ProGibb® 40%

PLANT GROWTH REGULATOR

WATER SOLUBLE GRANULE



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 1.1 oz (32 g) of Gibberellic Acid in 2.8 oz (80 g) of product.

EPA Reg. No. 73049-1 EPA Est. No. 33762-IA-001

SKU 60218

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KEEP OUT OF REACH OF CHILDREN CAUTION

	FIRSTAID		
If in Eyes	 Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. 		
If on Skin or Clothing	 Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. 		
HOT LINE NUMBER			

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also call toll-free 1-800-892-0099 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-6-VALENT (682-5368).

2.0 PRECAUTIONARY STATEMENTS

1.0

2.1 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.

2.2 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.

2.3 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.

2.4 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.

3.0 DIRECTIONS FOR USE

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

4.0 | AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours unless wearing appropriate PPE.

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

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

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

5.0 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.

5.1 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 preharvest 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.

6.0 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 nonuniform 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.

7.0 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

Nonrefillable 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.

8.0 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/BEN	IEFIT	APPLICATION	ON 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.		
CROP/CULTIVAR	GRAMS A.I./ACRE	GRAMS PRODUCT/ACRE	OUNCES 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					
	OBJECTIVE/BE	NEFIT	APPLICATION TIMING			
	For decreased berry set, reduced hand-thinning costs, and hastened maturity.		Make 1 - 4 applications during bloom. Make only 1 - 2 applications for "Other Seedless Grapes." When the bloom period is extended, subsequent sprays are to be made 1 - 7 days after the first application.			
	CROP/CULTIVAR GRAMS A.I./ACRE Flame Seedless 3 - 16 Thompson Seedless 8 - 20		GRAMS Product/Acre	OUNCES PRODUCT/ACRE		
			7.5 - 40	0.3 - 1.4		
			20 - 50	0.7 - 1.8		
	Raisin	3 - 12	7.5 - 30	0.3 - 1.1		
	Other Seedless Grapes	0.5 - 12	1.3 - 30	0.1 - 1.1		

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/BE	NEFIT	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	GRAMS ROP/CULTIVAR A.I./ACRE		OUNCES PRODUCT/ACRE
Thompson Seedless	16 - 24	40 - 60	1.4 - 2.2

BERRY SIZING SPRAYS – SEEDLESS TABLE GRAPE				
OBJECTIV	E/BENEFIT	APP	LICATION TIM	ING
clusters when	ith established	Make 1 - 4 applications beginning when the average berry size reaches "target" diameter (See below). Timing of the subsequent sprays will be dictated by experience in the vineyard and temperatures occurring between sprays. Sprays made after 15 - 20 days from the first sizing spray are less effective.		perry ameter ne pe n the res ys. 20 days
CROP/ CULTIVAR	TARGET BERRY DIAMETER*	GRAMS PRODUCT/ PRODUCT A.I./ACRE ACRE ACRE		
Perlette	4 - 5 mm	32 - 128 80 - 320 2.9 - 11.5		

CROP/ CULTIVAR	TARGET BERRY DIAMETER*	GRAMS A.I./ACRE	GRAMS PRODUCT/ ACRE	OUNCES PRODUCT/ ACRE
Perlette Seedless	4 - 5 mm	32 - 128	80 - 320	2.9 - 11.5
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 APPLICA		APPLICAT	ION TIMING	
To increase berry size.		Apply 20 - 50 ppm GA3 solution a a dip or direct spray to the cluster when berries reach 12 - 15 mm.		
RATE PER 5 GALS TREATMENT SOLUTION			IT 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 gals of solution needed. Consult the Valent representative or local specialist before sizing cultivars with which there is no familiarity.

BERRY SIZING SPRAYS – SEEDED TABLE GRAPE					
OBJECTIVE/BENEFIT APPLICATION TIMING					
To increase berry size in listed cultivars; and also to reduce berry shrivel in Emperor.	Make 1 application during the indicated berry diameter range to the entire vine.				
	DATE				

		RATE		
CROP/ CULTIVAR	BERRY DIAMETER (MM)*	GRAMS A.I./ACRE	GRAMS PRODUCT/ ACRE	OUNCES PRODUCT/ ACRE
Emperor	12 - 16			
Red Globe	12 - 18			
Calmeria	12 - 16	20	50	1.8
Christmas Rose	12 - 16	20	30	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		APPLICAT	TON TIMING
To increase berry size.		Make 1 application 3 - 5 days after full bloom, but before shatter begins	
CROP/ CULTIVAR	GRAMS A.I./ACRE	GRAMS OUNCES PRODU PRODUCT/ACRE ACRE	
Black Corinth (Zante Currant)	1 - 12	2.5 - 30	0.1 - 1.1

WINE GRAPE

APPLICATION TIMING

Make a single spray. Apply when

the clusters found in the dominant

OBJECTIVE/BENEFIT

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.	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.		
	GRAMS	GRAMS	OUNCES
CROP/CULTIVAR	A.I./	PRODUCT/	PRODUCT/
	ACRE	ACRE	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: DO NOT make this app	plication les	ss than three v	veeks before

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.

9.0 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 cause severe leaf and/or fruit drop.
- Dilute spray rates are expressed as the amount of product per 100 gallons of water.
- Do not apply in white wash sprays in which lime or other caustic material has produced a high pH in the spray tank. Applications of copper fungicides and/or oils within three weeks (before or after) the *ProGibb* 40% application often results in significant leaf drop and fruit drop.

CITRUS: FIELD APPLICATIONS

CITRUS – INCREASE FRUIT SET			
CROP/ Variety	OBJECTIVE/ BENEFIT	USE RATE/ ACRE	APPLICATION TIMING
Navel, Valencia* & Ambersweet* Orange *(Not for use in California)	To enhance fruit set and yield.	15 - 25 g a.i. 37.5 - 62.5 g product 1.4 - 2.3 oz product	Make a single dilute spray between mid Dec. and late Jan. using sufficient spray volume for adequate coverage of tree canopy.

NOTE: Many blocks of Ambersweet and Navel orange in Florida tend to flower very heavily, yet set poor crops. In these blocks, it appears that tree resources are wasted by heavy flowering, compromising the trees' ability to set fruit, support early fruit growth, and carry fruit to harvest. Productivity of heavily blooming blocks is often increased by reducing flower formation.

hoavily blooming blooms to often intercaped by readening never fermidation.				
Clementine Mandarin (Limit of 1 - 3 full applications in California)	To increase fruit set and yield.	1 - 40 g a.i. 2.5 - 100 g product 0.1 - 3.6 oz product	Make 1 - 4 applications from early bloom up to 4 weeks after petal fall. Allow a minimum of 3 days between sprays. Use a dilute spray with sufficient spray volume for adequate coverage of tree canopy between sprays.	
Tangerines and Mandarin Hybrids (Not for use in California)	To increase fruit set and yield.	8 - 30 g a.i. 20 - 75 g product 0.7 - 2.7 oz product	Make 1 - 2 applications during the bloom period. Apply as a dilute spray.	
Grapefruit (Not for use in California)	To enhance fruit set, size and yield.	8 - 30 g a.i. 20 - 75 g product 0.7 - 2.7 oz product	Make a single application in Dec Jan. Use a dilute spray with sufficient spray volume for adequate coverage of tree canopy. Typically 125 - 175 gallons of water per acre has been sufficient.	

NOTE: The rate and number of applications depends upon amount of desired fruit set. Generally, more fruit will be set by 2 applications (except grapefruit), earlier applications, higher rates, and climatic conditions more favorable to set. Differential responses to the PGR across citrus cultivars also interact with the above factors to affect the degree of fruit set achieved. Reductions in final fruit size are known to occur as a result of excessive fruit set. Increases in mature leaf drop occur in trees under stress.

CITRUS – REDUCE FRUIT DROP			
CROP/ VARIETY	OBJECTIVE/ BENEFIT	USE RATE/ ACRE	APPLICATION TIMING
Star Ruby Grapefruit (Not for use in California)	To reduce early- season small fruit drop of Star Ruby Variety thereby increasing yields.	25 - 35 g a.i. 62.5 - 87.5 g product 2.3 - 3.2 oz product	Make a single dilute application during the bloom period.

NOTE: Results vary from season to season depending on environmental conditions. Maintain a well-balanced fertilization and watering program.

CITRUS – DELAY RIND AGING				
CROP/ VARIETY	OBJECTIVE/ BENEFIT	USE RATE/ ACRE	APPLICATION TIMING	
Navel and other orange cultivars (except Valencia)	To delay rind aging, reduce physiological disorders (e.g., rind staining, water spotting, sticky or tacky surface, oleocellosis), and produce a more orderly harvesting pattern.	16 - 48 g a.i. 40 - 120 g product 1.4 - 4.3 oz product	Make 1 - 2 applications as a concentrate or dilute spray. Early application: spray approximately 2 weeks prior to color break (typically Aug Nov.). This timing causes the greatest delay in rind aging and produces the firmest rind possible. AND/OR Late application: 1 application after marketable color (typically Oct Dec.). This late spray has been known to cause re-greening.	
Valencia Orange	To reduce rind creasing and to delay rind aging and softening.	40 - 80 g a.i. 100 - 200 g product 3.6 - 7.2 oz product	Make a single application as a concentrate or dilute spray in Aug Oct. to target crop of young fruit.	

NOTE:

- Do not apply the early spray to groves that will be harvested early, as fruit coloring will be delayed. Do not apply from Jan. - July, as production is often reduced the following year.
- Slower color development is to be expected in the target crop. Increased re-greening of mature fruit has been known to occur. After marketable color is achieved, treatment effects are reduced the longer treated fruit remain on the tree.

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All Round Oranges (For Florida use only)	To delay aging and softening of the rind, and to reduce creasing and puffiness.	20 - 60 g a.i. 50 - 150 g product 1.8 - 5.4 oz product	Make a single application in Aug Oct. to trees with a target crop of young fruit. The addition of pure organo-silicone type surfactant at 0.05% (6 oz/100 gals) has been shown to be beneficial.
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.

NOTE: Do not apply if early harvest is planned. Do not apply after coloring as pre-harvest rind staining and re-greening has been known to occur. Application during coloring sometimes causes variation in rind color development.

CITRUS – DELAY RIND AGING (CONT'D)				
CROP/ VARIETY	OBJECTIVE/ BENEFIT	USE RATE/ ACRE	APPLICATION TIMING	
Grapefruit/ Pummelo	To delay disorders associated with rind aging (e.g., puffiness, softening, and orange coloration), prevent preharvest drop of mature fruit, increase peel strength, reduce water loss during storage, and produce a more orderly harvesting pattern.	16 - 48 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 gals) in spray solution. Do not apply in combination with an organosilicone surfactant. EARLY: Make application 2 weeks prior to color break. Apply as a dilute spray (Aug Sept.). AND/OR LATE: Make application after marketable color has developed (Oct Dec.).	
NOTE: Do not spray groves that will be harvested early, as fruit coloring will be delayed. Treated fruit will re-green if allowed to remain on the tree for extended periods. Applications made after December, or when trees begin to break dormancy, have been observed to adversely affect the new crop. Do not use concentrate sprays. Results vary from season to season depending on environmental conditions. For maximum effect on rind firmest and delay in rind aging, make applications before color change.				
Lemon/ Lime	To decrease rind aging, yellowing, and the amount of small ripe fruit, and to produce a more desirable production	10 - 32 g a.i. 25 - 80 g product 0.9 - 2.9 oz product	Make a single application when target crop is 1/2 to full size, but still green.	

CITRUS - DEL AV RIND AGING (CONT'D)

NOTE: When applied 2 years in a row, an even larger difference in harvest pattern and maturity have been known to occur.

production pattern relative to market demand.

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.

10.0 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			
opop/			
CROP/ Variety	OBJECTIVE/ Benefit	USE RATE/ ACRE	APPLICATION TIMING
Highbush Blueberry:	To improve fruit set.	40 - 80 g a.i.	Make a single application of 40 - 80 g a.i.
Coville, Jersey,		100 - 200 g product	per acre in 40 - 100 gals of water. The application should be
Stanley, Earliblue, Weymouth, Walcott, Berkeley,		3.6 - 7.2 oz product	made at full bloom (when 75% of the flowers are fully open).
Blueray, Bluecrop, 1316A,			OR Make 2 - 4
Concord, and others			applications of 40 g a.i. per acre in 40 - 100 gals of
(Not for use in California)			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.
Rabbiteye Blueberry:	To improve fruit set.	40 - 80 g a.i.	Make a single application of 40 - 80
Aliceblue,		100 - 200 g product	g a.i. in 40 - 100 gals of water per acre. The application should be
Beckyblue, Bonita, Brightwell, Climax.		3.6 - 7.2 oz product	made at full bloom (when 75% of the flowers are fully open).
Delite, Tiftblue,			OR
Woodward and others.			Make 2 - 4 applications of 40 g a.i. per acre in 40 - 100
(Not for use in California)			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	To stimulate fruit set during periods of cool	1 - 4 g a.i. 2.5 - 10 g	Make application just prior to bloom. For cantaloupes
in California)	temperatures.	product	and watermelons 2 additional applica-
		0.1 - 0.4 oz product	tions 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 (Not for use in California)	To maintain and extend high fruiting capacity of sour cherry trees by promoting spur formation and reducing the occurrence of "blind" nodes. Spur formation is apparent the year after application. Therefore, changes in shoot, spur, and flower production will not be evident until 2 or 3 years after program initiation.	4 - 18 g a.i. 10 - 45 g product 0.4 - 1.6 oz product	Apply 1 spray 14 - 28 days after bloom. Optimum timing is defined as that stage when 3 - 5 terminal leaves have fully expanded, or, at least 1 - 3 inches of terminal shoot extension has occurred. Use 4 - 18 g a.i. per acre, depending on tree age and vigor (See Table below). Apply as a dilute spray in sufficient water to ensure thorough wetting, or as a concentrate spray ensuring uniform coverage.	

NOTE:

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

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

OBJECTIVE/ BENEFIT To produce larger, brighter colored, firmer fruit.	USE RATE/ ACRE 16 - 48 g a.i. 40 - 120 g	APPLICATION TIMING Make 1 - 2 applica- tions depending on
larger, brighter colored,		
	product 1.4 - 4.3 oz product	crop development. If crop development is uniform, make one application when the fruit is translucent green to straw colored.
		If cultivars or conditions cause non-uniform crop development make 2 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

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.

			,
Stone Fruit Group	To increase fruit firmness and improve fruit quality in the season of application.	16 - 32 g a.i. 40 - 80 g product 1.4 - 2.9 oz product	Apply as a single spray 1 - 4 weeks prior to the beginning of the harvest period. Use sufficient water to achieve complete
	application.		
			and foliage.

NOTE:

 This application has been known to cause reduction in flower counts the year following the application, particularly if it is made during the months of May - July.

Italian Prune	To reduce internal	16 - 48 g a.i.	Make a single application 4 - 5
(Not for use in California)	browning, improve quality,	40 - 100 g product	weeks before expected harvest.
iii oaiiioiiia)	and increase size.	1.4 - 4.3 oz	Apply in sufficient water volume to
	0.20	product	ensure thorough wetting.

NOTE:

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

TEMPERATE FRUIT CROPS (CONT'D)			
CROP/ VARIETY	OBJECTIVE/ BENEFIT	USE RATE/ ACRE	APPLICATION TIMING
Pecan (Not for use in AZ, CA & NM)	To extend leaf retention and maintain green foliage.	10 g a.i. 25 g product 0.9 oz product	Make 1 - 4 applications of 10 g a.i. beginning in July and continuing through October as needed. Note: Use sufficient water to achieve complete coverage. In most cases 100 gallons per acre has been shown to be effective. • Do not make more than one application of <i>ProGibb</i> 40% in July. Using more than one application in July may result in reduced return bloom. • <i>ProGibb</i> 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 cover-age of the canopy.

NOTE: Do not spray plants/trees in their first year. Treat in the second season for reduction of flowering in the third season, and again in the third season if flower reduction and fruiting is desired in the fourth season. Treat only plants/trees that are in good physiological condition. Discontinue treatment the year before desired harvest. Consult with the Valent representative or local horticulturist for timings and rates for specific cultivars in your area.

for specific cultivars in your area.				
15 - 25 g a.i.	Make a single			
	application to mother			
	plants 10 - 30 days			
product	after planting. Plants			
	should have 1-6			
	leaves at spraying.			
product	Apply 100 gals			
	spray/acre to point of			
	run-off.			
:	15 - 25 g a.i. 17.5 - 62.5 g product 1.4 - 2.3 oz product			

NOTE: Not for use on fruiting plants. Treatments have not always been effective on plantings set out after mid-May. Response varies with cultivar and location. Consult your Valent representative or local horticulturist for specific recommendations.

11.0 SPRAY GUIDELINES FOR TROPICAL FRUIT CROPS

CROP/	OBJECTIVE/	USE RATE/	APPLICATION TIMING
VARIETY	BENEFIT	ACRE	
Avocado (Not for use in California)	To improve fruit set and yield.	65 a product	Apply at the cauliflower stage of inflorescence development.

TROPICAL FRUIT CROPS – FIELD USES			
CROP/ VARIETY	OBJECTIVE/ BENEFIT	USE RATE/ ACRE	APPLICATION/ Timing
Pineapple (Not for use in California)	To improve fruit size.	125 - 250 g a.i. 312.5 - 625 g product 11.3 - 22.5 oz product	Apply after flowering. Make 2 applications at 2 - 5 weeks intervals. Direct sprays to the fruit. Use sufficient water to achieve adequate coverage.
	To improve uniformity of fruit maturity and enhance harvest efficiency.	12 - 24 g a.i. 30 - 60 g product 1.1 - 2.2 oz product	Make the first application a few days after planting when plants are established. Repeat applications at 3 - 4 weeks intervals.

CROP/ VARIETY	OBJECTIVE/ BENEFIT	USE RATE/ ACRE	APPLICATION TIMING
Sugar Cane [Not for use in California]	To stimulate growth and biomass in newly planted sugar cane.	1.0 - 2.0 g a.i. 2.5 - 5 g product 0.1 - 0.2 oz product	Make 1 - 2 applications of 2.5 to 5.0 grams product per acre per application. Do not exceed a total of 5.0 grams of product per acre.

12.0 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	For perennials: apply 1 - 3 applications at bud initiation stage.	
		0.9 - 1.8 oz product	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).	

VEGETABLE CROPS (CONT'D)				
CROP/ Variety	OBJECTIVE/ BENEFIT	USE RATE/ ACRE	APPLICATION/ TIMING	
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: Dilutio excessive top	ns of greater cor growth, particularly	centration can with a second	increase the risk of application.	
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 gals of water per acre by ground application or 5 - 10 gals of water per acre 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.	
	apply by air in Califo t as bolting has bee		ly earlier than 4 weeks ur.	
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.	
	ximum benefits, vi te of growth due to		good condition, except res.	
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.	

NOTE: Use of ProGibb 40% may cause a slight and temporary reduction in the coloration of the foliage. Response to ProGibb 40% may vary by cultivar. Consult your Valent representative or local specialist before

treating unfamiliar cultivars.

	VEGETABLE CROPS (CONT'D)			
CROP/ VARIETY	OBJECTIVE/ BENEFIT	USE RATE/ ACRE	APPLICATION/ TIMING	
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.	
Pepper (Not for use in California)	To promote plant growth.	1 - 3 g a.i. 2.5 - 7.5 g product 0.1 - 0.27 oz product	Apply 1 - 2 sprays in 25 - 50 gals of water per acre at 2-week intervals. Begin sprays 2 weeks after transplanting.	
Pepper (Not for use in California)	To increase fruit set and promote early season fruit growth.	1 - 3 g a.i. 2.5 - 7.5 g product 0.1 - 0.27 oz product	Apply 1 - 2 sprays of 25 - 50 gals per acre at weekly intervals during the flowering period.	

NOTE: This use is best for areas with short growing seasons, or when low temperatures slow plant growth. The high rate is most efficacious for areas and/or varieties with pollination and/or fruit set problems.

Pepper (Not for use in California)	To increase fruit size and yield.	1 - 3 g a.i. 2.5 - 7.5 g	Apply in 25 - 50 gals of water per acre at the beginning of the
,		product 0.1 - 0.27 oz product	picking period.

NOTE: The high rate is best for plants with heavy fruit loads.

The Table 11 grants in 2001 for plants that hearly trait loads.				
Rhubarb	To break dormancy on plants receiving insufficient chilling and to increase marketable yield of forced rhubarb.	10 - 20 g a.i. 25 - 50 g product 0.9 - 1.8 oz product	1) When the rest period is not completely broken, make a single application of 2 fl oz (60 ml) of a solution containing 20 g a.i. in 10 gals of water to each cleaned crown. 2) 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.	

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

CROP/ VARIETY	OBJECTIVE/ BENEFIT	USE RATE/ ACRE	APPLICATION/ TIMING
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 1st true leaf and prior to harvest. Use sufficient water volume to ensure
NOTE: Use reduction in the	of ProGibb 40% ma ne coloration of the	ay cause a sligh e foliage.	thorough coverage. t and temporary
Spinach, Mustard greens, Collard greens and Turnip greens. (Not for use in California)	To facilitate harvest, increase yield and improve quality of fall and over-winter crops.	4 - 10 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 crop. Make applications in 10 - 50 gals of water per acre by ground sprayer or in a minimum of 5 - 10 gals of water per acre by air. When applied to promote growth of second cutting, wait until some regrowth has started before spraying. Maximum benefit is obtained when below normal temperatures prevail following application and growth would be otherwise slowed

VEGETABLE CROPS (CONT'D)

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 A	PPLICATIONS (EAI	RLY SEASON)						
Rice	To promote early season plant vigor and more uniform seedling growth prior to permanent flood establishment.	1 - 3 g a.i. 2.5 - 7.5 g product 0.1 - 0.3 oz product	Make 1 - 2 applications at the 1 - 2 and/or 4 - 5 leaf stages of growth.					
Rice (Not for use in California)	To aid in rice water weevil control use ProGibb 40% in a tank mixture combination with a neonicotinoid insecticide such as Belay® at recommended label rates.							

NOTE

- 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.

PANICLE EX	TENSION APPLICA	ATIONS (LATE S	EASON)
Rice (Not for use in California)	To promote main culm and tiller panicle extension which has been seen to result in improved pollination and seed yield.	3 - 8 g a.i. 7.5 - 20 g product 0.3 - 0.7 oz product	Make a single application between split-boot and 100% panicle heading. Heading applications to the first crop also has been observed to accelerate regrowth of second crop rice.
Rice (Hybrid Seed Production) (Not for use in California)	To promote main culm and tiller panicle extension resulting in improved pollination and seed yield.	0.5 - 2 g a.i. 1.25 - 6 g product 0.05 - 0.2 oz product	Make 1 - 5 applications at regular intervals during the heading period to promote main culm and tiller panicle extension.

NOTE:

- Timing and dosage are to be based upon environmental conditions, tank mix combinations with herbicides, and preferred permanent flood practice in relation to rice leaf stage.
- Do not apply when rice is subjected to drought stress conditions.
- Foliage occasionally and temporarily appears lighter green in color due to accelerated growth rates following *ProGibb* 40% application.

in untreated crops.

RICE (CONT'D)								
CROP/ VARIETY	OBJECTIVE/ BENEFIT	USE RATE/ ACRE	APPLICATION/ TIMING					
Rice	Promote yield enhancement of	4 - 7 g a.i.	Apply single application at post					
(Not for use in California)	ration crop rice by increasing ration tiller growth and aiding ration stand establishment.	10 - 17.5 g product 0.4 - 0.6 oz product	flowering through soft dough stage to primary rice crop to initiate enhanced growth of following ratoon crop.					

For Foliar and Hybrid Rice Seed Production: Mixing Instructions Fill the treatment tank with half of the final tank mix volume. Add the required amount of ProGibb 40% and mix thoroughly while adding water to the desired final volume. Dispose of any unused spray material at the end of the day.

Application Equipment

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

more uniform	more uniform stand establishment.								
CROP/	OBJECTIVE/	USE RATE/	APPLICATION TIMING						
VARIETY	BENEFIT	ACRE							
Seed	To promote germination and emergence for semi-dwarf and tall varieties. To help increase final stand density and uniformity when seed are planted deeper to receive adequate moisture.	0.5 - 2 g a.i.	For use						
treatment		0.05 - 0.2	with drill or						
for rice		oz product	broadcast						
[Not for use		(per 100 lbs	seeding						
in California]		seed)	systems.						

- Do not apply ProGibb 40% prior to a 24 hour presoak or to water used for the presoak.
- Do not exceed 0.2 oz of product/100 lbs of seed.

	COTTON								
CROP/ VARIETY	OBJECTIVE/ BENEFIT	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	In-furrow application to seed, or as a foliar application from the cotyledon leaf stage through the 7 leaf/node stage. Repeat applications as needed to a maximum of 2 applications. Applying more often than necessary to achieve the desired height results in excessive vegetative growth.						

NOTES:

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

Application equipment: As an aerial spray, use a spray system capable of producing a uniform spray pattern of medium to fine spray droplets at 10 gals 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.

TEMP	TEMPERATE FIELD CROPS – FIELD USES								
CROP/ VARIETY	OBJECTIVE/ BENEFIT	USE RATE/ ACRE	APPLICATION/ TIMING						
Hops	To increase	4 - 6 g a.i.	Make a single application in						
Seeded and seedless Fuggle hops and similar varieties adapted to the North- western states.	fruit set and yield.	10 - 15 g product 0.4 - 0.5 oz product	100 - 150 gals of water per acre when vine growth is 5 - 8 feet in length.						

NOTE:

Do not apply ProGibb 40% to plants that are under drought stress.
 Applications during stem elongation may increase lodging. Avoid drift or accidental application to other crops.

13.0 SPRAY GUIDELINES FOR WATERCRESS

WATERCRESS								
CROP/ VARIETY	OBJECTIVE/ Benefit	USE RATE/ ACRE	APPLICATION/ TIMING					
Watercress	1) To enhance growth in adverse weather conditions; 2) To help plants resume growth after insect and disease attacks; 3) To increase root free stem length during low light/short day conditions.	15 - 25 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.					

14.0 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%)

Ounces of ProGibb 40% for given PPM of gibberellic acid at different water volumes $\,$

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

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

Ounces of ProGibb 40% for given PPM of gibberellic acid at different water volumes

Gallons				PF	M 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 gallons of a 50 PPM gibberellic acid solution, dissolve 4.17 oz of ProGibb 40% in 250 gallons of water (see shaded area).

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

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

Grams of Active Ingredient	Ounces of Active Ingredient	Grams of ProGibb 40%	Ounces of ProGibb 40%
2	0.07	5	0.2
4	0.14	10	0.4
5	0.18	12.5	0.5
6	0.21	15	0.6
8	0.28	20	0.7
10	0.35	25	0.9
15	0.53	37.5	1.4

Grams of Active Ingredient	Ounces of Active Ingredient	Grams of ProGibb 40%	Ounces of ProGibb 40%
20	0.71	50	1.8
30	1.06	75	2.7
40	1.41	100	3.6
50	1.76	125	4.5
60	2.12	150	5.4
80	2.82	200	7.2

(Alternate for 2.82 oz [80 q] 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.

<u>Example:</u>

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).

15.0 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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