65	3.53	8.82	17.64	26.46	52.91
150	1.34	2.65	3.99	5.29	13.23	26.46	39.68	79.37
200	1.76	3.53	5.29	7.05	17.64	35.27	52.91	105.82
250	2.22	4.41	6.63	8.82	22.05	44.09	66.14	132.28
300	2.65	5.29	7.94	10.58	26.46	52.91	79.37	158.73
400	3.53	7.05	10.58	14.11	35.27	70.55	105.82	211.64
500	4.41	8.82	13.23	17.64	44.09	88.18	132.28	264.55

Note: The numbers inside the table are the ounces of ProGibb® 40% needed to obtain the desired ppm rates for each gallonage.

Example:
To make 250 gals of a 50 PPM gibberellic acid solution, dissolve 4.41 oz of ProGibb® 40% in 250 gals of water (see shaded area).

CONVERSION TABLE *(for the 2.82 oz [80 g] size)*
ProGibb 40% contains approximately 0.35 oz (10 Grams) of active ingredient per 0.88 oz (25 Grams) of product.

Grams of Active Ingredient	Ounces of Active Ingredient	Grams of ProGibb® 40%	Ounces of ProGibb® 40%
2	0.07	5	0.2
4	0.14	10	0.4
5	0.18	12.5	0.5
6	0.21	15	0.6
8	0.28	20	0.7
10	0.35	25	0.9
15	0.53	37.5	1.4
20	0.71	50	1.8
30	1.06	75	2.7
40	1.41	100	3.6
50	1.76	125	4.5
60	2.12	150	5.4
80	2.82	200	7.2

(Alternate for 2.82 oz [80 g] packaging)

Gallons of Water	parts per million (ppm) gibberellic acid									
	4	5	6	8	10	15	20	30	40	50
75	0.11	0.13	0.16	0.21	0.26	0.40	0.53	0.79	1.06	1.34
100	0.14	0.18	0.21	0.28	0.35	0.53	0.71	1.06	1.41	1.76
125	0.18	0.22	0.26	0.35	0.44	0.66	0.88	1.32	1.76	2.22
150	0.21	0.26	0.32	0.42	0.53	0.79	1.06	1.59	2.12	2.65
200	0.28	0.35	0.42	0.56	0.71	1.06	1.41	2.12	2.82	3.52

Note: The numbers inside the table are the ounces of ProGibb® 40% needed to obtain the desired ppm rates for each gallonage.

Example:
To make 200 gallons of a 40 ppm gibberellic acid solution, dissolve 2.82 oz of ProGibb® 40% in 200 gallons of water (see shaded area).

Warranty and Disclaimer Statement:
To the fullest extent permitted by 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.

Registered by:
Valent BioSciences Corporation
870 Technology Way, Suite 100
Libertyville, IL 60048 - 04-XXXX/RX
Distributed by Valent U.S.A. Corporation.

ProGibb 40% Plant Growth Regulator, Water Soluble Granule

[Alternate Brand Name: **RyzUp SmartGrass® Plant Growth Regulator, Water Soluble Granule]**

[Sub-Label II]

For Organic Production

Active Ingredient
Gibberellin A_3.....40.0% w/w
Other Ingredients.....60.0% w/w
Total.....100.0% w/w

Contains a total of 4.51 oz (128 grams) of Gibberellic Acid in 11.30 oz (320 grams) of product.

KEEP OUT OF REACH OF CHILDREN

CAUTION

See succeeding panel for First Aid, additional Precautionary Statements, Directions for Use and Storage/Disposal Statements.

EPA Registration No. 73049-1
EPA Establishment No.

Valent BioSciences Corporation
870 Technology Way, Suite 100
Libertyville, IL 60048
1-847-968-4700

Net Contents: 3, 12 and 30 ounce bottles by weight (80 gram, 320 gram and 850 gram bottles)

This container will treat _____acre at the maximum use rate, as directed 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 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. You may also call toll-free 1-800-892-0099 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-6-Valent.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

Caution: Causes moderate eye irritation. Harmful if absorbed through 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)
Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Waterproof gloves.
- Shoes plus socks.

Follow the 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
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS
For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning or 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 Tribe agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

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

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

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

- Coveralls.
- Waterproof gloves.
- Shoes plus socks.

GENERAL DIRECTIONS FOR USE

Use only as directed. Read the label thoroughly and make sure it is understood before making applications. Keep out of reach of children.

Application Instructions:

- ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name RyzUp SmartGrass®Plant Growth Regulator Water Soluble granule(hereafter referred to as RyzUp SmartGrass®) 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 local Valent representative or crop 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 indicated locally by the local Valent representative or crop specialist.

- For optimum effectiveness, thorough spray coverage of the target area must be achieved. Prepare solution concentrations by mixing the required amount of product with water in a clean, empty spray tank. Use of a non-ionic surfactant has been shown to increase wetting and uptake of the active ingredient. Discard 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 buffer for water with pH above or below this range.

- Applications made under slow drying conditions (cool to warm temperatures, medium to high relative humidity, and no wind) will increase absorption of the active ingredient by the plant, thus optimizing

effectiveness. Night-time applications are encouraged when day-time conditions are not conducive to slow drying conditions.

- Rainfastness: Re-apply if significant rain occurs within 2 hours of application.
- Avoid drift or accidental application to other crops.
- **Compatibility**: When considering tank mixing with other products, use the following compatibility jar test before mixing a whole tank.

Start with a clear glass or plastic quart jar. Add water from the same water source that will be used for the larger tank mix. Add the pesticides in correct proportions. Mix thoroughly and let stand for a minimum 15 minutes. Heat, separation, gelling, are all signs of incompatibility. Before using any mixes that pass the jar tests for compatibility, it is imperative to test the mixture on a designated area as it may result either in phytotoxicity or ineffectiveness. For further information, consult your local Valent representative.

- 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.
- Entry into treated areas is allowed after the restricted entry interval (REI) of 4 hours before this time entry is prohibited unless wearing appropriate PPE (coveralls, waterproof gloves, shoes plus socks).

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

Pesticide Storage
Keep containers tightly closed when not in use.

Pesticide Disposal
Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

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

SPRAY GUIDELINES
Apply in sprays of sufficient water volumes to ensure thorough wetting. Tank-mixing with surfactants, fertilizers, and/or other pesticides should not be done unless compatibility and phytotoxicity testing is done first using appropriate methods.

DIRECTIONS FOR CHEMIGATION
Fill the supply tank with the desired amount of water and begin agitation. Agitation should be maintained throughout the mixing and application process. Add the required amount of ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name RyzUp SmartGrass®] to supply tank in order to achieve the final solution rate recommended for the specific crop to be treated. ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name RyzUp SmartGrass®] should be applied at the end of water application (prior to last complete cycle in moving systems).

CHEMIGATION PRECAUTIONS:
Apply this product only through the following systems: center pivot, lateral move, side/wheel roll, traveler, solid set, big gun or hand move which have overhead sprinklers. 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.

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.

PASTURES & FORAGE – FIELD USES			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**APPLICATION TIMING**
Perennial Forage Grasses	To stimulate dry matter production for grazing, hay, green chop or silage when cool season conditions limit growth rates.	3 - 11 Grams A.I. 7.5 – 27.5 Grams product 0.3 – 1.0 Ounces product	Spring Application: 1 to 3 applications every 3 to 4 weeks starting at green up after 1 to 2 inches of new shoot growth has emerged. Autumn Application: 1 to 3 applications every 3 to 4 weeks starting when forage growth has slowed due to cool temperatures. Best response occurs when average daily temperatures are between 40° F to 60° F and adequate moisture and nutrition are present.
Annual Forage Grasses	To stimulate dry matter production for grazing, hay, green chop or silage when cool season conditions limit growth rates.	3 - 11 Grams A.I. 7.5 – 27.5 Grams product 0.3 – 1.0 Ounces product	Apply 1 to 6 applications every 3 to 4 weeks from autumn to early spring during periods of suboptimal growth due to cool temperatures. If applying to over-seeded pasture or newly established pasture, apply only after seedlings are well established. Best response occurs when average daily temperatures are between 40° F to 60° F and adequate moisture and nutrition are present.

PASTURES & FORAGE – FIELD USES (Cont.)			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**APPLICATION TIMING**
Cereal Grains (such as barley, oats, rye, sorghum, wheat, triticale)	To stimulate dry matter production for grazing, hay, green chop or silage when cool season conditions limit growth rates.	3 - 11 Grams A.I. 7.5 – 27.5 Grams product 0.3 – 1.0 Ounces product	Spring Application: 1 to 3 applications every 3 to 4 weeks starting at green up after 1 to 2 inches of new shoot growth has emerged. Autumn Application: 1 to 3 applications every 3 to 4 weeks starting when forage growth has slowed due to cool temperatures. Application to cereal grains during stem elongation (jointing onwards) can result in lodging. Apply during early tillering growth stages prior to stem elongation to avoid lodging. Best response occurs when average daily temperatures are between 40° F to 60° F and adequate moisture and nutrition are present.
Winter Brassicas (such as turnip, kale, rape)	To stimulate dry matter production for grazing, hay, green chop or silage when cool season conditions limit growth rates.	3 - 11 Grams A.I. 7.5 – 27.5 Grams product 0.3 – 1.0 Ounces product	Spring Application: 1 to 3 applications every 3 to 4 weeks starting at green up after 1 to 2 inches of new shoot growth has emerged. Autumn Application: 1 to 3 applications every 3 to 4 weeks starting when forage growth has slowed due to cool temperatures. Best response occurs when average daily temperatures are between 40° F to 60° F and adequate moisture and nutrition are present.

NOTE:

- Foliage occasionally and temporarily appears lighter green in color due to accelerated growth rates following application. For best results, ensure fertility is adequate to sustain additional pasture growth.
- Plants will not respond to treatment without adequate moisture or if under pest and/or nutritional stress.
- Once plants are at their maximum growth rate under optimal temperatures application of RyzUp SmartGrass® will not stimulate additional growth.
- Plants will not respond when the ground is frozen.
- Plants treated at maximum physiological size will not respond with additional growth.

COVER CROPS – FIELD USES

Crop	Objective/ Benefit	Use Rate/Acre	Application Timing
Annual Grasses (such as barley, oats, rye) **Annual Broadleaves and Legumes** (such as vetch, clover, cowpea, radish)	To stimulate root growth and dry matter production, reducing erosion and improving soil quality.	0.3 – 1.0 ounces product	Apply 1 to 3 applications every 3 to 4 weeks starting after the primary crop is harvested, when 1 to 2 inches of shoot growth in the cover crop has emerged.

FIELD USES			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**APPLICATION TIMING**
Corn: Silage, Field	To increase yield and help overcome the effects of heat or drought.	2 – 6 Grams A.I. 5 − 15 Grams product 0.3 − 0.6 Ounces product	Apply at V2 - V6
Corn: Popcorn, Sweet corn, Seed corn	To increase yield and help overcome the effects of heat or drought.	2 – 6 Grams A.I. 5 − 15 Grams product 0.3 − 0.6 Ounces product	Apply at V2 – V6

Note:

- Foliage occasionally and temporarily appears lighter green in color due to accelerated growth rates following application. For best results, ensure fertility is adequate to sustain additional pasture growth.
- Plants will not respond to treatment without adequate moisture or if under pest and/or nutritional stress.
- Better results have been seen with the use of a non-ionic surfactant.
- ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name RyzUp SmartGrass®] is compatible as a tank-mix partner with Roundup® herbicide on glyphosate resistant corn. Use of ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name RyzUp SmartGrass®] with other tank-mix partners is done solely at the user's risk.
- Always consider tank-mix partner recommendations when using ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name RyzUp SmartGrass®].
- Do not tank-mix ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name RyzUp SmartGrass®] with 2,4-D or any herbicide containing 2,4-D when applying to corn.
- ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name RyzUp SmartGrass] has been shown to enhance the effects of certain herbicides containing dicamba or HPPD inhibitors (group #27). Tank-mix combinations of ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand

name RyzUp SmartGrass] plus herbicides containing dicamba or HPPD inhibitors could result in temporary, injury on corn. Users should be aware that these effects may occur before applying ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name RyzUp SmartGrass] in combination with herbicides containing either dicamba or with HPPD inhibitors on hybrids with a known sensitivity to these classes of herbicides.

COVER CROPS – FIELD USES (Cont.)

CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Cotton	Promote early season growth and increase seedling vigor	1 to 6 Grams A.I. 2.5 to 15 Grams product 0.1 to 0.5 Ounces products	Apply 1 – 2 applications as a foliar broadcast spray during the 3 to 7 leaf/node stage. If applying as a banded spray, reduce rates accordingly. Complete coverage of leaf tissue is essential. Use higher rates when temperatures will likely average 75° F or less during the 14 days following application(s).
Sugarcane (Not for use in California)	To maintain yields in older plantings, increase bio-mass and stimulate growth before harvest of cane in older production fields (>3 years)	1.0 to 2.0 Grams A.I. 2.5 to 5 Grams product 0.1 to 0.2 Ounces products	Apply at 1st to 5th internode stage to new plantings or ratoon crop in at least 20 gal/A. Addition of non-ionic surfactant may increase activity.

TEMPERATE FIELD CROPS – FIELD USES

CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Soybean (Not for use in California)	To improve mechanical harvest efficiency by elongating the first and second internode of young plants.	1 − 20 Grams A.I. 10-20 Grams A.I. on LV label 2 − 50 Grams product 0.1 −1.8 Ounces product	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 gallons water/A.I.
	To enhance post-emergence grass control.	1 − 20 Grams A.I. 2 − 50 Grams product 0.1 −1.8 Ounces product.	V2-R5: Apply with SelectMax® herbicide for enhanced control of Johnsongrass and volunteer corn in soybeans.
V5-R3	To increase pod set and increase the growth of the plant.	2 − 4 Grams A.I. 6 − 11 Grams product 0.2 − 0.4 Ounces product	Make a single application at V5-R3 growth stage.

Note: Differences in response by variety may be large. Caution should be used when using on untested varieties. Consult your Valent representative.

WARRANTY AND DISCLAIMER STATEMENT

To the fullest extent permitted by 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.

Registered by:
Valent BioSciences Corporation
870 Technology Way, Suite 100
Libertyville, IL 60048
04-XXXX/RX
Distributed by Valent U.S. A. Corporation.

ProGibb Plant Growth Regulator, Water Soluble Granule

[Alternate Brand Name **RyzUp SmartCorn™ Plant Growth Regulator, Water Soluble Granule]**

[Sub-Label III]

For Organic Production

Active Ingredient
Gibberellin A_3.....40.0% w/w
Other Ingredients.....60.0% w/w
Total.....100.0% w/w

Contains a total of 128 grams of Gibberellic Acid in 320 grams of product.

KEEP OUT OF REACH OF CHILDREN

CAUTION

See succeeding panel for First Aid, additional Precautionary Statements, Directions for Use and Storage/Disposal Statements.

EPA Registration No. 73049-1
EPA Establishment No.

Valent BioSciences Corporation
870 Technology Way, Suite 100
Libertyville, IL 60048
1-847-968-4700

Net Contents: 12 and 30 ounce bottles by weight (320 gram and 850 gram bottles) ()
This container will treat _____acre at the maximum use rate, as directed 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 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. You may also call toll-free 1-800-892-0099 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-6-Valent.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

Caution: Causes moderate eye irritation. Harmful if absorbed through 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)
Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Waterproof gloves.
- Shoes plus socks.

Follow the 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
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS
For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning or 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 Tribe agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

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

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

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

- Coveralls.
- Waterproof gloves.
- Shoes plus socks.

GENERAL DIRECTIONS FOR USE

Use only as directed. Read the label thoroughly and make sure it is understood before making applications. Keep out of reach of children.

Application Instructions:

- ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name RyzUp SmartCorn™] (hereafter referred to as RyzUp SmartCorn™] water soluble granule 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 local Valent representative or crop 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 indicated locally by the local Valent representative or crop specialist.

- For optimum effectiveness, thorough spray coverage of the target area must be achieved. Prepare solution concentrations by mixing the required amount of product with water in a clean, empty spray tank. Use of a non-ionic surfactant has been shown to increase wetting and uptake of the active ingredient. Discard 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 buffer for water with pH above or below this range.

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

- Rainfastness: Re-apply if significant rain occurs within 2 hours of application.

- Avoid drift or accidental application to other crops.

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

Start with a clear glass or plastic quart jar. Add water from the same water source that will be used for the larger tank mix. Add the pesticides in correct proportions. Mix thoroughly and let stand for a minimum 15 minutes. Heat, separation, gelling, are all signs of incompatibility. Before using any mixes that pass the jar tests for compatibility, it is imperative to test the mixture on a designated area as it may result either in phytotoxicity or ineffectiveness. For further information, consult your local Valent representative.

- For aerial applications spray volumes must be greater than 2 gallons per acre (10 gallons per acre for tree crops).

- No preharvest interval is required for this product.

- Entry into treated areas is allowed after the restricted entry interval (REI) of 4 hours before this time entry is prohibited unless wearing appropriate PPE (coveralls, waterproof gloves, shoes plus socks).

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

Pesticide Storage
Keep containers tightly closed when not in use.

Pesticide Disposal
Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

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

SPRAY GUIDELINES
Apply in sprays of sufficient water volumes to ensure thorough wetting.. Tank-mixing with surfactants, fertilizers, and/or other pesticides should not be done unless compatibility and phytotoxicity testing is done first using appropriate methods.

DIRECTIONS FOR CHEMIGATION
Fill the supply tank with the desired amount of water and begin agitation. Agitation should be maintained throughout the mixing and application process. Add the required amount of ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name RyzUp SmartCorn™®] to supply tank in order to achieve the final solution rate recommended for the specific crop to be treated. ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name RyzUp SmartCorn™] should be applied at the end of water application (prior to last complete cycle in moving systems).

CHEMIGATION PRECAUTIONS:
Apply this product only through the following systems: center pivot, lateral move, side/wheel roll, traveler, solid set, big gun or hand move which have overhead sprinklers. 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.

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.

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FIELD USES			
CROP/VARIETY	**OBJECTIVE/BENEFIT**	**USE RATE/ACRE**	**APPLICATION TIMING**
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WARRANTY AND DISCLAIMER STATEMENT
To the fullest extent permitted by 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.

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