# 05/06/2005

# 1/32

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Ms. Maria Herrero Regulatory Affairs Valent Biosciences Corp. 870 Technology Way Libertyville, IL 60048

MAY 0 6 2005

Subject:

Valent Biosciences Corp., ProGibb 40% Plant Growth Regulator

EPA Registration No. 73049-1

Label Amendment to Add a Sublabel for New Uses - Rice and Cotton

Application Dated 1/12/5

Dear Ms. Maria Herrero:

The amendment referred to above, submitted in connection with registration under FIFRA section 3(c)(5), is acceptable provided that you:

- 1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
- 2. Submit three (3) copies of your final printed labeling before you release the product for shipment. Final printed labeling means the label or labeling of the product when distributed or sold. Clearly legible reproductions or photo reductions will be accepted for unusual labels, such as those silk-screened directly onto glass or metal containers or large bags or drum labels.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(b). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

If you have any questions contact Chris Pfeifer at 703-308-0031 or by email at: pfeifer.chris@epa.gov.

A stamped copy of the label is enclosed for your records.

Sincerely,

Sheryl K. Reilly, Ph.D., Chie

Biochemical Pesticides Branch

Biopesticides and Pollution Prevention Division (7511C)

Enclosure

	CONCURRENCES							
SYMBOL +	75116	7511	75/1c					
SURNAME -	PFFIFFP	Peterson	all					
DATE -	4/27/5	5/3/05	5/1,15					

# **MASTER LABEL**

Primary Product name: ProGibb 40% Plant Growth Regulator, Water Soluble Granule.

Sublabel I: ProGibb 40% Plant Growth Regulator, Water soluble Granule; For use on grapes, citrus, banana, pineapple, sweet cherries, and the stonefruit group.

Sublabel II: Ryzup 40% Plant Growth Regulator Water Plant Growth Regulator Solution; For use on rice and cotton.

For Organic Production

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

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

## KEEP OUT OF REACH OF CHILDREN

#### **CAUTION**

EPA Registration No. 73049-1 EPA Establishment No.

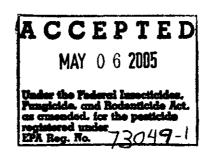
Valent BioSciences Corporation 870 Technology Way, Suite 100 Libertyville, IL 60048 1-847-968-4700

Net Contents: 80 or 320 g

This container will treat ½ acre at the maximum use rate, as directed for use on pineapple for fruit sizing.

(Alternate for 80 g packaging)

This container will treat .13 acre at the maximum use rate, as directed for use on pineapples for fruit sizing.



# SUB-LABEL I

# ProGibb 40% Plant Growth Regulator Water Soluble Granule

For use on grapes, citrus, banana, pineapple, sweet cherries, and the stonefruit group.

# PROGIBB® 40% Plant Growth Regulator Water Soluble Granule

For Organic Production

Active Ingredient	
Gibberellin A <sub>3</sub>	40.0% w/w
Other Ingredients	60.0% w/w
Total 1	

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

#### KEEP OUT OF REACH OF CHILDREN

## **CAUTION**

See inside booklet for Precautionary Statements.

EPA Registration No. 73049-1 EPA Establishment No.

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

Net Contents: 80 g and 320 g

This container will treat ½ acre at the maximum use rate, as directed for use on pineapples for fruit sizing. (Alternate for 80 g packaging)

This container will treat .13 acre at the maximum use rate, as directed for use on pineapples for fruit sizing.

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

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

## PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS & DOMESTIC ANIMALS

Caution: Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before reuse.

# Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

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

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

# **User Safety Recommendations**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

# **ENVIRONMENTAL HAZARDS**

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

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

# **DIRECTIONS FOR USE**

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

# AGRICULTURAL USE REQUIREMENTS

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

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

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

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

# GENERAL DIRECTIONS FOR USE

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

# **Application instuctions:**

- 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, result in undesirable effects. Always consult the Valent agricultural specialist in your area for the spray regimen best suited to your conditions.
- Do not apply to plants under pest, nutritional, or water stress.
- When a range of rates is indicated, use the concentration and spray volume indicated locally by the Valent agricultural specialist.

- For optimum effectiveness, thorough spray coverage must be achieved; all parts of the plant or crop must receive the spray or desired results will not occur. 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 the most efficacious results, the water pH is best at 7.0, and always below 8.5.
- ProGibb 40% applications made under slow drying conditions (cool to warm temperatures, medium to high relative humidity, and no wind) will increase absorption 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 ProGibb 40% if significant rain occurs within 2 hours of application.
- Compatibility: When considering the tank mixing of ProGibb 40% 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 of 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 it on a designated area as it may result either in phytotoxicity or ineffectiveness.

  For further information, consult your Valent agricultural specialist.
- DO NOT apply using ULV application methods. 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

# SPRAY GUIDELINES FOR CROP CATEGORIES

# • 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 thorough wetting. It is important to wet all flower clusters or berries thoroughly. For cultivar specific spray rates and timings, see accompanying tables.

SEEDLESS TABLE GRAPE				
CLUSTER STRETCH SPRAYS				
OBJECTIVE/BENEFIT	APPLICATION TIMING			
For cluster elongation and looser cluster	Make one to three applications before bloom			
forms. To reduce costs of thinning, allow	when flower clusters are 2 to 7 inches long.			
better air circulation to aid in the control of				
bunch rot, and increase light penetration to aid				
in sugar development.				
CROP/CULTIVAR	RATE (grams a.i. /acre)			
Perlette Seedless	8-24			
Flame Seedless	8-24			
Thompson Seedless	8-24			
Raisin	8-24			
Other Seedless Grapes	No information is available at this time.			

SEEDLESS TABLE GRAPE BERRY THINNING SPRAYS				
For decreased berry set, reduced hand-	Make one to four applications during bloom.			
thinning costs, and hastened maturity.	Make only 1-2 applications for "Other			
•	Seedless Grapes". When the bloom period is			
	extended, subsequent sprays are to be made 1			
	to 7 days after the first application.			
CROP/CULTIVAR	RATE (grams a.i. /acre)			
Perlette Seedless	No information is available for this variety/timing at this time.			
Flame Seedless	3-16			
Thompson Seedless	8-20			
Raisin	3-12			
Other Seedless Grapes	0.5-12			
NOTE.	, <u> </u>			

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.

SEEDLESS	S TABLE GRAPE
BUN	MP SPRAY
Thompson Seedless	
OBJECTIVE/BENEFIT	APPLICATION TIMING/RATES
To help initiate the beginning of the berry growth period.	Make one application of 16-24 grams a.i./acre during the period between the last thinning spray and the first sizing spray.

8-60

	SEEDLESS T	ABLE GRAPI	E
	BERRY SIZ	ING SPRAYS	
OBJECTIVE/BENEFIT		APPLICATION	ГIMING
For larger berries and larger clusters when used in conjunction with established girdling and thinning practices		Make one to four applications beginning when the average berry size reaches "target" diameter (See below). Timing of the subsequent sprays will be dictated by experience in the vineyard and temperatures occurring between sprays. Sprays made after 15-20 days from the first sizing spray are less effective.	
CROP/CULTIVAR	Target Berr	y Diameter *	RATE (grams a.i. /acre)
Perlette Seedless		mm	32-128
Flame Seedless	6-9	mm	20-128
Thompson Seedless	3-5	mm	32-128
Raisin	3-5	mm	4-20

\*Target average berry diameter for the first application

# NOTE:

Other Seedless Grapes

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

3-14 mm

ultivars; and mperor.	diameter range. Mal	n during the indicated berry see the application as a as a spray or dip directly to  Direct spray to the cluster only or dip the clusters.
meter	Make one application diameter range. Make whole vine spray, or the cluster.  Whole vine spray.	n during the indicated berry see the application as a as a spray or dip directly to  Direct spray to the cluster
meter	diameter range. Mal whole vine spray, or the cluster. Whole vine spray.	as a spray or dip directly to  Direct spray to the cluster
*		- ·
		Rate in ppm's of a.i.
	20	40-50
	20	40-50
	20	40-50
-	20	40-50
	20	40-50
	20	40-50
,		20

The whole vine application has been known to 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, sugars accumulation and overall maturation has been observed. Consult the Valent representative or local specialist before sizing cultivars with which there is no familiarity.

OBJECTIVE/BENEFIT	APPLICATION TIMING
To increase berry size	Make one application 3-5 days after full bloom, but before shatter begins.
CROP/CULTIVAR	RATE (grams a.i. /acre)
Black Corinth (Zante Currant)	1-12

# • CITRUS

For citrus, apply in sprays of sufficient water volumes to ensure thorough fruit wetting. In most cases, this application will cause some drop of older 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					
CROP/VARIETY	OBJECTIVE/BENEFIT	RATE (grams a.i. /acre)	APPLICATION TIMING		
Navel Orange	To delay rind aging, reduce physiological disorders (e.g., rind staining, water spotting, sticky or tacky surface, puffy rind and rupture under pressure), and produce a more orderly harvesting pattern.	16-48	Make one or two applications as a concentrate or dilute spray.  1) Early application: spray approximately 2 weeks prior to color break (typically August – November). This timing causes the greatest delay in rind aging and produces the firmest rind possible.  AND/OR  2) Late spray: one application after marketable color (typically October – December). This late spray has been known to cause re-greening.		
Valencia Orange (For California and Arizona use only)	To reduce rind creasing and to delay rind aging and softening	40-80	Make a single application as a concentrate or dilute spray in August to October to target crop of young fruit.		

Do not apply the early spray to groves that will be harvested early, as fruit coloring will be delayed. Do not apply from January through July, as production is often reduced the following year.

Slower color development is to be expected in the target crop. Increased re-greening of mature fruit has been known to occur. After marketable color is achieved, treatment effects are reduced the longer treated fruit remain on the tree.

CROP/VARIETY	OBJECTIVE/BENEFIT	RATE (grams a.i./acre)	APPLICATION TIMING
Lemon/Lime	To decrease the amount of small ripe fruit and produce a more desirable production pattern relative to market demand.	10 – 32	Make a single application when target crop is ½ to ¾ full size, but still green.
NOTE: When applied two y been known occur.	ears in a row, an even larger	difference in	harvest pattern and maturity have
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	Make one spray application two weeks prior to color break. Apply as a dilute spray.
			ploring as pre-harvest rind staining es causes variation in rind color
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	Make one or two dilute spray applications in sufficient volume to ensure coverage. Do not exceed 20 ppm a.i. in spray solution.  EARLY: Make application two weeks prior to color break. Apply as a dilute spray (AUG-SEP). AND/OR LATE: Make application after marketable color has developed (OCT-DEC).

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. The delay in rind aging is greatest when spray is applied before color change. This spray timing produces the firmest rind possible.

	CITRUS: FIELD A	PPLICATI	ONS (con't)				
CROP/VARIETY	OBJECTIVE/BENEFIT	RATE (grams a.i./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	Make a single dilute application during the bloom period.				
NOTE:							
Results vary from s	season to season depending	on environme	ntal conditions. Maintain a well-				
balanced fertilization	on and watering program.						
Clementine	To increase fruit set and	1-8 grams	Make one to two applications from				
Mandarin	yield	a.i. per 100	early bloom up to 4 weeks after				
		gallons of	petal fall. Allow a minimum of				
		spray	three days between sprays. Use a				
		volume	dilute spray with sufficient spray volume for adequate coverage of tree canopy.				
NOTE:							
The number of app	olications depends upon amo	ount of desired	I fruit set. Generally, more fruit will				
be set by 2 applicat	ions, earlier applications, hi	gher rates, and	d climactic conditions more				
			with the above factors to affect the				
	chieved. Reductions in fina	l fruit size are	known to occur as a result of				
excessive fruit set.							
Tangerine	To increase fruit set and	8 - 30	Make one to two applications				
Hybrids	yield. The number of		during the bloom period. Apply as				
(Orlando,	applications depends on		a dilute spray.				
Robinson,	desired fruit set.						
Minneola,							
Sunburst, and							
others) (Not for							
use in California)							

With a large fruit set, fruit sizes have been known to be reduced and color development slightly retarded. A slight increase in mature leaf drop occurs in trees under stress.

# • FRUIT CROPS

	FRUIT CROPS										
CROP/CULTIVAR	OBJECTIVE/BENEFIT	RATE	APPLICATION TIMING								
	To stimulate plant growth, and to overcome the effects of stress caused by insect, disease or adverse weather. These applications also help improve fruit size and quality and overall yield.	Aerial spray: Apply 6 to 20 grams a.i. per acre per spray. Use sufficient water volume to achieve adequate coverage of the canopy Ground spray: Apply 6 to 20 grams a.i. per acre per spray. Use sufficient water volume to achieve adequate coverage of the canopy.	Make applications every 3-4 weeks throughout the year. Use higher rates prior to, and during the periods of intense stress. Tank-mixing with the standard pesticide treatments applied by air is permissible.  Direct applications to the daughter plants. Make first application when the daughter plant is selected. Make applications every 3-4 weeks throughout the year as needed. Use higher rates prior to, and during the periods of intense stress. Tank-mixing with pesticides is permissible.								
	To stimulate early growth in new plantations, increase plant vigor and accelerate the time to flowering.	Apply 2-16 grams a.i. per acre per spray. Use sufficient water volume to achieve adequate coverage of the canopy	Make the first application a few days after transplanting, when plants are established. Repeat applications at 3-4 weeks intervals.								

·	Application by injection into the pseudostem		NOTE: make sure that the needle tip does not touch the growing tissue at the center of the pseudostem.
	1. To promote Plant Growth:	Apply 5 ml per plant of a 640- 1280 ppm solution.	Apply to plants over 5 feet tall on a monthly basis until flowering occurs. Make one application per generation
	2. To promote healthy root system	Apply 50 – 400 ml per plant of a 250- 1000 ppm solution	
	To simulate bunch fruit development, improving fruit size and quality, and overall yield.	Apply a solution of 200 – 500 ppm to bunch fruit. Use sufficient water volume to achieve adequate coverage.	Make application prior to bunch bagging program or approximately 14 days after floral bunch emergence. Tank- mixing with the standard pesticide treatments is permissible.
	Post-harvest treatment  To extend fruit green life	Apply a solution of 750 to 1500 ppm. Brush or spray the solution to the crown.	Apply after washing the fruit and before packing. Mixing with other protectants is permissible.

CROP/CULTIVAR	OBJECTIVE/BENEFIT	RATE	APPLICATION TIMING
Pineapple (not for use in California)	To improve fruit size.	Apply 125- 250* grams a.i. per acre per application.	Apply after flowering. Make 2 applications at 3-5 weeks intervals. Direct sprays to the fruit. Use sufficient water to achieve adequate coverage.
	To improve uniformity of fruit maturity and enhance harvest efficiency.	Apply 12-24 grams a.i. per acre per application.	Make the first application a few days after planting when plants are established. Repeat applications at 3-4 weeks intervals.
	To maintain the quality of the crown (greenness, turgidity), delay desiccation, discoloration and browning, and improve overall appearance during transit, storage and shelf life.	Apply at the rate of 250-500 ppm as a spray directed to the crown.	Apply after harvest and prior to packing. Make sure all leaves are thoroughly covered with the spray without excessive runoff.

<sup>\*</sup>At the highest dose rate this packaging will only cover ½ an acre.

(Alternate for 80 g packaging)

\*At the highest dose rate this packaging will only cover .13 of an acre.

	FRUIT	r CROPS	
CROP/VARIETY	OBJECTIVE/BENEFIT	RATE (grams a.i. /acre)	APPLICATION TIMING
Sweet Cherry	To produce larger, brighter colored, firmer fruit.	16-48	Apply a single spray when the fruit is translucent green to straw colored. Use sufficient water volume to ensure thorough wetting.
NOTE:			
	elopment and harvest date is carrates with heavier crop load		lelayed.
Sweet Cherry (Not for use in California)	To produce larger, brighter colored, firmer fruit in cultivars with uneven maturity	16-48	Make 2 applications. Apply 1/3 to ½ 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:			
	lopment and harvest date is or rates with heavier crop loads		elayed.
Stone Fruit Group  NOTE:	To increase fruit firmness and improve fruit quality in the season of application	16-32	Apply as a single spray one to 4 weeks prior to the beginning of the harvest period. Use sufficient water to achieve complete coverage of fruits and foliage.

**CONVERSION TABLE** (for the 320 g size)
ProGibb 40% contains approximately 10 grams of active ingredient per 25 grams of product.

application, particularly if it is made during the months of May through July.

This application has been known to cause reduction in flower counts the year following the

Grams of active ingredient	Grams of ProGibb 40%
2	5
4	10
5	12.5
6	15

8	20
10	25
15	37.5
20	50
30	75
40	100
50	125
60	150
80	200
100	250
128	320

# Grams of ProGibb 40% WSG for given ppm's of Gibberellic Acid at Different Water Volumes for Banana Uses.

Gallons	parts per million (ppm) gibberellic acid											
of Water	100	200	300	400	500	600	700	1000	1100	1200	1500	
0.5	0.5	1	1.5	2	2.5	3	3.5	5	5.5	6	7.5	
1	1	2	3	4	5	6	7	10	11	12	15	
2	2	4	6	8	10	12	14	20	22	24	30	
5	5	10	15	20	25	30	35	50	55	65	75	
7.5	7.5	15	22.5	30	37.5	45	52.5	75	82.5	85	112.5	
10	10	20	30	40	50	60	70	100	110	120	150	

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

#### Example:

To make 10 gallons of a 1100 ppm gibberellic acid solution, dissolve 110 grams of ProGibb 40% WSG in 10 gallons of water (see shaded area).

# Grams of ProGibb 40% WSG for given ppm's of Gibberellic Acid at Different Water Volumes for Seeded Grape.

Gallons	parts per million (ppm) gibberellic acid									
of.	4	5	6	8	10	15	20	30	40	.50
Water						[				'
75	3.0	3.8	4.5	6.0	7.5	11.3	15.0	22.5	30.0	38
100	4.0	5.0	6.0	8.0	10.0	15.0	20.0	30.0	40.0	50
125	5.0	6.3	7.5	10.0	12.5	18.8	25.0	37.5	50.0	63
150	6.0	7.5	9.0	12.0	15.0	22.5	30.0	45.0	60.0	75
200	8/0	10.0	12.0	16.0	20.0	30.0	40.0	60.0	80.0	100
250	10.0	12.5	15.0	20.0	25.0	37.5	50.0	75.0	100.0	125
300	12.0	15.0	18.0	24.0	30.0	45.0	60.0	90.0	120.0	150
400	16.0	20.0	24.0	32.0	40.0	60.0	80.0	120.0	160.0	200
500	20.0	25.0	30.0	40.0	50.0	75.0	100.0	150.0	200.0	250
600	24.0	30.0	36.0	48.0	60.0	90.0	120.0	180.0	240.0	300
750	30.0	37.5	45.0	60.0	75.0	112.5	150.0	225.0	300.0	

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

# Example:

To make 250 gallons of a 40 ppm gibberellic acid solution, dissolve 100 grams of ProGibb 40% WSG in 250 gallons of water (see shaded area).

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

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

Grams of active ingredient	Grams of ProGibb 40%
2	5
4	10
5	12.5
6	15
8	20
10	25
15	37.5
20	50
30	75

(Alternate for 80 g packaging)

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

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

#### Example:

To make 200 gallons of a 40 ppm gibberellic acid solution, dissolve 80 grams of ProGibb 40% WSG in 200 gallons of water (see shaded area).

# 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

Do not reuse empty containers. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

# 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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# SUB-LABEL II

# RYZUP® 40% PLANT GROWTH REGULATOR Water Soluble Granule

For use on rice and cotton.

25/32

# RyzUp\*\* 40% Plant Growth Regulator Water Soluble Granule

For Organic Production

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

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

# KEEP OUT OF REACH OF CHILDREN

# **CAUTION**

See inside booklet for Precautionary Statements.

EPA Registration No. 73049-1 EPA Establishment No.

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

Net Contents: 320 g

This container will treat ½ acre at the maximum use rate, as directed for use on hybrid rice for panicle extension.

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

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

## PRECAUTIONARY STATEMENTS

## HAZARDS TO HUMANS & DOMESTIC ANIMALS

Caution: Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before reuse.

# Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

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

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

# **User Safety Recommendations**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## ENVIRONMENTAL HAZARDS

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

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

# DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons,

either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribal, consult the State or Tribe agency responsible for pesticide regulation.

# AGRICULTURAL USE REQUIREMENTS

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

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

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

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

# GENERAL DIRECTIONS FOR USE

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

# Application instructions:

• RyzUp 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, result in undesirable effects. Always consult the Valent agricultural specialist in your area for the spray regimen best suited to your conditions.

- Do not apply to plants under pest, nutritional, or water stress.
- When a range of rates is indicated, use the concentration and spray volume indicated locally by the Valent agricultural specialist.
- For optimum effectiveness, thorough spray coverage must be achieved; all parts of the plant or crop must receive the spray or desired results will not occur. 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 the most efficacious results, the water pH is best at 7.0, and always below 8.5.
- RyzUp 40% applications made under slow drying conditions (cool to warm temperatures, medium to high relative humidity, and no wind) will increase absorption 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 RyzUp 40% if significant rain occurs within 2 hours of application.
- Compatibility: When considering the tank mixing of RyzUp 40% 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 of 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 it on a designated area as it may result either in phytotoxicity or ineffectiveness.
  - For further information, consult your Valent agricultural specialist.
- DO NOT apply using ULV application methods. For aerial applications spray volumes must be greater than 2 gallons per acre.
- No preharvest interval is required for this product
- Avoid drift or accidental application to other crops

# RICE

#### 1) **FOLIAR APPLICATION**

USE	OBJECTIVE/	RATE	APPLICATION TIMING
	BENEFIT	(grams/acre)	
Seedling Applications (	(Early Season)	2.5 to 7.5 g	At the 1-2 and 4-5 leaf stages of growth
With use of a non- ionic surfactant or in tank mix combination with rice herbicides  With some dry and water-based herbicide formulations, or when temperatures will likely average 75° F or less during 14 days after application.	To promote vigorous and more uniform seedling growth of rice prior to permanent flood establishment. This growth promotion will permit earlier flooding (5 to 10 days earlier) of drill or broadcast-seeded rice and is particularly effective on semi-dwarf varieties.	2.5 to 5.0 g 3.75 – 7.5 g	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.

Panicle Extension Applications (Late Season)				
Tank mix with a non-ionic surfactant known to be non-phytotoxic to rice.	To promote main culm and tiller panicle extension. Known to increase panicle height of rice, which will facilitate harvest efficiency in the field by allowing the rice grain to be cut above the leaf canopy at faster combine speeds and at reduced vegetative load. Grain quality and maturity have been observed to be advanced with the promotion of tiller panicle development.	7.5 to 20.0 g	Between split-boot and 100% panicle heading. Heading applications to the first crop also has been observed to accelerate regrowth of second crop rice. The desired result is an earlier second crop maturity and maximized grain yield.	

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 RyzUp application.

# 2) HYBRID RICE SEED PRODUCTION

USE	OBJECTIVE/ BENEFIT	RATE (grams a.i./acre)	APPLICATION TIMING
Panicle Extension	Improved pollination and seed yield.	50.0-250.0*	Make 1-5 applications at regular intervals during the heading period to promote main culm and tiller panicle extension.
* At the high	nest dose rate this packagi	ng will only cover ½	an acre

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

RyzUp has been shown to help shorten the vegetative growth "lag" phase. This benefit reduces the time interval needed to develop optimum leaf area and plant height, thus maximizing the potential for earliness and improved yields.

USE	OBJECTIVE/ BENEFIT	RATE (g/acre)	APPLICATION TIMING
On young cotton plants	Promote growth and increase seedling vigor	2.5 to 15.0 grams Use higher rates (within the indicated range) when temperatures will likely average 75°F or less during the 14 days following application(s).	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 3 applications.  Applying more often than necessary to achieve the desired height results in excessive vegetative growth.

**Do not** apply RyzUp to cotton plants that are under drought stress. If the cotton plants are under continuous stress, delay the application of RyzUp until the stress is alleviated and the plants are beginning to recover.

Avoid drift or accidental application to other crops.

# **Mixing Instructions**

Fill the treatment tank with half of the final tank mix volume. Add the required amount of RyzUp 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 RyzUp by aerial or ground spray equipment. As an aerial spray, use a spray system capable of producing a uniform spray pattern of medium to fine spray droplets at 10 gallon per acre (GPA). Apply no less than 3 GPA of total spray volume. Use low pressure ground sprayers equipped with boom and flat fan nozzles using 10 to 15 GPA spray volume.

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# **Use Restriction**

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

# 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

Do not reuse empty containers. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

# 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.

<sup>c</sup>2005