

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

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

January 10, 2023

April Matute Documentation Specialist Valent BioSciences LLC 1910 Innovation Way, Suite 100 Libertyville, IL 60048

Subject: Labeling Notification per Pesticide Registration Notice (PRN) 98-10 – Label Notification to add alternate brand name: Proliant® Plant Growth Regulator, Water Soluble Granule Product Name: Progibb 40% Plant Growth Regulator, Water Soluble Granule EPA Registration Number: 73049-1 EPA Receipt Date: 07/14/2022 Action Case Number: 00378453

Dear Ms. Matute:

The U.S. Environmental Protection Agency (EPA) is in receipt of your application for notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Biopesticides and Pollution Prevention Division (BPPD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The labeling submitted with this application has been stamped "Notification" and will be placed in our records. The alternate brand name "*Proliant*® *Plant Growth Regulator, Water Soluble Granule*" has been added to the product's records. You must submit one (1) copy of the final printed labeling with the modifications.

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 the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and is subject to review by 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 EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should EPA find or if it is brought to our attention that a website contains statements or claims substantially differing from statements or claims made in connection with obtaining a FIFRA section 3 registration, the website will be referred to EPA's Office of Enforcement and Compliance Assurance.

Page 2 of 2 EPA Reg. No. 73049-1 Action Case No. 00378453

If you have any questions, please contact James Parker via email at parker.james@epa.gov.

Sincerely,

andrew E. Buycelow

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

Enclosure

73049-1

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

01/10/2023

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

PROGIBB® 40% PLANT GROWTH REGULATOR, WATER SOLUBLE GRANULE

[Alternate Brand Names: Berelex 40SG Plant Growth Regulator Soluble Granule, ACCEL 40SG Plant Growth Regulator Soluble Granule , RyzUp® SmartGrass® Plant Growth Regulator, Water Soluble Granule, RyzUp® SmartCorn[™], Plant Growth Regulator, Water Soluble Granule, <u>Proliant® Plant Growth Regulator, Water Soluble Granule</u>]

MASTER LABEL

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

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

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

For Organic Production

Active Ingredient
Gibberellin A ₃
Other Ingredients
Total

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

KEEP OUT OF REACH OF CHILDREN

CAUTION

EPA Registration No. 73049-1 EPA Establishment No. 33762-IA-001 Lot Number:

Valent BioSciences LLC 1910 Innovation Way, Suite 100 Libertyville, IL 60048

PROGIBB[®] 40% Plant Growth Regulator Water Soluble Granule

[Alternate Brand Name: ACCEL 40SG Plant Growth Regulator Soluble Granule] [SUB-LABEL I]

For Organic Production

Active Ingredient	
Gibberellin A ₃	40.0% w/w
Other Ingredients	60.0% w/w
Total	100.0% w/w

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

KEEP OUT OF REACH OF CHILDREN

CAUTION

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

EPA Registration No. 73049-1 EPA Establishment No. 33762-IA-001 Lot Number:

Valent BioSciences LLC 1910 Innovation Way, Suite 100 Libertyville, IL 60048 1-847-968-4700

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

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

	FIRST AID			
If in eyes	 Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. 			
If on skin or clothing				
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 <u>4</u> hours *unless wearing appropriate PPE*.

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

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

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

GENERAL DIRECTIONS FOR USE

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

Application Instructions:

- ProGibb[®] 40% Plant Growth Regulator water soluble granule (hereafter referred to as ProGibb 40%) contains gibberellic acid which is an extremely potent plant growth regulator; when applying plant growth regulators, deviations from the label directions in the rates, timings, water volumes, or the adoption of untested spray mixes, results in undesirable effects. Always consult the local Valent representative in your area for the spray regimen best suited to your conditions.
- Do not apply to plants under pest, nutritional, or water stress.
- Avoid drift or accidental application to other crops.
- When a range of rates is indicated, use the concentration and spray volume indicated by the local Valent representative.
- For optimum effectiveness, thorough spray coverage of the target area must be achieved. Prepare solution concentrations by mixing the required amount of product with water in a clean, empty spray tank. Discard any unused spray material at the end of each day following local, state or federal law.
- For most efficacious results, 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.
- For aerial applications spray volumes must be greater than 2 gallons per acre (10 gallons per acre for tree crops).
- No pre-harvest interval is required for this product.
- Compatibility: When considering tank mixing with other products, use the following compatibility jar test before mixing a whole tank.

COMPATIBILITY WITH OTHER AGRICULTURAL PRODUCTS

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

Do not tank mix ProGibb[®] 40% with other products unless compatibility has been verified. If considering tank mixing ProGibb[®] 40% with other products use the following **compatibility jar test** before mixing a whole tank:

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

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

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

DIRECTIONS FOR CHEMIGATION

Fill the supply tank with the desired amount of water. Then add the amount of ProGibb[®] 40% required in order to achieve the final solution rate recommended for the specific crop to be treated. Agitate the mixture of ProGibb[®] 40% frequently during the chemigation period to assure a uniform distribution throughout the system.

Apply ProGibb[®] 40% continuously for the duration of the water application but do not exceed recommended rates and volumes as outlined on the product label.

CHEMIGATION PRECAUTIONS

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

- The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Do not apply when wind speed favors drift beyond the area intended for treatment.

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

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days of the year. Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water systems should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or in cases where there is no water pump, when the water pressure decreases to the point where the pesticide distribution is adversely affected.

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

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

STORAGE AND DISPOSAL

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

Pesticide Storage

Keep containers tightly closed when not in use.

Pesticide Disposal

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

Container Disposal:

(3 oz [80 g] or 12 oz [320 g] or 30 oz [850 g] bottles)

Non-refillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty remaining contents into application equipment or mix tank. Fill container 1/4 full with water and recap. Shake 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use or disposal. Drain for 10 seconds after flow begins to drip. Repeat this procedure two more times. Then offer for recycling or dispose of in a sanitary landfill, or incineration, if allowed by state and local authorities by burning. If burned, stay out of smoke.

(0.09 oz [2.5 g] sachets)

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

SPRAY GUIDELINES FOR GRAPE

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

SEEDLESS TABLE GRAPE

CLUSTER STRETCH SPRAYS – SEEDLESS TABLE GRAPE					
OBJECTIVE/BENEFIT	APPLICATION TIMING				
For cluster elongation and looser cluster forms. To reduce costs of thinning, allow better air circulation to aid in the control of bunch rot, and increase light penetration to aid in sugar development.	Make 1 - 3 applications before bloom when flower clusters are 2 - 7 inches long.				
	Grams	Grams	Ounces		
CROP/CULTIVAR	A.I./Acre	Product/Acre	Product/Acre		
Perlette Seedless	8-24	20 - 60	0.7 - 2.2		
Flame Seedless	8 - 24	20 - 60	0.7 - 2.2		
Thompson Seedless	8-24	20 - 60	0.7 - 2.2		
Raisin	8-24	20 - 60	0.7 - 2.2		
Other Seedless Grapes	No indications are available at this time.				

BERRY THINNING SPRAYS - SEEDLESS TABLE GRAPE					
APPLICATION TIMING					
Make 1 - 4 application	s during bloom. N	/lake only 1 - 2			
applications for "Othe	applications for "Other Seedless Grapes." When the				
bloom period is extended, subsequent sprays are to be					
made 1 - 7 days after the first application.					
Grams Grams Ounces					
A.I./Acre	Product/Acre	Product/Acre			
3 - 16	7.5 - 40	0.3 - 1.4			
8 - 20	20 - 50	0.7 - 1.8			
3 - 12	7.5 - 30	0.3 - 1.1			
0.5 - 12 1.3 - 30 0.1 - 1.1					
	APPLICMake 1 - 4 applicationapplications for "Otherbloom period is extendmade 1 - 7 days after tGramsA.I./Acre3 - 168 - 203 - 12	APPLICATION TIMINMake 1 - 4 applications during bloom. Mapplications for "Other Seedless Grapesbloom period is extended, subsequent spmade 1 - 7 days after the first applicationGramsGramsA.I./AcreProduct/Acre3 - 167.5 - 408 - 2020 - 503 - 127.5 - 30			

NOTE: At the high end of the prescribed range of rates and number of applications, expect significantly more thinning in young vines or vines with high vigor. For "Other Seedless Grapes" use caution as some of the new cultivars are very responsive and over-thin easily. Consult the Valent representative or local specialist before thinning cultivars with which there is no familiarity.

BUMP SPRAY – SEEDLESS TABLE GRAPE				
OBJECTIVE/BENEFIT	APPLICATION TIMING			
To help initiate the beginning of the berry growth period.	Make 1 application during the period between the last thinning spray and the first sizing spray.			
CROP/CULTIVAR	GramsGramsOuncesA.I./AcreProduct/AcreProduct/Acre			
Thompson Seedless	16-24	40 - 60	1.4 - 2.2	

BERRY SIZING SPRAYS - SEEDLESS TABLE GRAPE				
OBJECTIVE/BENEFIT APPLICATION TIMING			N TIMING	
For larger berries and large	ries and larger clusters when used Make 1 - 4 applications beginning when the average be			ing when the average berry
in conjunction with establish	shed girdling and	size reaches "target" diameter (See below). Timing of t		
thinning practices.		.	1 2	ted by experience in the
				urring between sprays.
		· ·	•	from the first sizing spray
	r	are less effe	ctive.	
	TARGET			
	BERRY	Grams	Grams	Ounces
CROP/CULTIVAR	DIAMETER*	A.I./Acre	Product/Acre	Product/Acre
Perlette Seedless	4-5 mm	32 - 128	80-320	2.9 - 11.5
Flame Seedless	6-9 mm	20 - 128	50-320	1.8 - 11.5
Thompson Seedless	3-5 mm	32 - 128	80-320	2.8 - 11.5
Raisin	3-5 mm	4 - 20	10 - 50	0.4 - 1.8
Other Seedless Grapes	$3-14 \ mm$	8 - 128	20-320	0.7 –11.5
*Target average berry diameter for the first application.				
NOTE: In some growing regions and for some cultivars, the higher amounts of gibberellic acid indicated will reduce fruitfulness (cluster counts) the following year. At the high end of the prescribed				

range of rates and number of applications, a delay in berry skin color development, sugar

accumulation and overall maturation has been observed. Consult the Valent representative or local specialist before sizing cultivars with which there is no familiarity.

BERRY SIZING CLUSTER DIP – SEEDED and SEEDLESS TABLE GRAPE				
OBJECTIVE/BENEFIT	APPLICATION TIMING			
To increase berry size.	Apply 20 - 50 ppm GA3 solution as a dip or direct spray to the cluster when berries reach 12 - 15 mm.			
	Rate Per 5 Gallons Treatment Solution			
CROP/CULTIVAR	PPM A.I. Grams Product Ounces Product			
Seedless Grapes	20-50 1-2.5 0.1-0.25			
NOTE: To prepare dip solution, add $1 - 2.5$ gram ProGibb [®] 40% for every 5 gallons of solution needed.				

BERRY SIZING SPRAYS – SEEDED TABLE GRAPE				
OBJECTIVE/E	BENEFIT	APPLICATION TIMING		
To increase berry size ir and also to reduce berry Emperor.		s; Make 1 application during the indicated berry diameter rather entire vine.		rry diameter range to
	BERRY		Rate	
CROP/CULTIVAR	DIAMETER (mm)*	Grams A.I./Acre	Grams Product/Acre	Ounces Product/Acre
Emperor	12 - 16		50	
Red Globe	12 - 18			
Calmeria	12 - 16	20		1.8
Christmas Rose	12 - 16	20	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				
OBJECTIVE/BENEFIT	APPLICATION TIMING			
To increase berry size.	Make 1 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 TI	MING		
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 gals. of water per acre.			
CROP/CULTIVAR	Grams a.i. /acre	Grams Product/Acre	Ounces Product/Acre	
Palomino Sauvignon Blanc Tinta Madeira	0.4 - 1	1 - 2.5	0.04 - 0.1	
Aleatico Carignane Chardonnay Chenin Blanc French Colombard Pinot Noir Valdepenas	1 - 2	2.5 - 5	0.1 – 0.2	
Barbera Petite Sirah Zinfandel	2 - 4	5 - 10	0.2 - 0.4	
Green Hungarian	4 - 8	10-20	0.4 -0.7	
Grenache Alicante	8	20	0.7	
Salvadore	8 - 16	20 - 40	0.7 – 1.4	
NOTE				

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				
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING		
Naval,	To enhance fruit set and	15 – 25 g a.i.	Make a single dilute spray		
Valencia*, &	yield.		between mid-Dec. and late		
Ambersweet		37.5 – 62.5 g product	Jan. using sufficient spray		
Orange*			volume for adequate coverage		
		1.4 - 2.3 oz product	of tree canopy		
*[Not for use in					
California]					
NOTE: Manuelle star	- f A h anorra at an 1 N 1	n an in Flanida tan 1 ta fla			
			ower very heavily, yet set poor		
			vering, compromising the trees'		
	port early fruit growth, and ca	•	activity of heavily blooming		
blocks is often increa	sed by reducing flower format				
~1 .	To increase fruit set and	1 - 40 g a.i.	Make 1 - 4 applications from		
Clementine	yield		early bloom up to 4 weeks		
Mandarin		2.5 - 100 g product	after petal fall. Allow a		
57.1.1.01.0.01			minimum of 3 days between		
[Limit of 1-3 full		0.1 - 3.6 oz product	sprays. Use a dilute spray with		
applications in			sufficient spray volume for		
California]			adequate coverage of tree		
			canopy between sprays.		
	To increase fruit set and	8 – 30 g a.i.	Make 1 - 2 applications during		
Tangerines and	yield.	0 20 g uni	the bloom period. Apply as a		
Mandarin Hybrids	y lola.	20-75 g product	dilute spray.		
		/ 0 8 Product			
[Not for use in		0.7 - 2.7 oz product			
California]					
L L					

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 g a.i.	Make a single application in Dec Jan. Use a dilute spray			
[Not for use in California]		20-75 g product	with sufficient spray volume for adequate coverage of tree			
Camonnaj		0.7 - 2.7 oz product	canopy. Typically $125 - 175$ gallons of water per acre has			
			been sufficient.			
	NOTE: The rate and number of applications depends upon amount of desired fruit set. Generally, more fruit					
	cations (except grapefruit), ear					
	more favorable to set. Differential responses to the PGR across citrus cultivars also interact with the above					
			e are known to occur as a result			
of excessive fruit set.	Increases in mature leaf drop	occur in trees under stres	S.			

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

	CITRUS – DEI	LAY RIND AGING	
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Navel and other orange cultivars (except Valencia)	To delay rind aging, reduce physiological disorders (e.g., rind staining, water	16 – 48 g a.i. 40 – 120 g product	Make 1 - 2 applications as a concentrate or dilute spray.
	spotting, sticky or tacky surface, oleocellosis), and produce a more orderly harvesting pattern	1.4 – 4.3 oz product	Early application: spray approximately 2 weeks prior to color break (typically Aug. – Nov.). This timing causes the greatest delay in rind aging and produces the firmest rind possible. AND/OR Late application: one application after marketable color (typically Oct. – Dec.). This late spray has been known to cause re- greening.
Valencia Orange	To reduce rind creasing and to delay rind aging and	40 – 80 g a.i.	Make a single application as a concentrate or dilute
	softening	100 – 200 g product	spray in Aug. to Oct. to target crop of young fruit.
		3.6 – 7.2 oz product	
not apply from JaSlower color deve		ion is often reduced the fol ne target crop. Increased re	lowing year.
All Round Oranges	To delay aging and	20-60 g a.i.	Make a single application in
(For Florida use	softening of the rind, and to reduce creasing and	50 150 a maduat	Aug. to Oct. to trees with a target crop of young fruit.
only)	puffiness	50 – 150 g product	The addition of pure
	1	1.8 – 5.4 oz product	organo-silicone type surfactant at 0.05% (6 oz / 100 gallons) has been shown to be beneficial.

	CITRUS – DELAY	RIND AGING (Cont.)	1
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 g a.i. 50 – 100 g product 1.8 – 3.6 oz product	Make 1 spray application 2 weeks prior to color break. Apply as a dilute spray.
	f early harvest is planned. Do nown to occur. Application du		s pre-harvest rind staining and causes variation in rind color
Grapefruit/Pummelo	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 g a.i. 40 – 120 g product 1.4 – 4.3 oz product	Make 1 - 2 dilute spray applications in sufficient volume to ensure coverage. Do not exceed 20 ppm A.I. (8 g a.i. /100 gallons) in spray solution. Do not apply in combination with an organo-silicone surfactant.EARLY: Make application 2 weeks prior to color break. Apply as a dilute spray (Aug. – Sep).AND/ORLATE: Make application after marketable color has developed (Oct. –
re-green if allowed to r trees begin to break dor sprays. Results vary fro	emain on the tree for extended rmancy, have been observed t	d periods. Applications ma o adversely affect the new g on environmental condit	Dec.). be delayed. Treated fruit will ade after December, or when crop. Do not use concentrate ions. For maximum effect on Make a single application when target crop is 1/2 to full size, but still green.
NOTE: When applied	production pattern relative to market demand. two years in a row, an even la	_	pattern and maturity have

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

SPRAY GUIDELINES FOR TEMPERATE FRUIT CROPS

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

TEMPERATE FRUIT CROPS: FIELD APPLICATIONS

TEMPERATE FRUIT CROPS – FRUITSET				
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING	
Highbush Blueberry Coville, Jersey, Stanley, Earliblue, Weymouth, Walcott, Berkeley, Blueray, Bluecrop, 1316A, Concord, and others [Not for use in California]	To improve fruit set.	40 – 80 g a.i. 100 – 200 g product 3.6 – 7.2 oz product	Make a single application of 40 - 80 g a.i. per acre in 40 - 100 gallons of water. The application should be made at full bloom (when 75% of the flowers are fully open). OR Make 2 - 4 applications of 40 g a.i. per acre in 40 - 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 2 weeks after bloom to increase size of "shot" berries.	

TEMPERATE FRUIT CROPS – FRUITSET (Cont.)			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Rabbiteye Blueberry: Aliceblue, Beckyblue, Bonita, Brightwell, Climax, Delite, Tiftblue, Woodward and others. [Not for use in California]	To improve fruit set.	40 – 80 g a.i. 100 – 200 g product 3.6 – 7.2 oz product	Make a single application of 40 - 80 g a.i. in 40 - 100 gals 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 g a.i. per acre in 40 - 100 gals. 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 g a.i. 2.5 – 10 g product 0.1 – 0.4 oz product	Make application just prior to bloom. For cantaloupes and watermelons 2 additional applications should be made at intervals of 10 - 14 days.

NOTE: For maximum benefits, vines must be in good condition, except for reduced rate of growth due to cool temperatures.

	TEMPERATE FRUIT CROPS – SPUR FORMATION			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING	
Sour Cherry	To maintain and extend	4 – 18 g a.i.	Apply 1 spray 14 - 28 days	
	high fruiting capacity of		after bloom. Optimum timing	
[Not for use in	sour cherry trees by	10-45 g product	is defined as that stage when 3	
California]	promoting spur formation		- 5 terminal leaves have fully	
-	and reducing the	0.4 - 1.6 oz product	expanded, or, at least 1 - 3	
	occurrence of "blind"	1	inches of terminal shoot	
	nodes. Spur formation is		extension has occurred. Use 4	
	apparent the year after		– 18 g a.i. per acre, depending	
	application. Therefore,		on tree age and vigor (See	
	changes in shoot, spur, and		Table below). Apply as a dilute	
	flower production will not		spray in sufficient water to	
	be evident until two or		ensure thorough wetting, or as	
	three years after program		a concentrate spray ensuring	
	initiation.		uniform coverage.	

NOTE:

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

APPLICATION RATES FOR SOUR CHERRY TREES BY AGE

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

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

- Do not exceed 48 g 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	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Stone Fruit Group	To increase fruit firmness and improve fruit quality in	16 – 32 g a.i.	Apply as a single spray 1 - 4 weeks prior to the beginning of the harvest period. Use
	the season of application	40 - 80 g product	sufficient water to achieve
		1.4 – 2.9 oz product	complete coverage of fruits and foliage.
* *	has been known to cause reduct is made during the months of Ma	•	year following the application,
Italian Prune	To reduce internal browning, improve quality,	16 – 48 g a.i.	Make a single application 4 5 weeks before expected
	and increase size.	40 – 100 g product	harvest. Apply in sufficient
[Not for use in California]	and increase size.		water volume to ensure

• Color development and harvest have occasionally been slightly delayed. Observation of reduced bloom the following season is occasionally seen.

TEMPERATE FRUIT CROPS				
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING	
Pecan	To extend leaf retention	10 g a.i.	Make 1 - 4 applications of 10	
[Not for use in AZ, CA, & NM]	and maintain green foliage.	25 g product	g a.i. beginning in July and continuing through October as needed.	
		0.9 oz product		
		ľ	 Note: Use sufficient water to achieve complete coverage. In most cases 100 gallons per acre has been shown to be effective. Do not make more than one application of ProGibb[®] 40% in July. Using more than one application in July may result in reduced return bloom. ProGibb[®] 40% may be tank 	
			mixed with Belay [®] Insecticide or with fungicide	

TEMPERATE FRUIT CROPS – NON BEARING USES			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Non Bearing Stone Fruit [Not for use in California]	To reduce flowering and fruiting in young stone fruit trees in order to minimize the competitive effect of early fruiting on tree development.	20 – 80 g a.i. 50 – 200 g product 1.8 – 7.2 oz product	Make a single application during the period of flower bud initiation for the following year. Use sufficient water to achieve good coverage of the canopy.
Non Bearing Blueberry [Not for use in California]	To reduce flowering and fruiting in young blueberry plants in order to minimize the competitive effect of early fruiting on plant development.	20 – 80 g a.i. 50 – 200 g product 1.8 – 7.2 oz product	Make 1 - 4 applications during the period of flower bud initiation for the following year. Use sufficient water to achieve good coverage of the canopy.
season, and again in t only plants/trees that	rees in their first year. Treat in he third season if flower reduc are in good physiological cond the Valent representative or lo	tion and fruiting is desired lition. Discontinue treatme	l in the fourth season. Treat ent the year before desired
Strawberry [Not for use in California]	To increase runner production of mother plants.	15 – 25 g a.i. 37.5 – 62.5 g product 1.4 – 2.3 oz product	Make a single application to mother plants $10 - 30$ days after planting. Plants should have 1 - 6 leaves at spraying. Apply 100 gals. spray/acre to
mid-May. Response v	n fruiting plants. Treatments h varies with cultivar and location ific recommendations.		
Cranberry [Not for use in California]	To reduce or completely eliminate the crop in the year of application	10 - 50 g a.i. (5 - 10 oz)	Make a single application at early bloom (2 - 5% scatter bloom). Use sufficient water to ensure thorough coverage.
increased fruit set (op	ary with cultivar, age of the bo		-

SPRAY GUIDELINES FOR TROPICAL FRUIT CROPS

CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Avocado	To improve fruit set and yield	25 g a.i.	Apply at the cauliflower stage of inflorescence
[Not for use in	yiciu	65 g product	development.
California]		2.2 oz product	
	TROPICAL FRUIT	 ' CROPS – FIELD USES	6
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Pineapple	To improve fruit size.	125 – 250 g a.i.	Apply after flowering. Make 2 applications at 2 - 5 weeks
[Not for use in California]		312.5 – 625 g product	intervals. Direct sprays to the fruit. Use sufficient water to
Ľ		11.3 – 22.5 oz product	achieve adequate coverage.
	To improve uniformity of	12 – 24 g a.i.	Make the first application a
	fruit maturity and enhance harvest efficiency.	30 – 60 g product	few days after planting when plants are established. Repeat applications at 3 - 4 weeks
		1.1 – 2.2 oz product	intervals.
Coffee	To induce flower bud break	10 – 50 g a.i.	Apply in sufficient water volume to assure total
[Not for use in California]	oreak	25 – 125 g product	coverage of developing buds along all laterals (arrange
Cumorniuj		0.9 – 4.5 oz product	nozzles for coverage from bottom up as well as top down of laterals and leaves).
			Multiple applications at 3 - 7 day frequency may be required over a period of 10 - 14 days.
			Use a non-ionic surfactant at 0.05% v/v to enhance performance.

TROPICAL CROPS – FIELD USES			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Sugarcane [Not for use in California]	To maintain yields in older plantings, increase bio- mass and stimulate growth before harvest of cane in	1.0 – 2.0 g a.i. 2.5 – 5 g product	Apply at 1 st - 5 th internode stage to ratoon crop in at least 20 gal/A. Addition of non-ionic surfactant may
Cumomiu		0.1 - 0.2 oz product	increase activity.

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	older production fields (>3		
	years).		
	To stimulate growth and	1.0 – 2.0 g a.i.	Make 1-2 applications of 2.5
Sugarcane	biomass in newly planted		to 5.0 grams product per
	sugar cane.	2.5-5 g product	acre per application. Do not
[Not for use in			exceed a total of 5.0 grams
California]		0.1 - 0.2 oz product	of product per acre.
	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 g a.i. per acre per spray. 6 – 30 g product 0.25 – 1.1 oz product	Make applications at 1 - 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 g a.i. per acre per spray. 6 – 30 g product 0.25 – 1.1 oz product	Direct applications to developing daughter plants and pre-bloomed mother plants. Make applications every 1 - 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 g a.i. per gallon of water.	Make 2 - 3 foliar applications, beginning with the 1 st application timing at 3 - 5 weeks after planting, followed by a 2 nd and 3 rd application at 2 - 3 week frequency. Use sufficient spray water volume to achieve adequate canopy coverage.
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	TROPICAL CROPS – FIELD USES (Cont.)			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING	
(Cont.) Banana [Not for use in California]	BUNCH SPRAYS: To stimulate bunch fruit development, improving fruit size and quality and overall yields.	FOLIAR BUNCH SPRAY: Add 1 - 2 g a.i. per gallon of water.	Make applications immediately after floral bunch emergence when hands and fingers are exposed through bunch bagging program. Use sufficient water volume to achieve adequate canopy coverage Tank mixing with	
			standard pesticides is permissible. Add non-ionic surfactant at 0.05% v/v to enhance coverage and uptake.	
		PSEUDOSTEM INJECTIONS: Add 2.0 - 5.0 g a.i. per gallon of water.	Utilize a 5 ml volume per injection. Make 2 - 4 injections from the 14 th true leaf to 5 weeks before shooting. Make the first injection beginning at the 14th - 15th true leaves measured from the 10 th Filiform leaf development	

	TROPICAL CROPS -	FIELD USES (Con	t.)
CROP/CULTIVAR	OBJECTIVE/BENEFIT	DOSE RATE	APPLICATION TIMING
Plantain [Not for use in California]	ESTABLISHED PLANTINGS: To stimulate plant growth and to reduce the effects of stresses caused by insect, disease or adverse weather. These applications may help improve fruit size, quality and overall yields.	GROUND FOLIAR SPRAY: Apply 6 – 20 g a.i. per acre per spray.	Direct applications to developing daughter plants and pre-bloomed mother plants. Make applications every 1 - 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 g a.i. per gallon of water.	Make 2 - 3 foliar applications, beginning with the 1 st application timing at 3 - 5 weeks after planting, followed by a 2 nd and 3 rd application at 2 - 3 week frequency. Use sufficient spray water volume to achieve adequate canopy coverage.

SPRAY GUIDELINES FOR VEGETABLE CROPS

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

	VEGETABLE CROPS			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING	
Artichoke	To accelerate maturity and shift harvest to an earlier date.	10 – 20 g a.i. 25 – 50 g product 0.9 – 1.8 oz product	For perennials: apply 1 - 3 applications at bud initiation stage. For annuals: apply 1 - 4 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 - 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 g a.i. 2.5 – 15 g product 0.1 – 0.5 oz product	Make the first application 4 – 6 weeks after emergence, using commercial ground or aerial equipment with spray concentrations of 20 - 30 ppm. In severe disease situations or cool weather a second spray 14 days later is sometimes required to achieve the desired amount of foliar recovery. Do not apply more than twice per crop.	
NOTE: Dilutions of g second application.	greater concentration can increa	ase the risk of excessive	top growth, particularly with a	

	VEGETABL	E CROPS (Cont.)	
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Celery	To increase plant height and yield and to overcome stress due to cold weather conditions or saline soils, and obtain earlier maturity.	2.5 – 10 g a.i. 6.3 – 25 g product 0.2 – 0.9 oz product	Make a single application 1 - 4 weeks prior to harvest. Use 25 - 50 gallons of water per acre by ground application or 5 - 10 gallons of water per acre for aerial application [except in California]. Use lower concentrations if applying 3 - 4 weeks before harvest and higher concentrations within 1 - 2 weeks before harvest.
NOTE: Do not apply been known to occur.	by air in California. Do not ap	oply earlier than 4 weeks	before harvest as bolting has
Cucumber [Not for use in California]	To stimulate fruit set during periods of cool temperatures.	1 – 4 g a.i. 2.5 – 10 g product 0.1 – 0.4 oz product	Make 1 application prior to bloom followed by 2 additional applications at intervals of 10 - 14 days. It is acceptable to use up to 4 applications. Use sufficient water volume for thorough coverage of exposed foliage.
NOTE: For maximur cool temperatures.	n benefits, vines must be in go	od condition, except for r	reduced rate of growth due to
Leaf Lettuce	To promote plant height and leaf length	0.5 – 1.0 g a.i. 1.25 – 2.5 g product 0.05 – 0.1 oz product	Apply a single application of ProGibb [®] 40% between the cotyledon stage and prior to harvest. Use sufficient water volume to ensure thorough coverage.
	[®] 40% may cause a slight and $\frac{1}{2}$ 40% may vary by cultivar. C liar cultivars.		e coloration of the foliage.
Lettuce for Seed	To obtain uniform bolting and increase seed production.	1 – 4 g a.i. 2.5 – 10 g product 0.1 – 0.4 oz product	Apply 1 - 4 applications at 2- week intervals, beginning at the fourth true leaf. Use sufficient water volume to ensure thorough wetting.

VEGETABLE CROPS (Cont.)			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Pepper [Not for use in	To promote plant growth	1 - 3 g a.i.	Apply 1 - 2 sprays in 25 - 50 gallons of water per acre at
California]		2.5 – 7.5 g product	two-week intervals. Begin sprays 2 weeks after
		0.1 - 0.27 oz product	transplanting.
Pepper	To increase fruit set and	1 – 3 g a.i.	Apply 1 - 2 sprays of 25 - 50
[Not for use in	promote early season fruit growth.	2.5 – 7.5 g product	gallons per acre at weekly intervals during the flowering
California]		0.1 - 0.27 oz product	period.
	est for areas with short growing acious for areas and/or varietie		ratures slow plant growth. The fruit set problems.
Pepper	To increase fruit size and	1 – 3 g a.i.	Apply in 25 - 50 gallons of water per acre at the
[Not for use in California]	yield.	2.5 – 7.5 g product	beginning of the picking period.
_		0.1 - 0.27 oz product	P
NOTE: The high rate	is best for plants with heavy f	ruit loads.	
Potato Seed	To stimulate uniform sprouting to aid in	0.2 – 0.4 g a.i.	Dip whole or cut seed pieces in a solution containing 0.2 -
[Not for use in California]	maximum production, more uniform	0.5 - 1.0 g product	0.4 grams a.i. in 100 gals of water prior to planting.
Cumornia	development, fewer late	0.02 - 0.04 oz product	water prior to printing.
	maturing plants, and to break dormancy of newly		
	harvested potatoes that have not had a full rest		
	period.		
Note: Under high soil seed pieces.	temperatures use the minimum	n concentration for dorma	nt seed. Do not treat rested

	VEGETABLI	E CROPS (Cont.)	
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Rhubarb	To break dormancy on plants receiving insufficient chilling and to increase market-able yield of forced rhubarb.	10 – 20 g a.i. 25 – 50 g product 0.9 – 1.8 oz product	 When the rest period is not completely broken, make a single application of 2 fluid ounces (60 ml) of a solution containing 20 g a.i. in 10 gals. of water to each cleaned crown. When the rest period is broken by cold weather, apply 2 fl. oz. (60 ml) of a solution containing 10 g a.i. in 10 gals of water to each cleaned crown.
	house temperatures at $40 - 50^{\circ}$ ms with plastic. Temperatures		
Spinach	To promote plant height and leaf length.	2.5 – 10.0 g a.i. 6.25 – 25 g product 0.23 – 0.9 oz product	Apply a single application of ProGibb [®] 40% between the 1 st true leaf and prior to harvest. Use sufficient water volume to ensure thorough coverage.
Note: Use of ProGibb®	40% may cause a slight and t	emporary reduction in the	e coloration of the foliage.
Spinach, Mustard greens, Collard greens and Turnip greens. [Not for use in	To facilitate harvest, increase yield and improve quality of fall and over- winter crops.	4 – 10 g a.i. 10 – 25 g product 0.4 – 0.9 oz product	Apply a single spray 10 - 18 days before each anticipated harvest on fall or over-winter crops, ideally when daytime temperatures are 40° F - 70° F and during early morning hours when dew is present on
California]	tion of bolting has been known to		crop. Make applications in 10 - 50 gallons of water per acre by ground sprayer or in a minimum of 5 - 10 gallons of water per acre by air. When applied to promote growth of second cutting, wait until some re-growth has started before spraying. Maximum benefit is obtained when below normal temperatures prevail following application and growth would be otherwise slowed in untreated crops.

NOTE: Since the promotion of bolting has been known to occur, do not apply after the mid-winter period or if temperatures are expected to exceed 75° F within several days of application. Do not apply on spring plantings.

RICE

CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Seedling Applications	(Early Season)		
Rice	To promote early season	1 – 3 g a.i.	Make 1 - 2 applications at the
	plant vigor and more		1 - 2 and/or 4 - 5 leaf stages
	uniform seedling growth prior to permanent flood	2.5 – 7.5 g product	of growth.
	establishment.	0.1 - 0.3 oz product	
Rice	To aid in rice water weevil		
	control use ProGibb® 40%		
[Not for Use in	in a tank mixture		
California]	combination with a		
	neonicotinoid insecticide		
	such as Belay® at		
	recommended label rates.		

Note:

• Early flooding reduces the additional flushing costs associated with a delay in establishing the permanent flood, reduce weed infestations and the number of herbicide applications, and/or promote earlier and more uniform grain maturity.

• Do not apply prior to the 2 - 3 leaf stage if gibberellin seed treatment is used.

• Timing and dosage are to be based upon environmental conditions, tank mix combinations with herbicides, and preferred permanent flood practice in relation to rice leaf stage.

• Do not apply when rice is subjected to drought stress conditions.

• The use of a non-ionic surfactant has been seen to improve uptake.

RICE (Cont.)

CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Panicle Extension A	pplications (Late Season)		
Rice	To promote main culm and tiller panicle extension	3 – 8 g a.i.	Make a single application between split-boot and 100%
[Not for Use in California]	which has been seen to result in improved	7.5-20 g product	panicle heading.
	pollination and seed yield.	0.3 – 0.7 oz product	Heading applications to the first crop also has been observed to accelerate re- growth of second crop rice.
Rice [Hybrid Seed	To promote main culm and tiller panicle extension	0.5 – 2 g a.i.	Make 1 - 5 applications at regular intervals during the
Production]	resulting in improved pollination and seed yield.	1.25 – 6 g product	heading period to promote main culm and tiller panicle
[Not for use in California]		0.05 – 0.2 oz product	extension.
herbicides, and prDo not apply wheFoliage occasiona	ge are to be based upon environme referred permanent flood practic on rice is subjected to drought stu- lly and temporarily appears light b [®] 40% application.	e in relation to rice leaf st ress conditions.	tage.
Rice [Not for use in California]	Promote yield enhancement of ratoon crop rice by increasing ratoon tiller growth and aiding ratoon	4 – 7 g a.i. 10 – 17.5 g product	Apply single application at post flowering through soft dough stage to primary rice crop to initiate enhanced
-	stand establishment.	0.4 - 0.6 oz product	growth of following ratoon crop.

For Foliar and Hybrid Rice Seed Production: Mixing Instructions

Fill the treatment tank with half of the final tank mix volume. Add the required amount of ProGibb[®] 40% and mix thoroughly while adding water to the desired final volume. Dispose of any unused spray material at the end of the day.

Application Equipment

Apply ProGibb[®] 40% by aerial or ground spray equipment. As an aerial spray, use a spray system capable of producing a uniform spray pattern of medium to fine spray droplets at 10 gallon per acre (GPA). Apply no less than 3 GPA of total spray volume. Use low pressure ground sprayers equipped with boom and flat fan nozzles using 10 - 15 GPA spray volume.

Compatibility with Other Chemicals: It is permissible to tank-mix ProGibb[®] 40% with most commonly used rice herbicides and fungicides.

SEED TREATMENT APPLICATION

Mixing Instructions

Apply ProGibb[®] 40% to seed with standard mist treating equipment. For best results, higher treatment volume of 6 - 10 fl oz per 100 lbs of seed (177 - 296 ml/45 kg seed) ensure complete and uniform coverage.

Fill the treatment tank with half of the final tank mix volume. Add the required amount of ProGibb[®] 40% and mix thoroughly while adding water and other co-applied seed treatment products (see Compatibility with Other Chemicals section) to the desired final volume.

An approved dye must be added to distinguish ProGibb[®] 40% treated seed and prevent inadvertent use for food, feed, or oil purposes. Treated seed must be labeled in accordance with the requirements of the Federal Seed Act.

Use Restriction

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

ProGibb® 40% stimulates seed germination and promotes faster and more uniform stand establishment.				
			APPLICATION	
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	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		
[Not for use in		(per 100 lbs seed)		
California]	To help increase final stand			
	density and uniformity when			
	seed are planted deeper to			
	receive adequate moisture.			
	_			
• Do not apply ProGibb [®] 40% prior to a 24 hour presoak or to water used for the presoak.				
• Do not exceed 0.2 oz of product/100 lbs of seed.				

CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Cotton	Promote early season growth	1 - 6 g a.i.	In-furrow application to
	and increase seedling vigor	_	seed, or as a foliar
		2.5 - 15 g product	application from the
			cotyledon leaf stage through
		0.1 - 0.5 oz product	the 7 leaf/node stage.
			Repeat applications as
			needed to a maximum of 2
			applications.
			Applying more often than
			necessary to achieve the
			desired height results in
			excessive vegetative growth.
			_

Notes:

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

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

- Do not apply ProGibb[®] 40% to plants that are under drought stress. If the plants are under continuous stress, delay the application of ProGibb[®] 40% until the stress is alleviated and the plants are beginning to recover.
- Avoid drift or accidental application to other crops.

TEMPERATE FIELD CROPS – FIELD USES					
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING		
Dry Bean [Not for use in California]	Promotes early season growth, increased seedling vigor, and increased plant height allowing for improved harvesting efficiency.	1 – 6 g a.i. 2.5 – 15 g product 0.1 – 0.5 oz products	Apply 1 – 2 applications as a foliar broadcast spray during the 3 - 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).		
 delay the ap Applying m vegetative g Highly variations should be un Hops Seeded and seedless Fuggle hops and similar varieties adapted 	y to plants that are under drou oplication until the stress is alle above often than necessary to acl growth. able responses based on geneti sed when applying to varieties To increase fruit set and yield.	eviated and the plants ar hieve the desired height c background or variety	e beginning to recover. results in excessive are known to occur. Caution		
	ProGibb [®] 40% to plants that a ease lodging. Avoid drift or a				

	TEMPERATE FIELI	O CROPS – FIELD US	ES
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Soybean	To improve mechanical	1 – 20 g a.i.	V1 - V4: Apply 1 - 2
	harvest efficiency by		applications as a foliar
[Not for Use in	elongating the first and	2-50 g product	broadcast spray during
California]	second internode of young		growth stages V1 - V4 (1 - 2
	plants.	0.1 - 1.8 oz product	sets of unfolded trifoliolate
			leaves). If applying as a banded spray, reduce rates
			accordingly. Complete
			coverage of leaf tissue is
			essential. Make applications
			in 20 - 40 gals. water/a.i.
			5
Note: Differences in	n response by variety may be l	arge. Caution should be	used when using on untested
varieties.			
	To enhance post-	1 – 20 g a.i.	V2 - R5: Apply with
	emergence grass control.		SelectMax [®] herbicide for
		2-50 g product	enhanced control of
		0.1 1.9 or modulat	Johnsongrass and volunteer
		0.1 - 1.8 oz product.	corn in soybeans.
	To increase pod set and	2 – 4 g a.i.	V5 - R3: Make a single
	increase the growth of the	8	application at V5 - R3
	plant.	6 - 11 g product	growth stage.
		0.2 - 0.4 oz product	
	response by variety may be l	arge. Caution should be	e used when using on untested
varieties. Consult yo	our Valent representative.		
Peanut	To promote plant growth.	2.5 – 5.0 g a.i.	Make 2 - 4 applications on a
1 canat	To promote plant growth.	2.3 - 5.0 g a.i.	2 week interval. Begin
[Not for use in		6 – 12 g product	sprays 2 weeks after
California]		· 81	emergence.
1		0.2 - 0.4 oz product	5
	To enhance post-	5 – 20 g a.i.	Apply with SelectMax [®]
	emergence grass control.		herbicide for enhanced
		12-50 g product	control of Johnsongrass and
			volunteer corn in peanuts.
		0.4 - 1.8 oz product	
	response by variety may be l		
varieties. For specifi	c variety information, consult	your Valent representation	ive.

SelectMax[®] registered trademark of Valent USA LLC.

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

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

Valor[®], Valor[®] XLT, Gangster[®], and Fierce[®] are registered trademarks of Valent USA LLC.

SPRAY GUIDELINES FOR WATERCRESS:

	Watercress									
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING							
Watercress	 To enhance growth in adverse weather conditions; To help plants resume growth after insect and disease attacks; To increase root free stem length during low light/short day conditions. 	15 - 25 g a.i. 37.5 – 62.5 g product 1.4 – 2.3 oz product	Make 1 - 2 applications per acre per crop 3 - 7 days before harvest. Use 50 - 100 gals. of water per acre.							

TURF GRASS – SEED TREATMENT

CROP/VARIETY	OBJECTIVE/ BENEFIT	USE RATE/100 LBS OF SEED	APPLICATION TIMING
Grasses grown for seed production (For use in AZ, GA, MD and OR only)	To promote germination, emergence and stand uniformity	0.5 - 2.1 g a.i. 1.25 - 5.25 g product 0.05 - 0.2 oz product	For every 100 lbs. turf grass seed to be treated, mix the desired amount of product into 8 - 20 fl. oz. of water to form treatment solution

Note:

- Do not apply product prior to a 24 hour presoak or to water used for the presoak.
- Do not exceed 2.1 grams a.i./100 lbs of seed.

CITRUS: POST-HARVEST APPLICATIONS

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

BANANA/PLANTAIN: POST-HARVEST APPLICATION

[Not for Use in California]

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

PINEAPPLE: POST-HARVEST APPLICATION

[Not for Use in California]

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

PROGIBB® 40% CONVERSIONS

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

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

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

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

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

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

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

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

Gallons		PPM GA3						
of Water	25	50	75	100	250	500	750	1500
10	0.08	0.17	0.25	0.33	0.83	1.67	2.50	5.01
20	0.17	0.33	0.50	0.67	1.67	3.34	5.01	10.01
25	0.21	0.42	0.63	0.83	2.09	4.17	6.26	12.52
50	0.42	0.83	1.25	1.67	4.17	8.34	12.52	25.03
100	0.83	1.67	2.50	3.34	8.34	16.69	25.03	50.07
150	1.25	2.50	3.76	5.01	12.52	25.03	37.55	75.10
200	1.67	3.34	5.01	6.68	16.69	33.38	50.07	100.13
250	2.09	4.17	6.26	8.34	20.86	41.72	62.58	125.17
300	2.50	5.01	7.51	10.01	25.03	50.07	75.10	150.20
400	3.34	6.68	10.01	13.35	33.38	66.76	100.13	200.27
500	4.17	8.34	12.52	16.69	41.72	83.45	125.17	250.34

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

Example:

To make 250 gals of a 50 PPM gibberellic acid solution, dissolve 4.17 oz of ProGibb[®] 40% in 250 gals of water (see shaded area).

CONVERSION TABLE (for the 2.82 oz [80 g] size)

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

ProGibb 40% contains approximately 0.35 oz (10 Grams) of active ingredient per 0.88 oz (25 Grams) of product.

(Alternate for 2.82 oz [80 g] packaging)

Gallons		PPM GA3								
of Water	4	5	6	8	10	15	20	30	40	50
75	0.10	0.13	0.15	0.20	0.25	0.38	0.50	0.75	1.00	1.25
100	0.13	0.17	0.20	0.27	0.33	0.50	0.67	1.00	1.34	1.67
125	0.17	0.21	0.25	0.33	0.42	0.63	0.83	1.25	1.67	2.09
150	0.20	0.25	0.30	0.40	0.50	0.75	1.00	1.50	2.00	2.50
200	0.27	0.33	0.40	0.53	0.67	1.00	1.34	2.00	2.67	3.34

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

Example:

To make 200 gallons of a 40 ppm gibberellic acid solution, dissolve 2.67 oz of ProGibb[®] 40% in 200 gallons of water (see shaded area).

Warranty and Disclaimer Statement:

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

ProGibb[®] 40% Plant Growth Regulator is a registered trademark of Valent BioSciences LLC. Belay[®] Insecticide, SelectMax[®], Valor[®], Valor[®] XLT, Gangster[®], and Fierce[®] are registered trademarks of Valent U.S.A. LLC.

Products That Work, From People Who Care is a trademark of Valent U.S.A. LLC.

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ProGibb 40% Plant Growth Regulator, Water Soluble Granule

[Alternate Brand Name: RyzUp SmartGrass[®] Plant Growth Regulator, Water Soluble Granule, <u>Proliant®</u> Plant Growth Regulator, Water Soluble Granule]

[Sub-Label II]

For Organic Production

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

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

KEEP OUT OF REACH OF CHILDREN

CAUTION

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

EPA Registration No. 73049-1 EPA Establishment No. 33762-IA-001

Valent BioSciences LLC 1910 Innovation Way, Suite 100 Libertyville, IL 60048 1-847-968-4700

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

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

	FIRST AID				
If in eyes	 Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. 				
If on skin or clothing	 Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. 				
	HOT LINE NUMBER				
for treatment. You may	iner or label with you when calling a poison control center or doctor, or going y also call toll-free 1-800-892-0099 (24 hours) for emergency medical ort emergency information. For all other information, call 1-800-6-VALENT.				

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & 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[®] Plant Growth Regulator Water Soluble granule] (hereafter referred to as RyzUp SmartGrass[®]) contains gibberellic acid which is an extremely potent plant growth regulator; when applying plant growth regulators, deviations from the label directions in the rates, timings, water volumes, or the adoption of untested spray mixes, results in undesirable effects. Always consult the local Valent representative or crop specialist in your area for the spray regimen best suited to your conditions.
- Do not apply to plants under pest, nutritional, or water stress.
- When a range of rates is indicated, use the concentration and spray volume indicated locally by the local Valent representative or crop specialist.
- For optimum effectiveness, thorough spray coverage of the target area must be achieved. Prepare solution concentrations by mixing the required amount of product with water in a clean, empty spray tank. Use of a non-ionic surfactant has been shown to increase wetting and uptake of the active ingredient. Discard any unused spray material at the end of each day following local, state or federal law.
- For most efficacious results, use water with a pH of 4.0 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 or 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 1/4 full with water and recap. Shake 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use or disposal. Drain for 10 seconds after flow begins to drip. Repeat this procedure two more times. Then offer for recycling or dispose of in a sanitary landfill, or incineration, if allowed by state and local authorities by burning. If burned, stay out of smoke.

SPRAY GUIDELINES

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

DIRECTIONS FOR CHEMIGATION

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

CHEMIGATION PRECAUTIONS:

Apply this product only through the following systems: center pivot, lateral move, side/wheel roll, traveler, solid set, big gun or hand move which have overhead sprinklers. Do not apply this product through any other type of irrigation system. Crop injury or lack of effectiveness can result from non-uniform distribution of treated water. If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise. Prior to application ensure that the chemigation system meets the following requirements:

- The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

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

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days of the year. Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water systems should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where the pesticide distribution is adversely affected.

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

	PASTURES & FORAGE – FIELD USES				
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING		
Perennial Forage Grasses	To stimulate dry matter production for grazing, hay, green chop or silage when cool season conditions limit growth rates.	3 - 11 g a.i. 7.5 – 27.5 g product 0.3 – 1.0 oz product	Spring Application: 1 - 3 applications every 3 - 4 weeks starting at green up after 1 - 2 inches of new shoot growth has emerged. Autumn Application: 1 - 3 applications every 3 - 4 weeks starting when forage growth has slowed due to cool temperatures. Best response occurs when average daily temperatures are between 40° F - 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 g a.i. 7.5 – 27.5 g product 0.3 – 1.0 product	Apply 1 - 6 applications every 3 - 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 - 60° F and adequate moisture and nutrition are present.		
Timothy Hay	To stimulate dry matter production for grazing, hay, green chop or silage when cool season conditions limit growth rates	0.3 to 1.0 oz product	Spring Application: apply when forage growth is slow due to cool temperatures. After Cutting: Apply 7 to 14 days after cutting to promote growth.		

	PASTURES & FORAG	E – FIELD USES (Con	t.)
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Cereal Grains (such as barley, oats, rye, sorghum, wheat, triticale)	To stimulate dry matter production for grazing, hay, green chop or silage when cool season conditions limit growth rates.	3 - 11 g a.i. 7.5 – 27.5 g product 0.3 – 1.0 oz product	Spring Application: 1 - 3 applications every 3 - 4 weeks starting at green up after 1 - 2 inches of new shoot growth has emerged. Autumn Application: 1 - 3 applications every 3 - 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 - 60° F and adequate moisture and nutrition are present.
	To promote growth and stand establishment	3 - 11 g a.i. 7.5 – 27.5 g product 0.3 to 1.0 oz product	Apply as a foliar application from 2 leaf (Feekes 1) to 8 tillers (Feekes 5). Best response occurs when average daily temperatures are between 40°F to 60°F.

	To flush weed emergence (see list) for uniform germination [Not For Use in the states of AR, the bootheel region of MO, MS, LA and TX]	3 - 11 g a.i. 7.5 – 27.5 g product 0.3 to 1.0 oz product	Autumn application: apply once alone or in combination with herbicide before weed emergence. If used alone, follow up with herbicide to control emerged weeds. Do not apply RyzUp SmartGrass after nodes in grassy weeds have begun separating (jointed).
Winter Brassicas (such as turnip, kale, rape)	To stimulate dry matter production for grazing, hay, green chop or silage when cool season conditions limit growth rates.	3 - 11 g a.i. 7.5 – 27.5 g product 0.3 – 1.0 oz product	Spring Application: 1 - 3 applications every 3 - 4 weeks starting at green up after 1 - 2 inches of new shoot growth has emerged. Autumn Application: 1 - 3 applications every 3 - 4 weeks starting when forage growth has slowed due to cool temperatures. Best response occurs when average daily temperatures are between 40° F - 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.
- Do not tank-mix *RyzUp SmartGrass* with any Growth Regulators/Synthetic Auxins (Group 4) herbicides.
- *RyzUp SmartGrass* enhances the effect of some HPPD (Group 27) herbicides and will cause unwanted injury when applied post-emergent to crops and hybrids with known sensitivity to HPPD herbicides. Users should understand and accept this risk before applying *RyzUp SmartGrass* in combination with HPPD herbicides.
- Plants will not respond to treatment without adequate moisture or if under pest and/or nutritional stress.
- Once plants are at their maximum growth rate under optimal temperatures application of RyzUp SmartGrass[®] will not stimulate additional growth.
- Plants will not respond when the ground is frozen.
- Plants treated at maximum physiological size will not respond with additional growth.

COVER CROPS – FIELD USES

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

FIELD USES				
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING	
Corn: Silage, Field	To increase yield and help overcome the effects of environmental stress.	2-6 g a.i. $5-15 g product$ $0.3-0.6 oz product$	Apply at V2 - V6	
		0.5 0.0 02 product		
Corn: Popcorn, Sweet corn, Seed corn	To increase yield and help overcome the effects of	2 – 6 g a.i.	Apply at V2 – V6	
,	environmental stress.	5-15 g product		
		0.3 - 0.6 oz 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[®]] is compatible as a tank-mix partner with Roundup[®] herbicide on glyphosate resistant corn. Use of ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name RyzUp SmartGrass[®]] with other tank-mix partners is done solely at the user's risk.
- Always consider tank-mix partner recommendations when using ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name RyzUp SmartGrass[®]].
- Do not tank-mix RyzUp SmartGrass with any Growth Regulators/Synthetic Auxins (Group 4) herbicides.
- RyzUp SmartGrass enhances the effect of some HPPD (Group 27) herbicides and will cause unwanted injury when applied post-emergent to crops and hybrids with known sensitivity to HPPD herbicides. Users should understand and accept this risk before applying RyzUp SmartGrass in combination with HPPD herbicides.

	COVER CROPS – FIELD USES (Cont.)						
CROP/VARIETY	OBJECTIVE/BENEFI T	USE RATE/ACRE	APPLICATION TIMING				
Cotton	Promote early season growth and increase seedling vigor	1 - 6 g a.i. 2.5 - 15 g product 0.1 - 0.5 oz products	Apply $1 - 2$ applications as a foliar broadcast spray during the 3 - 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	To maintain yields in older plantings, increase	1.0 - 2.0 g a.i.	Apply at 1 st - 5 th internode stage to new plantings or ratoon crop				
[Not for use in California]	bio-mass and stimulate growth before harvest of cane in older production fields (>3 years)	2.5 - 5 g product 0.1 - 0.2 oz products	in at least 20 gal/A. Addition of non-ionic surfactant may increase activity.				

	TEMPERATE FIE	LD CROPS – FIELD	USES
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Soybean	To improve mechanical	1 – 20 g a.i.	V1 - V4: Apply 1 - 2 applications
	harvest efficiency by		as a foliar broadcast spray during
[Not for use in	elongating the first and	10 - 20 g a.i. on LV	growth stages V1 - V4 (1 - 2 sets
California]	second internode of	label	of unfolded trifoliolate leaves). If
	young plants.		applying as a banded spray, reduce
		2-50 g product	rates accordingly. Complete
			coverage of leaf tissue is essential.
		0.1 - 1.8 oz product	Make applications in 20 - 40 gals
			water/a.i.
	To enhance post-	1 – 20 g a.i.	V2 - R5: Apply with SelectMax [®]
	emergence grass control.		herbicide for enhanced control of
		2-50 g product	Johnsongrass and volunteer corn in
		0.1 1.0 1.4	soybeans.
		0.1 – 1.8 oz product	
	To increase pod set and	2 – 4 g a.i.	V5-R3: Make a single application
	increase the growth of the		at V5-R3 growth stage.
	plant.	6 - 11 g product	
		0.2 - 0.4 oz product	
Pulse Crops	To raise height of lowest	3 – 6 g a.i	Apply at 2-leaf to 4-leaf stages.
(Chickpeas/Garbanzo	pod and to promote		
Beans and Lentils)	growth and stand establishment.	7.5 - 15 g product	
		0.3 - 0.5 oz product	

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

Grasses Grown For Seed Production					
Сгор	Objective/ Benefit	Use Rate/Acre	Application Timing		
Annual and perennial grasses (such as ryegrass, Kentucky bluegrass, tall fescue)	To flush weed emergence (see list) for uniform germination and to stimulate growth of grass grown for seed.	6 – 12 g a.i. 15 – 30 g product 0.5 - 1.0 oz product	Autumn application: apply once alone or in combination with herbicide before weed emergence. If used alone, follow up with herbicide to control emerged weeds. Do not apply RyzUp SmartGrass- after nodes in grassy weeds have begun separating (jointed).		

	Ν	on-Crop	
Fallow Fields	To flush weed emergence	6 – 12 g a.i.	Autumn application: apply
	(see list) for uniform		once alone or in
[Not For Use in the states of AR, the	germination	15 - 30 g product	combination with
bootheel region of			herbicide(s) before weed
MO, MS, LA and		0.5 - 1.0 oz product	emergence. If used alone,
TX]			follow up with herbicide to
			control emerged weeds. Do
			not apply RyzUp
			SmartGrass after nodes in
			grassy weeds have begun
			separating (jointed).
Bermudagrass	To maintain or enhance	0.1 - 0.3 oz product	Under hot conditions, apply 1
Tifdwarf	regrowth Bermudagrass		3 g a.i./acre weekly in 25-100
Tifgreen	during summer months.		gals. of water/acre.
[Not for use in			
California]			TT 1 1 1.1.1 1
Bermudagrass	To initiate or maintain	0.9 - 2.3 oz product	Under cool conditions, apply
(Tifdwarf, Tifgreen	growth and prevent color		10 g a.i./acre weekly or 25 g
and other cultivars)	change during periods of		a.i./acre biweekly in 25-100
[Not for use in California]	cold stress and light frosts.		gals. of water/acre.
NOTE:			

NOTE:

• Maintain adequate moisture and proper fertilization programs as required for the local area.

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

Weed species that germination is stimulated by application of RyzUp SmartGrass [Not For Use in the states of AR, the bootheel region of MO, MS, LA and TX].

Common Name	Scientific Name
GRASS WEED SPECIES	
Annual Bluegrass	Poa annua
Downy Brome	Bromus tectorum
Italian Ryegrass	Lolium multiflorum
Rattail Fescue	Vulpia myuros
BROADLEAF WEED SPECIES	
Hairy Nightshade	Solanum sarrachoides
Chamomile	Anthemis cotula

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[®] is a registered trademark of Monsanto Company. Ryzup SmartGrass[®] is a registered trademark of Valent BioSciences LLC. Products That Work, From People Who Care is a trademark of Valent U.S.A. LLC.

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ProGibb Plant Growth Regulator, Water Soluble Granule

[Alternate Brand Name RyzUp SmartCornTM Plant Growth Regulator, Water Soluble Granule]

[Sub-Label III]

For Organic Production

Active Ingredient	
Gibberellin A ₃	
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] [booklet] [panel] for First Aid, additional Precautionary Statements, Directions for Use and Storage/Disposal Statements.

EPA Registration No. 73049-1 EPA Establishment No. 33762-IA-001 Lot Number:

Valent BioSciences LLC 1910 Innovation Way, Suite 100 Libertyville, IL 60048 1-847-968-4700

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

FIRST AID				
If in eyes	 Hold eye open and rinse slowly and gently with water for 15-20 minu Remove contact lenses, if present, after the first 5 minutes, then contin 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				
	y 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 SmartCornTM] [hereafter referred to as RyzUp SmartCornTM] 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 or 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 1/4 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 SmartCornTM] 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 SmartCornTM] 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				
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING	
Corn: Silage, Field	To increase yield and help overcome the effects of heat or drought.	2 – 6 g a.i. 5 – 15 g product	Apply at V2 - V6	
		0.3 – 0.6 oz product		
Corn: Popcorn,To increase yield and helSweet corn, Seedovercome the effects ofcornheat or drought.	To increase yield and help overcome the effects of	2 – 6 g a.i.	Apply at V2 – V6	
		5 – 15 g product		
		0.3 – 0.6 oz 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 SmartCorn[™]] is compatible as a tank-mix partner with Roundup[®] herbicide on glyphosate resistant corn. Use of ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name RyzUp SmartCorn[™]] 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 SmartCornTM].
- Do not tank-mix ProGibb Plant Growth Regulator, Water Soluble Granule [alternate brand name RyzUp SmartCornTM] 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[™]] 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[™]] 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 SmartCornTM] 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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