

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

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

August 4, 2016

Regiane G. Pereira Regulatory Affairs Valent BioSciences Corporation 870 Technology Way Libertyville, IL 60048

Subject: Non-PRIA (Pesticide Registration Improvement Act) Labeling Amendment – correct application rate for seed potato Product Name: ProGibb 40% Plant Growth Regulator Water Soluble Granule EPA Registration Number: 73049-1 Application Date: 15 July 2016 OPP Decision Number: 519597

Dear Ms. Pereira:

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

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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 Cody Kendrick of my team by phone at (703) 347-0468 or via email at kendrick.cody@epa.gov.

Sincerely,

andrew P. Bycelow

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

Enclosure

#### LABEL AMENDMENT

**A C C E P T E D** 08/04/2016

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 2004004

73049-1

MASTER LABEL

#### Primary Product Name: ProGibb<sup>®</sup> 40% Plant Growth Regulator, Water Soluble Granule

Sublabel I: ProGibb<sup>®</sup> 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.

Sublabel II: ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name RyzUp<sup>®</sup> SmartGrass<sup>®</sup> Plant Growth Regulator, Water Soluble Granule]; For agricultural use on pastures, forage crops, corn and soybean.

Sublabel III: ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name RyzUp<sup>®</sup> SmartCorn<sup>TM</sup>, Plant Growth Regulator, Water Soluble Granule] For Agricultural Use on Corn

For Organic Production

Active Ingredient		
Gibberellin A <sub>3</sub>	40.0%	W/W
Other Ingredients	. 60.0%	w/w
Total		

Contains a total of 128 grams of Gibberellic Acid in 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, Suite 100 Libertyville, IL 60048

Net Contents: 2.5 gram sachets, 80, 320, or 850 gram bottles (3, 12 and 30 ounce bottles by weight) This container will treat \_\_\_\_\_\_ acre at the maximum use rate, as directed for use on \_\_\_\_\_\_.

### SUB-LABEL I

# ProGibb<sup>®</sup> 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.

#### PROGIBB<sup>®</sup> 40% Plant Growth Regulator Water Soluble Granule

For Organic Production

Active Ingredient	
Gibberellin A <sub>3</sub>	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: 2.5 grams, 80 grams, 320 grams, and 850 grams (0.09, 3, 12 and 30 ounces by weight.)

This container will treat \_\_\_\_\_\_acre at the maximum use rate, as directed for use on \_\_\_\_\_\_.

	FIRST AID			
<ul> <li>If in eyes</li> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>				
If on skin or clothing				
	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  $\underline{4}$  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<sup>®</sup> 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<sup>®</sup> 40% with other agricultural products are not necessarily available.

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

Apply ProGibb<sup>®</sup> 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, 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: (80 or 320 or 850 gram 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 <sup>1</sup>/<sub>4</sub> 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.

#### (2.5 grams 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	Make one to three appl		oom when	
reduce costs of thinning, allow better air circulation	flower clusters are 2 to	7 inches long.		
to aid in the control of bunch rot, and increase light				
penetration to aid in sugar development.				
	Grams	Grams	Ounces	
CROP/CULTIVAR	A.I./Acre	Product/Acre	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				
<b>OBJECTIVE/BENEFIT</b>	APPLI	APPLICATION TIMING		
For decreased berry set, reduced hand-thinning		Make one to four applications during bloom. Make only		
costs, and hastened maturity.	1-2 applications for "C	ther Seedless Grag	pes." When the	
	bloom period is extend	bloom period is extended, subsequent sprays are to be		
	made 1 to 7 days after	made 1 to 7 days after the first application.		
	Grams	Grams Grams Ounces		
CROP/CULTIVAR	A.I./Acre	<b>Product/Acre</b>	<b>Product/Acre</b>	
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	
<b>NOTE:</b> At the high end of the prescribed range of rates and number of applications, expect significantly more				

**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			
<b>OBJECTIVE/BENEFIT</b>	IVE/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         Grams         Ounces           A.I./Acre         Product/Acre         Product/Acre		
Seedless Grapes	16 – 24	40 - 60	1.4 – 2.2 oz

BERRY SIZING SPRAYS - SEEDLESS TABLE GRAPE				
OBJECTIVE/BENEFIT APPLICATION TIMING			N TIMING	
For larger berries and large in conjunction with establis thinning practices.		sed Make one to four applications beginning when the average		
	are less effective.			ioni die nice sizing sprag
	TARGET	<u> </u>	G	
	BERRY DIAMETER*	Grams	Grams	Ounces Product/Acre
CROP/CULTIVAR		A.I./Acre	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				

**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.

<b>BERRY SIZING CLUSTER DIP – SEEDED and SEEDLESS TABLE GRAPE</b>			
<b>OBJECTIVE/BENEFIT</b>	APPLICATION TIMING		
To increase berry size.	Apply 20 - 50 ppm GA3 solution as a dip or direct spray to the cluster when berries reach 3-14 mm.		
	Rate Per 5 Gallons Treatment Solution		
CROP/CULTIVAR	PPM A.I. Grams Product Ounces Product		
Seedless Grapes	20-50 1-2.5 0.1-0.25		
<b>NOTE:</b> To prepare dip solution, add $1 - 2.5$ gram ProGibb <sup>®</sup> 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				
<b>OBJECTIVE/E</b>	BENEFIT	APPLICATION TIMING		
To increase berry size in	listed cultivars;	Make one application during the indicated berry diameter rang		berry diameter range
and also to reduce berry	shrivel in	to the entire vine.		
Emperor.				
	BERRY		Rate	
	DIAMETER	Grams	Grams	Ounces
<b>CROP/CULTIVAR</b>	(mm)*	A.I./Acre	<b>Product/Acre</b>	Product/Acre
Emperor	12 -16			
Red Globe	12 -18			
Calmeria	12 -16	20	50	1.8
Christmas Rose	12 -16	20	50	1.0
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			
<b>OBJECTIVE/BENEFIT</b>	APPLICATION TIMING		
To increase berry size.	Make one application 3-5 days after full bloom, but before shatter begins.		
	Grams Grams Ounces		
CROP/CULTIVAR	A.I./Acre Product/Acre 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 – INCREASE FRUIT SET				
<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	USE RATE/ACRE	APPLICATION TIMING	
Naval, Valencia*, and Ambersweet Orange*	To enhance fruit set and yield.	15 – 25 Grams A.I. 37.5 – 62.5 Grams product	Make a single dilute spray between mid-December and late January using sufficient spray volume for adequate coverage of tree canopy	
*(Not for use in California)		1.4 – 2.3 Ounces product		
crops. In these blocks ability to set fruit, sup	<b>NOTE:</b> 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: FIELD APPLICATIONS**

CITRUS – INCREASE FRUIT SET (Cont.)					
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING		
Grapefruit	To enhance fruit set, size and yield	8 – 30 Grams A.I.	Make a single application in December - January. Use a		
(Not for use in California)		20 – 75 Grams product	dilute spray with sufficient spray volume for adequate		
		0.7 - 2.7 Ounces	coverage of tree canopy.		
		product	Typically 125 – 175 gallons of		
			water per acre has been sufficient.		
	<b>NOTE:</b> 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				
	Differential responses to the P				
	egree of fruit set achieved. Red creases in mature leaf drop occ		are known to occur as a result of		

CITRUS – REDUCE FRUIT DROP			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Star Ruby	To reduce early-season	25 – 35 Grams A.I.	Make a single dilute
Grapefruit	small fruit drop of Star Ruby Variety thereby	62.5 – 87.5 Grams product	application during the bloom period.
(Not for use in	increasing yields.	L.	bioom period.
California)		2.3 – 3.2 Ounces product	
<b>NOTE:</b> Results vary from season to season depending on environmental conditions. Maintain a well-balanced fertilization and watering program.			

	CITRUS – DE	LAY RIND AGING	
<b>CROP/VARIETY</b>	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	<ul> <li>Make one or two applications as a concentrate or dilute spray.</li> <li>Early application: spray approximately 2 weeks prior to color break (typically AUG. – NOV.).</li> <li>This timing causes the greatest delay in rind aging and produces the firmest rind possible.</li> <li>AND/OR</li> <li>Late application: one application after marketable color (typically OCT. – DEC.).</li> <li>This late spray has been known to cause re-</li> </ul>
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	greening. Make a single application as a concentrate or dilute spray in August to October to target crop of young fruit.
<ul><li>apply from Januar</li><li>Slower color devel</li></ul>	arly spray to groves that will b y through July, as production i lopment is to be expected in th cur. After marketable color is a e tree. To delay aging and softening of the rind, and to reduce creasing and puffiness	s often reduced the following e target crop. Increased re-gi	g year. reening of mature fruit has

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.	
	early harvest is planned. Do nown to occur. Application du			
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	<ul> <li>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.</li> <li>EARLY: Make application two weeks prior to color break.</li> <li>Apply as a dilute spray (AUG. – SEPT).</li> <li>AND/OR</li> <li>LATE: Make application after marketable color has developed (OCT – DEC).</li> </ul>	
green if allowed to rema begin to break dormanc Results vary from seaso	roves that will be harvested ea ain on the tree for extended pe y, have been observed to adve on to season depending on env d aging, make applications be To decrease rind aging, yellowing, and the amount of small ripe fruit, and to produce a more desirable production pattern relative to market demand.	eriods. Applications made af ersely affect the new crop. D rironmental conditions. For r	delayed. Treated fruit will re- ter December, or when trees to not use concentrate sprays. maximum effect on rind Make a single application when target crop is 1/2 to full size, but still green.	
<b>NOTE:</b> When applied t known to occur.	wo years in a row, an even la	rger difference in harvest pa	ttern and maturity have been	

CITRUS – INCREASE JUICE YIELD			
<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	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<sup>®</sup> 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,	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).	
1316A, Concord, and others		L L	OR	
(Not for use in California)			Make 2-4 applications of 40 Grams A.I. per acre in 40 to 100 gallons of water. Make the first application at full bloom, and the second application within 10-14 days of the first spray. For Weymouth, application can be delayed up to two weeks after bloom to increase size of "shot" berries.	

	TEMPERATE FRUIT CROPS – FRUITSET (Cont.)			
<b>CROP/VARIETY</b>	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.	
California)	temperatures n benefits, vines must be in goo	0.1 – 0.4 Ounces product	applications should be ma at intervals of 10-to-14 da	

	TEMPERATE FRUIT CROPS – SPUR FORMATION			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING	
Sour Cherry	To maintain and extend high fruiting capacity of	4 – 18 Grams A.I.	Apply one spray 14-to-28 days after bloom. Optimum timing is	
(Not for use in California)	sour cherry trees by promoting spur formation and reducing the occurrence	10 – 45 Grams product	defined as that stage when 3-to- 5 terminal leaves have fully expanded, or, at least 1-to-3	
	of "blind" nodes. Spur formation is apparent the year after application.	0.4 – 1.6 Ounces product	inches of terminal shoot extension has occurred. Use 4 – 18 Grams A.I. per acre,	
	Therefore, changes in shoot, spur, and flower production		depending on tree age and vigor (See Table below). Apply as a	
	will not be evident until two or three years after program initiation.		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 QUAL	JTY
CROP/VARIETY	<b>OBJECTIVE/BENEFIT</b>	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	<ul> <li>Make 1-2 applications depending on crop development.</li> <li>If crop development is uniform, make one application when the fruit is translucent green to straw colored.</li> <li>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.</li> <li>Use sufficient water volume</li> </ul>
NOTE			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.

CROP/			
VARIETY	<b>OBJECTIVE/BENEFIT</b>	USE RATE/ACRE	APPLICATION TIMING
Stone Fruit Group	To increase fruit firmness and improve fruit quality in	16 – 32 Grams A.I.	Apply as a single spray one to four weeks prior to the beginning of the harvest
	the season of application	40 – 80 Grams product	period. Use sufficient water to achieve complete coverage
		1.4 – 2.9 Ounces product	of fruits and foliage.
NOTE:			
	has been known to cause reduction is made during the months of Ma	•	ar following the application,
		•	Ar following the application, Make a single application four to five weeks before
particularly if it	is made during the months of Ma To reduce internal	y through July.	Make a single application
particularly if it Italian Prune	is made during the months of Ma To reduce internal browning, improve quality,	y through July. 16 – 48 Grams A.I.	Make a single application four to five weeks before
particularly if it Italian Prune (Not for use in	is made during the months of Ma To reduce internal browning, improve quality,	y through July. 16 – 48 Grams A.I. 40 – 100 Grams	Make a single application four to five weeks before expected harvest. Apply in sufficient water volume to

• 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		
CROP/VARIETY Pecan (Not for use in AR, CA, & NM)	OBJECTIVE/BENEFIT To extend leaf retention and maintain green foliage.	USE RATE/ACRE 10 Grams A.I. 25 Grams product 0.9 Ounces product	<ul> <li>Make 1-4 applications of 10 g</li> <li>A.I. beginning in July and continuing through October as needed.</li> <li>Note: Use sufficient water to achieve complete coverage. In most cases 100 gallons per acre has been shown to be effective.</li> <li>Do not make more than one application of ProGibb<sup>®</sup> 40% in July. Using more than one application in July may result in reduced return bloom.</li> <li>ProGibb<sup>®</sup> 40% may be tank mixed with Belay<sup>®</sup></li> </ul>		
			Insecticide or with fungicides.		

California)early fruiting on tree development.water to achieve good coverage of the canopy.Non Bearing Blueberry plants in order to minimize the competitive effect of early fruiting on plant development.20 – 80 Grams A.I. productMake one to four applicatio during the period of flower bud initiation for the following year. Use sufficie 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 on 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 yo area.15 – 25 Grams A.I. 37.5 – 62.5 Grams productMake a single application to mother plants.Strawberry California)To increase runner production of mother plants.15 – 25 Grams A.I. 37.5 – 62.5 Grams productMake a single application to mother plants 10 – 30 days after planting. Plants should have 1-6 leaves at spraying Apply 100 gallons spray/ac to point of run-off.NOTE: Not for use on for use in California)To reduce roompletely eliminate the crop in the year of application10-50 grams a.i. (5-10 oz)Make a single application a early bloom (2-5% scatter bloom). Use sufficient wat to ensure thorough coverage	CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
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<ul><li>NOTE:</li><li>Applications made later than indicated have been known to result in no effect or actually result in</li></ul>	Do not spray plants/t season, and again in plants/trees that are in Consult with the Vale area. Strawberry (Not for use in California) <b>NOTE:</b> Not for use of mid-May. Response for specific recomme Cranberry (Not for use in	the third season if flower reducti n good physiological condition. The season if flower reduction is a season of the season of t	on and fruiting is desired Discontinue treatment the ulturist for timings and ra 15 – 25 Grams A.I 37.5 – 62.5 Grams product 1.4 – 2.3 Ounces product ve not always been effect . Consult your Valent rep. 10-50 grams a.i.	in the fourth season. Treat only year before desired harvest. tes for specific cultivars in your 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. ive on plantings set out after resentative or local horticulturist Make a single application at

representative or local specialist for specific information.

# SPRAY GUIDELINES FOR TROPICAL FRUIT CROPS

<b>CROP/VARIETY</b>	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Avocado	To improve fruit set and yield	25 Grams A.I.	Apply at the cauliflower stage of inflorescence development.
(Not for use in California)		65 Grams product	1
Cumorina)		2.2 oz product	
	TROPICAL FRUIT	CROPS – FIELD USES	
<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	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	Apply after flowering. Make 2 applications at 2-5 weeks intervals. Direct sprays to the fruit. Use sufficient water to
		11.3 – 22.5 Ounces product	achieve adequate coverage.
	To improve uniformity of fruit maturity and enhance harvest efficiency.	12 – 24 Grams A.I. 30 – 60 Grams product	Make the first application a few days after planting when plants are established. Repeat applications at 3-4 weeks
		1.1 – 2.2 Ounces product	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				
<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	<b>USE RATE/ACRE</b>	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 1 <sup>st</sup> to 5 <sup>th</sup> 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 CROP	S – 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 1 <sup>st</sup> application timing at 3-5 weeks after planting, followed by a 2 <sup>nd</sup> and 3 <sup>rd</sup> application at 2 to 3 week frequency. Use sufficient spray water volume to achieve adequate canopy coverage.

	TROPICAL CROPS – FIELD USES (Cont.)				
CROP/VARIETY	<b>OBJECTIVE/BENEFIT</b>	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		
		PSEUDOSTEM INJECTIONS: Add 2.0 to 5.0 Grams A.I. per gallon of water.	uptake. Utilize a 5 ml volume per injection. Make 2 to 4 injections from the 14 <sup>th</sup> true leaf to 5 weeks before shooting. Make the first injection beginning at the 14th to 15th true leaves measured from the 10 <sup>th</sup> Filiform leaf development		

	TROPICAL CROPS -	FIELD USES (Con	t.)
<b>CROP/CULTIVAR</b>	<b>OBJECTIVE/BENEFIT</b>	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 1 <sup>st</sup> application timing at 3-5 weeks after planting, followed by a 2 <sup>nd</sup> and 3 <sup>rd</sup> 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			
<b>CROP/VARIETY</b>	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	For perennials: apply one to three applications at bud initiation stage.
		0.9 – 1.8 Ounces product	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.
<b>NOTE:</b> Dilutions of g second application.	reater concentration can increa	se the risk of excessive to	p growth, particularly with a

	VEGETABL	E CROPS (Cont.)	
CROP/VARIETY	<b>OBJECTIVE/BENEFIT</b>	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.	<ul> <li>2.5 – 10 Grams A.I.</li> <li>6.3 – 25 Grams product</li> <li>0.2 – 0.9 Ounces product</li> </ul>	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.
<b>NOTE:</b> Do not apply been known to occur.	by air in California. Do not app	ply earlier than 4 weeks be	efore harvest as bolting has
Cucumber (Not for use in California)	To stimulate fruit set during periods of cool temperatures.	<ul> <li>1 – 4 Grams A.I.</li> <li>2.5 – 10 Grams product</li> <li>0.1 – 0.4 Ounces product</li> </ul>	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.
<b>NOTE:</b> For maximum cool temperatures.	h benefits, vines must be in goo	d condition, except for re-	duced rate of growth due to
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 <sup>®</sup> 40% between the cotyledon stage and prior to harvest. Use sufficient water volume to ensure thorough coverage.
			coloration of the foliage. ntative or local specialist before
Lettuce for Seed	To obtain uniform bolting and increase seed production.	<ul> <li>1 – 4 Grams A.I.</li> <li>2.5 – 10 Grams product</li> <li>0.1 – 0.4 Ounces product</li> </ul>	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.)				
<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	USE RATE/ACRE	APPLICATION TIMING	
Pepper	To promote plant growth	1-3 grams A.I.	Apply one to two sprays in 25-to-50 gallons of water per	
(Not for use in California)		2.5 – 7.5 Grams product	acre at two-week intervals. Begin sprays 2 weeks after	
		0.1 – 0.27 Ounces product	transplanting.	
Pepper	To increase fruit set and	1 – 3 Grams A.I.	Apply one to two sprays of 25	
(Not for use in California)	promote early season fruit growth.	2.5 – 7.5 Grams product	to 50 gallons per acre at weekly intervals during the flowering period.	
		0.1 – 0.27 Ounces product		
	est for areas with short growing efficacious for areas and/or vari			
Pepper	To increase fruit size and	1 – 3 Grams A.I.	Apply in 25-to-50 gallons of water per acre at the	
(Not for use in California)	yield.	2.5 – 7.5 Grams product	beginning of the picking period.	
		0.1 – 0.27 Ounces product		
<b>NOTE:</b> The high rate	is best for plants with heavy fr	uit loads.		
Potato Seed	To stimulate uniform sprouting to aid in	0.2 – 0.4 Grams A.I.	Dip whole or cut seed pieces in a solution containing 0.2-	
	maximum production, more uniform development,	0.5 – 1.0 Grams product	to-0.4 grams a.i. in 100 gallons of water prior to	
	fewer late maturing plants, and to break dormancy of	0.02 – 0.04 Ounces of	planting.	
	newly harvested potatoes that have not had a full rest period.	product		
Ũ	temperatures use the minimum	concentration for dorman	t seed. Do not treat rested seed	
pieces.				

VEGETABLE CROPS (Cont.)				
<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	<b>USE RATE/ACRE</b>	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	<ol> <li>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.</li> <li>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</li> </ol>	
	nouse temperatures at 40 – 50° i th plastic. Temperatures above	e 50° F lower yields and c		
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 <sup>®</sup> 40% between the 1 <sup>st</sup> true leaf and prior to harvest. Use sufficient water volume to ensure thorough coverage.	
Note: Use of ProGibb <sup>®</sup> Spinach, Mustard greens, Collard greens and Turnip greens. (Not for use in California)	40% may cause a slight and te o facilitate harvest, increase yield and improve quality of fall and over-winter crops.	mporary reduction in the 4 – 10 Grams A.I. 10 – 25 Grams product 0.4 – 0.9 Ounces product	<ul> <li>coloration of the foliage.</li> <li>Apply a single spray 10-to-13 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 or crop.</li> <li>Make applications in 10-to-5 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 ha started before spraying. Maximum benefit is obtained when below normal temperatures prevail following application and growth would be otherwise slowed in untreated crops.</li> </ul>	

### RICE

<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	<b>USE RATE/ACRE</b>	APPLICATION TIMING
Seedling Applications	(Early Season)		
Rice	To promote early season plant vigor and more uniform seedling growth prior to permanent flood	1 – 3 Grams A.I. 2.5 – 7.5 Grams product	Make one to two applications at the 1-2 and/or 4-5 leaf stages of growth.
	establishment.	0.1 – 0.3 Ounces product	
	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.		

Note:

- This growth promotion will permit earlier flooding (5 to 10 days earlier) of drill or broadcast-seeded rice and is particularly effective on semi-dwarf varieties.
- Early flooding reduces the additional flushing 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.)

<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	USE RATE/ACRE	APPLICATION TIMING		
Panicle Extension Ap	oplications (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.		
<ul><li>herbicides, and pre-</li><li>Do not apply whe</li><li>Foliage occasiona</li></ul>	<ul> <li>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.</li> <li>Do not apply when rice is subjected to drought stress conditions.</li> <li>Foliage occasionally and temporarily appears lighter green in color due to accelerated growth rates following ProGibb<sup>®</sup> 40% application.</li> </ul>				
	of ratoon crop rice by increasing ratoon tiller growth and aiding ratoon stand establishment.	10 – 17.5 Grams product 0.4 – 0.6 Ounces product	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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 40% with most commonly used rice herbicides and fungicides.

### 3) SEED TREATMENT APPLICATION

#### **Mixing Instructions**

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

<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	<b>USE RATE/ACRE</b>	APPLICATION TIMING
Cotton	Promote early season growth	1 to 6 Grams A.I.	
	and increase seedling vigor		In-furrow application to
		2.5 to 15 Grams	seed, or as a foliar
		product	application from the
			cotyledon leaf stage through
		0.1 to 0.5 Ounces	the 7 leaf/node stage.
		products	Repeat applications as
			needed to a maximum of 3
			applications.
			Applying more often than
			necessary to achieve the
			desired height results in
			excessive vegetative growth.

#### Notes:

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

Application equipment: As an aerial spray, use a spray system capable of producing a uniform spray pattern of medium to fine spray droplets at 10 gallons per acre (GPA). Apply no less than 3 GPA of total spray volume. Use low pressure ground sprayers equipped with boom and flat fan nozzles using 10 to 15 GPA spray volume.

- Do not apply ProGibb<sup>®</sup> 40% to plants that are under drought stress. If the plants are under continuous stress, delay the application of ProGibb<sup>®</sup> 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 US	-		
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING		
Dry Bean	Promotes early season growth, increased seedling vigor, and increased plant height allowing for improved harvesting efficiency.	<ul> <li>1 - 6 Grams A.I.</li> <li>2.5 - 15 Grams product</li> <li>0.1 - 0.5 Ounces products</li> </ul>	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).		
<ul><li>the applicat</li><li>Applying m vegetative g</li><li>Highly variation</li></ul>	ly plants that are under drought ion until the stress is alleviated hore often than necessary to ach growth. able responses based on genetic sed when applying to varieties To increase fruit set and yield.	and the plants are begin nieve the desired height c background or variety	nning to recover. results in excessive are known to occur. Caution		
Note: Do not apply	ProGibb <sup>®</sup> 40% to plants that arease lodging. Avoid drift or ac	re under drought stress.			

	TEMPERATE FIELD	CROPS – FIELD US	ES
<b>CROP/VARIETY</b>	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Soybean	To improve mechanical	1 – 20 Grams A.I.	V1-V4: Apply 1-2
	harvest efficiency by	2 – 50 Grams	applications as a foliar
	elongating the first and	product	broadcast spray during
	second internode of young	*	growth stages V1-V4 (1-2
	plants.	0.1 -1.8 Ounces	sets of unfolded trifoliolate
		product	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.
	n response by variety may be la	arge. Caution should be	used when using on untested
varieties.		1 20 0 4 1	
	To enhance post-	1 - 20 Grams A.I.	V2-R5: Apply with SelectMax <sup>®</sup> herbicide for
	emergence grass control.	2-50 Grams	
		product	enhanced control of
		0.1 –1.8 Ounces	Johnsongrass and volunteer
			corn in soybeans.
V5-R3	To increase and set and	product. 2 – 4 Grams A.I.	Molto o single angligation o
V J-KJ	To increase pod set and increase the growth of the	2 - 4 Granis A.I. 6 - 11 Grams	Make a single application a V5-R3 growth stage.
	plant.	product	v 5-K5 glowin stage.
		0.2 - 0.4 Ounces	
		product	
Note: Differences in	n response by variety may be la		used when using on untested
	our Valent representative.		used when using on untested
Peanuts	To promote plant growth.	2.5 – 5.0 Grams A.I	Make two to four
Peanuts	To promote plant growth.	2.5 – 5.0 Grams A.I 6 – 12 Grams	
Peanuts	To promote plant growth.		
Peanuts	To promote plant growth.	6 – 12 Grams	applications on a two week interval. Begin sprays two
Peanuts	To promote plant growth.	6 – 12 Grams product	applications on a two week interval. Begin sprays two
Peanuts	To promote plant growth.	6 – 12 Grams product 0.2 – 0.4 Ounces	applications on a two week interval. Begin sprays two
Peanuts		6 – 12 Grams product 0.2 – 0.4 Ounces product	applications on a two week interval. Begin sprays two weeks after emergence.
Peanuts	To enhance post-	6 – 12 Grams product 0.2 – 0.4 Ounces product 5 – 20 Grams A.I.	applications on a two week interval. Begin sprays two weeks after emergence.
Peanuts	To enhance post-	6 – 12 Grams product 0.2 – 0.4 Ounces product 5 – 20 Grams A.I. 12 – 50 Grams	applications on a two week interval. Begin sprays two weeks after emergence. Apply with SelectMax <sup>®</sup> herbicide for enhanced
Peanuts	To enhance post-	6 – 12 Grams product 0.2 – 0.4 Ounces product 5 – 20 Grams A.I. 12 – 50 Grams	applications on a two week interval. Begin sprays two weeks after emergence. Apply with SelectMax <sup>®</sup> herbicide for enhanced control of Johnsongrass and
Peanuts	To enhance post-	6 – 12 Grams product 0.2 – 0.4 Ounces product 5 – 20 Grams A.I. 12 – 50 Grams product	applications on a two week interval. Begin sprays two weeks after emergence. Apply with SelectMax <sup>®</sup> herbicide for enhanced control of Johnsongrass and

SelectMax<sup>®</sup> registered trademark of Valent USA Corporation.

USE	<b>OBJECTIVE/BENEFIT</b>	RATE/ACRE	APPLICATION TIMING
Soil application			
	To promote early Palmer	5 – 20 Grams A.I	Apply with a pre-emergence
	amaranth and/or waterhemp	12 – 50 Grams product	herbicide that has activity on
	seed germination to better		Palmer amaranth and/or
	synchronize their		waterhemp (e.g. Valor <sup>®</sup> ,
	sensitivity.	product.	Valor <sup>®</sup> XLT, Gangster <sup>®</sup> , and
		1	Fierce <sup>®</sup> ).

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

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

### SPRAY GUIDELINES FOR WATERCRESS:

	Wa	tercress	
<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	<b>USE RATE/ACRE</b>	APPLICATION TIMING
Watercress	<ol> <li>To enhance growth in adverse weather conditions;</li> <li>To help plants resume growth after insect and disease attacks;</li> <li>To increase root free stem length during low light/short day conditions.</li> </ol>	<ul> <li>15 - 25 Grams A.I.</li> <li>37.5 - 62.5 Grams product</li> <li>1.4 - 2.3 Ounces product</li> </ul>	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/VARIET Y	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			
<ul> <li>Note:</li> <li>Do not apply product prior to a 24 hour presoak or to water used for the presoak.</li> <li>Do not exceed 2.1 grams a.i./100 lbs of seed.</li> </ul>						

# PROGIBB<sup>®</sup> 40% CONVERSIONS

ProGibb<sup>®</sup> 40% contains 1.0 gram of A.I. per 2.5 Grams (0.09 oz) 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<sup>®</sup> 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<sup>®</sup> 40%)

Grams of Active Ingredient	Grams of ProGibb <sup>®</sup> 40%	Ounces of ProGibb <sup>®</sup> 40%
2	5	0.2
4	10	0.4
5	12.5	0.5
6	15	0.6
8	20	0.7
10	25	0.9
15	37.5	1.4
20	50	1.8
30	75	2.7
40	100	3.6
50	125	4.5
60	150	5.4
80	200	7.2
100	250	9.0
128	320	11.5

**CONVERSION TABLE** (for the 320 g size)

# Grams of ProGibb<sup>®</sup> 40% for given ppm's of Gibberellic Acid at Different Water Volumes.

Gallons		PPM GA3								
of Water	4	5	6	8	10	15	20	30	40	50
75	2.8	3.6	4.3	5.6	7.2	10.8	14.4	21.6	28.8	36.0
100	3.7	4.6	5.7	7.4	9.2	13.8	18.4	27.6	36.8	46.0
125	4.6	5.8	7.1	9.2	11.6	17.4	23.2	34.8	46.4	58.0
150	5.5	7.2	8.6	11.0	14.4	21.6	28.8	43.2	57.6	72.0
200	7.4	9.2	11.4	14.8	18.4	27.6	36.8	55.2	73.6	92.0
250	9.3	11.5	14.3	18.6	23.0	34.5	46.0	69.0	92.0	115.0
300	11.0	14.4	17.2	22.0	28.8	43.2	57.6	86.4	115.2	144.0
400	14.8	18.4	22.8	29.6	36.8	55.2	73.6	110.4	147.2	184.0
500	18.5	23.0	28.5	37.0	46.0	69.0	92.0	138.0	184.0	230.0
600	22.0	28.8	34.4	44.0	57.6	86.4	115.2	172.8	230.4	288.0
750	27.9	34.5	42.8	55.8	69.0	103.5	138.0	207.0	276.0	345.0

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

### **CONVERSION TABLE** (for the 80 g size)

Grams of Active Ingredient	Grams of ProGibb <sup>®</sup> 40%	Ounces of ProGibb <sup>®</sup> 40%
2	5	0.2
4	10	0.4
5	12.5	0.5
6	15	0.6
8	20	0.7
10	25	0.9
15	37.5	1.4
20	50	1.8
30	75	2.7
40	100	3.6
50	125	4.5
60	150	5.4
80	200	7.2

ProGibb 40% contains approximately 10 Grams of active ingredient per 25 Grams of product.

#### (Alternate for 80 g packaging)

Gallons	parts per million (ppm) gibberellic acid									
of	4	5	6	8	10	15	20	30	40	50
Water										
75	3.0	3.8	4.5	6.0	7.5	11.3	15.0	22.5	30.0	38
100	4.0	5.0	6.0	8.0	10.0	15.0	20.0	30.0	40.0	50
125	5.0	6.3	7.5	10.0	12.5	18.8	25.0	37.5	50.0	63
150	6.0	7.5	9.0	12.0	15.0	22.5	30.0	45.0	60.0	75
200	8/0	10.0	12.0	16.0	20.0	30.0	40.0	60.0	80.0	

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

### Example:

To make 200 gallons of a 40 ppm gibberellic acid solution, dissolve 80 Grams of ProGibb<sup>®</sup> 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.

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

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# SUB-LABEL II

ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name: RyzUp SmartGrass<sup>®</sup> Plant Growth Regulator, Water Soluble Granule]

For agricultural use on Pastures, forage crops, cover crops, corn and soybean.

### ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name: **RyzUp SmartGrass**<sup>®</sup> **Plant Growth Regulator, Water Soluble Granule**]

For Organic Production

Active Ingredient	
Gibberellin A <sub>3</sub>	
Other Ingredients	60.0% w/w
Total	

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

This container will treat \_\_\_\_\_\_ acre at the maximum use rate, as directed for use on \_\_\_\_\_\_.

	FIRST AID					
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue</li> </ul>					
	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	for treatment. You may also call toll-free 1-800-892-0099 (24 hours) for emergency medical					
treatment and/or transp	ort 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  $\underline{4}$  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<sup>®</sup>Plant Growth Regulator Water Soluble granule(hereafter referred to as RyzUp SmartGrass<sup>®</sup>) 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 <sup>1</sup>/<sub>4</sub> 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<sup>®</sup>] 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<sup>®</sup>] 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			
<b>CROP/VARIETY</b>	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.	<ul> <li>3 - 11 Grams A.I.</li> <li>7.5 - 27.5 Grams product</li> <li>0.3 - 1.0 Ounces product</li> </ul>	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.	<ul> <li>3 - 11 Grams A.I.</li> <li>7.5 - 27.5 Grams product</li> <li>0.3 - 1.0 Ounces product</li> </ul>	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<sup>®</sup> 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**

Сгор	<b>Objective/ Benefit</b>	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			
<b>CROP/VARIETY</b>	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	Apply at V2 - V6
		0.3 – 0.6 Ounces product	
	1	1	I
Corn: Popcorn, Sweet corn, Seed corn	To increase yield and help overcome the effects of heat	2 – 6 Grams A.I.	Apply at V2 – V6
,	or drought.	5 – 15 Grams product	
		0.3 – 0.6 Ounces product	

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<sup>®</sup>] is compatible as a tank-mix partner with Roundup<sup>®</sup> herbicide on glyphosate resistant corn. Use of ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name RyzUp SmartGrass<sup>®</sup>] 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<sup>®</sup>].
- Do not tank-mix ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name RyzUp SmartGrass<sup>®</sup>] 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	<b>OBJECTIVE/BENEFIT</b>	USE RATE/ACRE	APPLICATION TIMING		
Cotton	Promote early season growth and increase seedling vigor	<ol> <li>to 6 Grams A.I.</li> <li>to 15 Grams product</li> <li>to 0.5 Ounces products</li> </ol>	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)	<ul> <li>1.0 to 2.0 Grams A.I.</li> <li>2.5 to 5 Grams product</li> <li>0.1 to 0.2 Ounces products</li> </ul>	Apply at 1 <sup>st</sup> to 5 <sup>th</sup> 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			
<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	<b>USE RATE/ACRE</b>	APPLICATION TIMING
Soybean	To improve mechanical	1 – 20 Grams A.I.	V1-V4: Apply 1-2 applications
	harvest efficiency by	10-20 Grams A.I. on	as a foliar broadcast spray during
	elongating the first and	LV label	growth stages V1-V4 (1-2 sets of
	second internode of young	2 – 50 Grams product	unfolded trifoliolate leaves). If
	plants.		applying as a banded spray,
		0.1 -1.8 Ounces	reduce rates accordingly.
		product	Complete coverage of leaf tissue
			is essential. Make applications
			in 20-40 gallons water/A.I.
	To enhance post-emergence	1 – 20 Grams A.I.	V2-R5: Apply with SelectMax <sup>®</sup>
	grass control.	2 – 50 Grams product	herbicide for enhanced control of
			Johnsongrass and volunteer corn
		0.1 -1.8 Ounces	in soybeans.
		product.	
V5-R3	To increase pod set and	2 – 4 Grams A.I.	Make a single application at V5-
	increase the growth of the	6 – 11 Grams product	R3 growth stage.
	plant.		

	0.2 – 0.4 Ounces	
	product	
Note: Differences in response by variety may be la	arge. Caution should be us	sed 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.

Roundup<sup>®</sup> is a registered trademark of Monsanto Company. Ryzup SmartGrass<sup>®</sup> is a registered trademark of Valent BioSciences Corporation. Products That Work, From People Who Care is a trademark of Valent U.S.A. Corporation. © 2013 Valent BioSciences Corporation

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73049-0001.20160803.ProGibb40.Label\_Amendment

### SUB-LABEL III

ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name: RyzUp SmartCorn<sup>TM</sup> Plant Growth Regulator, Water Soluble Granule]

For agricultural use on Corn.

# ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name: [alternate brand name **RyzUp SmartCorn<sup>TM</sup> Plant Growth Regulator, Water Soluble Granule**]

For Organic Production

Active Ingredient	
Gibberellin A <sub>3</sub>	
Other Ingredients	
Total	

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: 320 gram and 850 gram bottles (12 and 30 ounce bottles by weight) This container will treat \_\_\_\_\_\_acre at the maximum use rate, as directed for use on \_\_\_\_\_\_.

	FIRST AID		
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Demons context lances if present offer the first 5 minutes then continue</li> </ul>		
	• 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 transp	ort 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  $\underline{4}$  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<sup>TM</sup>] (hereafter referred to as RyzUp SmartCorn<sup>TM</sup>] 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 <sup>1</sup>/<sub>4</sub> 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<sup>TM®</sup>] 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<sup>TM</sup>] 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.

FIELD USES			
<b>CROP/VARIETY</b>	<b>OBJECTIVE/BENEFIT</b>	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 SmartCorn<sup>™</sup>] is compatible as a tank-mix partner with Roundup<sup>®</sup> herbicide on glyphosate resistant corn. Use of ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name RyzUp SmartCorn<sup>™</sup>] 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 SmartCorn<sup>TM</sup>].

• Do not tank-mix ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name RyzUp SmartCorn<sup>TM</sup>] 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 SmartCorn<sup>™</sup>] 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 SmartCorn<sup>™</sup>] 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 SmartCorn<sup>TM</sup>] in combination with herbicides containing either dicamba or with HPPD inhibitors on hybrids with a known sensitivity to these classes of herbicides.

#### 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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