

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 128 g of Gibberellic Acid in 320 g of product.

EPA Reg. No. 73049-1
EPA Est. No. 33762-IA-001 (Lot Suffix 'S4') List No. 60218
EPA Est. No. 067256-IL-001 (Lot Suffix 'IH')

INDEX:

- 1.0 First Aid
- 2.0 Precautionary Statements
 - 2.1 Hazards to Humans & Domestic Animals
 - 2.2 Personal Protective Equipment (PPE)
 - 2.3 User Safety Recommendations
 - 2.4 Environmental Hazards
- 3.0 Directions for Use
- 4.0 Agricultural Use Requirements
- 5.0 General Directions for Use
 - 5.1 Application Instructions
- 6.0 Storage and Disposal
- 7.0 Spray Guidelines for Grape
- 8.0 Spray Guidelines for Citrus
- 9.0 Spray Guidelines for Temperate Fruit Crops
- 10.0 Spray Guidelines for Tropical Fruit Crops
- 11.0 Spray Guidelines for Vegetable Crops
- 12.0 Temperate Field Crops - Field Uses
- 13.0 Spray Guidelines for Watercress
- 14.0 Directions for Chemigation
- 15.0 ProGibb 40% Conversions
- 16.0 Warranty and Disclaimer Statement

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

1.0

FIRST AID	
If in Eyes	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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

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.

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% 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 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.
- For optimum effectiveness, thorough spray coverage of the target area must be achieved. Prepare solution concentrations by mixing the required amount of product with water in a clean, empty spray tank. Discard any unused spray material at the end of each day following local, state or federal law.
- For most efficacious results, the water pH is best at 7.0, and always below 8.5.
- 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.
- Product persistence: Re-apply if significant rain occurs within 2 hours of application.
- Compatibility: When considering tank mixing with other products, use the following compatibility jar test before mixing a whole tank.
Start with a clear glass or plastic quart jar. Add water from the same water source that will be used for the larger tank mix. Add the pesticides in correct proportions. Mix thoroughly and let stand for a minimum 15 minutes. Heat, separation, gelling, are all signs of incompatibility. Before using any mixes that pass the jar tests for compatibility, it is imperative to test the mixture on a designated area as it may result either in phytotoxicity or ineffectiveness. For further information, consult your local Valent representative.
- For aerial applications spray volumes must be greater than 2 gals per acre (10 gals per acre for tree crops).
- No preharvest interval is required for this product.

6.0 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.

7.0 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/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.	
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/BENEFIT		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	GRAMS PRODUCT/ACRE	OUNCES PRODUCT/ACRE
Flame Seedless	3 - 16	7.5 - 40	0.3 - 1.4
Thompson Seedless	8 - 20	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 (CONT'D)

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

BERRY SIZING SPRAYS – SEEDLESS TABLE GRAPE				
OBJECTIVE/BENEFIT		APPLICATION TIMING		
For larger berries and larger clusters when used in conjunction with established girdling and thinning practices.		Make 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.		
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 - 60	20 - 150	0.7 - 5.4
*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 – 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 GALS 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 <i>ProGibb</i> 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.		
CROP/CULTIVAR	BERRY DIAMETER (MM)*	RATE		
		GRAMS A.I./ACRE	GRAMS PRODUCT/ACRE	OUNCES PRODUCT/ACRE
Emperor	12 - 16	20	50	1.8
Red Globe	12 - 18			
Calmeria	12 - 16			
Christmas Rose	12 - 16			
Rogue	12 - 16			
Queens	12 - 15			
*Predominant average berry diameter for this application.				
NOTE: Whole vine applications have been known to reduce fruitfulness (cluster counts) the following year. Consult the Valent representative or local specialist before sizing cultivars with which there is no familiarity.				

BERRY SIZING CLUSTER DIPS – SEEDED TABLE GRAPE				
OBJECTIVE/BENEFIT		APPLICATION TIMING		
To increase berry size in listed cultivars; and also to reduce berry shrivel in Emperor.		Make one 20 - 50 ppm application during the indicated berry diameter range. Make the application as a direct spray or dip to the cluster.		
CROP/CULTIVAR	BERRY DIAMETER (MM)*	RATE PER 5 GALS TREATMENT SOLUTION		
		PPM A.I.	GRAMS PRODUCT	OUNCES PRODUCT
Emperor	12 - 16	20 - 50	1 - 2.5	0.1 - 0.25
Red Globe	12 - 18			
Calmeria	12 - 16			
Christmas Rose	12 - 16			
Rogue	12 - 16			
Queens	12 - 15			
Other Seeded Grapes	2-3 weeks after bloom or when shatter is completed			
*Predominant average berry diameter for this application.				
NOTE: To prepare a 50 ppm GA3 solution, add 1 g a.i. for every 5 gals of dip solution needed. Consult the Valent representative or local specialist before sizing cultivars with which there is no familiarity.				

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.	
CROP/CULTIVAR	GRAMS A.I./ACRE	GRAMS PRODUCT/ACRE	OUNCES PRODUCT/ACRE
Black Corinth (Zante Currant)	1 - 12	2.5 - 30	0.1 - 1.1

8.0 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.) causes severe leaf and/or fruit drop. Do not apply in white wash sprays in which lime or other caustic material has produced a high pH in the spray tank. Applications of copper fungicides and/or oils within three weeks (before or after) the *ProGibb* 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 Orange Ambersweet Orange*	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.
*(Not for use in California)			
NOTE: Many blocks of Ambersweet and Navel orange in Florida tend to flower very heavily, yet set poor crops. In these blocks, it appears that tree resources are wasted by heavy flowering, compromising the trees' ability to set fruit, support early fruit growth, and carry fruit to harvest. Productivity of heavily blooming blocks is often increased by reducing flower formation.			
Clementine Mandarin	To increase fruit set and yield	1 - 40 g a.i. 2.5 - 150 g product 0.9 - 3.6 oz product	Make 1 - 2 applica- tions from early bloom up to 4 weeks after petal fall. Use a dilute spray with sufficient spray volume for adequate coverage of tree canopy. Typically 1 - 8 g a.i. is diluted per 100 gals spray solution. Allow a minimum of 3 days between sprays.
Tangerines and Mandarin Hybrids (Orlando, Robinson, Minneola, Sunburst, and others) (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 applica- tions 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 applica- tion in Dec. - Jan. Apply in 125 - 175 gals of water per acre.
NOTE: The rate and number of applications depends upon amount of desired fruit set. Generally, more fruit will be set by 2 applications, 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 applica- tions as a concen- trate 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 - 300 g product 3.6 - 7.2 oz product	Make a single applica- tion 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. - Jul., 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.			
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 applica- tion 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 (Not for use in California)	To delay disorders associated with rind aging (e.g., puffiness, softening, and orange coloration), prevent preharvest drop of mature fruit, increase peel strength, reduce water loss during storage, and produce a more orderly harvesting pattern.	16 - 48 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. 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. Do not use concentrate sprays. Results vary from season to season depending on environmental conditions. For maximum effect on rind firmest and delay in rind aging, make applications before color change.			
Lemon/ Lime	To decrease rind aging, yellowing, and the amount of small ripe fruit, and to produce a more desirable production pattern relative to market demand.	10 - 32 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.
NOTE: When applied 2 years in a row, an even larger difference in harvest pattern and maturity have been known to occur.			

CITRUS – INCREASE JUICE YIELD			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Processing Oranges	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.

CITRUS: POST-HARVEST APPLICATIONS

CITRUS – DELAY SENESCENCE			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	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 (<i>Geotrichum candidum</i>).	50 - 1000 PPM	Dilute 2 - 40 g a.i. per 10 gals of final post-harvest application solution. Apply post-harvest application solution to the entire fruit as a spray or drench.
Yellow Lemons and other mature citrus fruit	To delay aspects of rind senescence and color changes.	50 - 1000 PPM	Dilute 2 - 40 g a.i. per 10 gals of final post-harvest application solution. Apply post-harvest application solution to the entire fruit as a spray or drench.

9.0 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			
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 80 g a.i. per acre in 40 - 100 gals of water. The application should be made at full bloom (when 75% of the flowers are fully open). OR Make 2 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. For Weymouth, application can be delayed up to 2 weeks after bloom to increase size of "shot" berries.

TEMPERATE FRUIT CROPS: FIELD APPLICATIONS (CONT'D)

TEMPERATE FRUIT CROPS – FRUITSET (CONT'D)			
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 when most of the flowers are elongated but not yet open (Bloom Stage 5). OR Make 2 - 4 applications 10 - 14 days apart starting at Bloom Stage 5. Spray 20 - 40 g in 40 - 100 gals of water per acre per application.
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 (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

TEMPERATE FRUIT CROPS – FRUIT QUALITY			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Sweet Cherry	To produce larger, brighter colored, firmer fruit.	16 - 48 g a.i. 40 - 120 g product 1.4 - 4.3 oz product	Apply a single spray when the fruit is translucent green to straw colored. Use sufficient water volume to ensure thorough wetting.
Sweet Cherry in cultivars with uneven maturity (Not for use in California)	To produce larger, brighter colored, firmer fruit.	16 - 48 g a.i. 40 - 120 g product 1.4 - 4.3 oz product	Make 2 applications. Apply 1/3 - 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.
NOTE:			
<ul style="list-style-type: none"> • 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 coverage of fruits and foliage.
NOTE:			
<ul style="list-style-type: none"> • 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 - Jul. 			

TEMPERATE FRUIT CROPS – FRUIT QUALITY (CONT'D)			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Stone Fruit: Italian Prune (Not for use in California)	To reduce internal browning, improve quality, and increase size.	16 - 48 g a.i. 40 - 120 g product 1.4 - 4.3 oz product	Make a single application 4 - 5 weeks before expected harvest. Apply in sufficient water volume to ensure thorough wetting.
NOTE: Color development and harvest may be slightly delayed. May reduce bloom the following season.			

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.
NOTE: Do not spray plants/trees in their first year. Treat in the second season for reduction of flowering in the third season, and again in the third season if flower reduction and fruiting is desired in the fourth season. Treat only plants/trees that are in good physiological condition. Discontinue treatment the year before desired harvest. Consult with the Valent representative or local horticulturist for timings and rates for specific cultivars in your area.			
Strawberry (Not for use in California)	To increase runner production of mother plants.	15 - 25 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 point of run-off.
NOTE: Not for use on fruiting plants. Treatments have not always been effective on plantings set out after mid-May. Response varies with cultivar and location. Consult your Valent representative or local horticulturist for specific recommendations.			

10.0 SPRAY GUIDELINES FOR TROPICAL FRUIT CROPS

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 3 - 5 weeks intervals. Direct sprays to the fruit. Use sufficient water to achieve adequate coverage.

11.0 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 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).
Carrots Fresh and Processing	To delay leaf senescence. Maintaining vigorous foliage has been shown to help reduce the incidence of infection by <i>Alternaria dauci</i> .	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 greater concentration can increase the risk of excessive top growth, particularly with a second application.			

VEGETABLE CROPS (CONT'D)			
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.	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 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.
		6.3 - 25 g product	
		0.2 - 0.9 oz product	
NOTE: Do not apply by air in California. Do not apply earlier than 4 weeks before harvest as bolting has been known to occur.			
Cucumber (Not for use in California)	To stimulate fruit set during periods of cool temperatures.	1 - 4 g a.i.	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.
		2.5 - 10 g product	
		0.1 - 0.4 oz product	
NOTE: For maximum benefits, vines must be in good condition, except for reduced rate of growth due to cool temperatures.			
Lettuce for Seed	To obtain uniform bolting and increase seed production.	1 - 4 g a.i.	Apply 1 - 4 applications at 2-week intervals, beginning at the fourth true leaf. Use sufficient water volume to ensure thorough wetting.
		2.5 - 10 g product	
		0.1 - 0.4 oz product	
Pepper (Not for use in California)	To increase fruit set and promote early season fruit growth.	1 - 3 g a.i.	Apply 1 - 2 sprays of 25 - 50 gals per acre at weekly intervals during the flowering period.
		2.5 - 7.5 g product	
		0.1 - 0.27 oz product	
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.	Apply in 25 - 50 gals of water per acre at the beginning of the picking period.
		2.5 - 7.5 g product	
		0.1 - 0.27 oz product	
NOTE: The high rate is best for plants with heavy fruit loads.			

VEGETABLE CROPS (CONT'D)			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
Rhubarb	To break dormancy on plants receiving insufficient chilling and to increase marketable yield of forced rhubarb.	10 - 20 g a.i.	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.
		25 - 50 g product	
		0.9 - 1.8 oz product	
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.			
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.	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. 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 in untreated crops.
		10 - 25 g product	
		0.4 - 0.9 oz product	
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.			

12.0 TEMPERATE FIELD CROPS – FIELD USES

TEMPERATE FIELD CROPS – FIELD USES			
CROP/VARIETY	OBJECTIVE/BENEFIT	USE RATE/ACRE	APPLICATION TIMING
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.
NOTE: <ul style="list-style-type: none"> 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. 			
Rice (Not for use in California)	To promote main culm and tiller panicle extension resulting 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 re-growth of second crop rice.
Rice (Hybrid Seed Production) (Not for use in California)	To promote main culm and tiller panicle extension resulting in improved pollination and seed yield.	20 - 100 g a.i. 50 - 250 g product 1.8 - 9.0 oz product	Make 1 - 5 applications at regular intervals during the heading period to promote main culm and tiller panicle extension.

TEMPERATE FIELD CROPS – FIELD USES			
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	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).
NOTE: <ul style="list-style-type: none"> Do not apply to plants that are under drought stress. If plants are under continuous stress, delay the application until the stress is alleviated and the plants are beginning to recover. Applying more often than necessary to achieve the desired height results in excessive vegetative growth. Avoid drift or accidental application to other crops. 			

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

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 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.

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.

15.0 PROGIBB 40% CONVERSIONS

ProGibb 40% contains 1.0 g of active ingredient per 2.5 g (0.09 oz) of product.

To convert from grams a.i. to grams product – multiply grams a.i. x 2.5
(i.e., 32 g a.i. x 2.5 = 80 g *ProGibb* 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

GRAMS OF ACTIVE INGREDIENT	GRAMS OF <i>PROGIBB</i> 40%	OUNCES OF <i>PROGIBB</i> 40%
2	5	0.2
4	10	0.4
5	12.5	0.5
6	15	0.6
8	20	0.7
10	25	0.9
15	37.5	1.4
20	50	1.8
30	75	2.7
40	100	3.6
50	125	4.5
60	150	5.4
80	200	7.2
100	250	9.0
128	320	11.5

Grams of *ProGibb* 40% for given ppm of Gibberellic Acid at Different Water Volumes.

Gals of Water	Desired parts per million (ppm) gibberellic acid									
	4	5	6	8	10	15	20	30	40	50
75	1.5	3	4.5	6	7.5	11	14	21	28	35
100	2	4	6	8	10	14	19	28	38	47
125	2.5	5	7.5	9	12	18	24	35	47	59
150	3	6	9	11	14	21	28	43	57	71
200	4	8	11	15	19	28	38	57	76	95
250	5	10	14	19	24	35	47	71	95	118
300	5.5	11	17	23	28	43	57	85	113	142
400	7.5	15	23	30	38	57	76	113	151	189
500	9.5	19	28	38	47	71	95	142	189	236
600	11	23	34	45	57	85	113	170	227	284
750	14	28	43	57	71	106	142	213	284	

Note: The numbers inside the table are the grams of *ProGibb* 40% needed to obtain the desired ppm for each gallonage.
Example: To make 250 gals of a 40 ppm gibberellic acid solution, dissolve 95 g of *ProGibb* 40% in 250 gals of water (see shaded area).

16.0 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.

ProGibb is a registered trademark of Valent BioSciences Corporation.

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

© 2011 Valent BioSciences Corporation



Registered by:
Valent BioSciences Corporation
870 Technology Way
Libertyville, IL 60048

04-6445/R7 (Pkg. 04-6132/R9)

Distributed by Valent U.S. A. Corporation.
P.O. Box 8025
Walnut Creek, CA 94596-8025



For state registration and/or supplemental labels, please call or visit us online.

Products That Work, From People Who Care® | www.valent.com | 800-6-VALENT (682-5368)

Read and follow the label instructions before using.

© 2011 Valent BioSciences Corporation. All rights reserved. Printed in the U.S.A. 2011-PG40-0001 2/11 AV