

US EPA ARCHIVE DOCUMENT



Reregistration Eligibility Decision (RED)

Gibberellic Acid



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

CERTIFIED MAIL

Dear Registrant:

I am pleased to announce that the Environmental Protection Agency has completed its reregistration eligibility review and decisions on the biopesticide case Gibberellic Acid, which includes Gibberellic Acid (GA_3), related isomers known as Gibberellins ($GA_4 + GA_7$), and the salt of the acid, Potassium Gibberellate. The enclosed Reregistration Eligibility Decision (RED) contains the Agency's evaluation of the data base of these chemicals, its conclusions of the potential human health and environmental risks of the current product uses, and its decisions and conditions under which these uses and products will be eligible for reregistration. The RED includes the data and labeling requirements for products for reregistration.

To assist you with a proper response, read the enclosed document entitled "Summary of Instructions for Responding to the RED". This summary also refers to other enclosed documents which include further instructions. You must follow all instructions and submit complete and timely responses. **An Application for Reregistration is required to be submitted eight months from the date of receipt of this letter.** Complete and timely responses will avoid the Agency taking the enforcement action of suspension against your products.

If you have questions about our decision or the requirements set forth in this document, please contact the reregistration representative for the Biopesticides and Pollution Prevention Division, Richard King at (703) 308-8052.

Sincerely yours,

Janet Andersen, Acting Director
Biopesticides and Pollution Prevention Division
(7501W)

Enclosures

SUMMARY OF INSTRUCTIONS FOR RESPONDING TO THE REREGISTRATION ELIGIBILITY DECISION (RED)

1. **DATA CALL-IN (DCI) OR "90-DAY RESPONSE"**--If **generic data** are required for reregistration, a DCI letter will be enclosed describing such data. If **product specific data** are required, a DCI letter will be enclosed listing such requirements. If **both generic and product specific data** are required, a combined Generic and Product Specific DCI letter will be enclosed describing such data. However, if you are an end-use product registrant only and have been granted a generic data exemption (GDE) by EPA, you are being sent only the **product specific** response forms (2 forms) with the RED. Registrants responsible for generic data are being sent response forms for both generic and product specific data requirements (4 forms). **You must submit the appropriate response forms (following the instructions provided) within 90 days of the receipt of this RED/DCI letter; otherwise, your product may be suspended.**

2. **TIME EXTENSIONS AND DATA WAIVER REQUESTS**--No time extension requests will be granted for the 90-day response. Time extension requests may be submitted only with respect to actual data submissions. Requests for time extensions for product specific data should be submitted in the 90-day response. Requests for data waivers must be submitted as part of the 90-day response. All data waiver and time extension requests must be accompanied by a full justification. All waivers and time extensions must be granted by EPA in order to go into effect.

3. **APPLICATION FOR REREGISTRATION OR "8-MONTH RESPONSE"**--**You must submit the following items for each product within eight months of the date of this letter (RED issuance date).**

a. **Application for Reregistration** (EPA Form 8570-1). Use only an original application form. Mark it "Application for Reregistration." Send your Application for Reregistration (along with the other forms listed in b-e below) to the address listed in item 5.

b. **Five copies of draft labeling** which complies with the RED and current regulations and requirements. Only make labeling changes which are required by the RED and current regulations (40 CFR 156.10) and policies. Submit any other amendments (such as formulation changes, or labeling changes not related to reregistration) separately. You may, but are not required to, delete uses which the RED says are ineligible for reregistration. For further labeling guidance, refer to the labeling section of the EPA publication "General Information on Applying for Registration in the U.S., Second Edition, August 1992" (available from the National Technical Information Service, publication #PB92-221811; telephone number 703-487-4650).

c. **Generic or Product Specific Data**. Submit all data in a format which complies with PR Notice 86-5, and/or submit citations of data already submitted and give the EPA identifier (MRID) numbers. Before citing these studies, you must **make sure that they meet the Agency's acceptance criteria** (attached to the DCI).

d. **Two copies of the Confidential Statement of Formula (CSF)** for each basic and each alternate formulation. The labeling and CSF which you submit for each product must comply with P.R. Notice 91-2 by declaring the active ingredient as the **nominal concentration**. You have two options for submitting a CSF: (1) accept the standard certified limits (see 40 CFR §158.175) or (2) provide certified limits that are supported by the analysis

of five batches. If you choose the second option, you must submit or cite the data for the five batches along with a certification statement as described in 40 CFR §158.175(e). A copy of the CSF is enclosed; follow the instructions on its back.

e. **Certification With Respect to Data Compensation Requirements.** Complete and sign EPA form 8570-31 for each product.

4. **COMMENTS IN RESPONSE TO FEDERAL REGISTER NOTICE**--Comments pertaining to the content of the RED may be submitted to the address shown in the Federal Register Notice which announces the availability of this RED.

5. WHERE TO SEND PRODUCT SPECIFIC DCI RESPONSES (90-DAY) AND APPLICATIONS FOR REREGISTRATION (8-MONTH RESPONSES)

By U.S. Mail:

Document Processing Desk (**RED-SRRD-PRB**)
Office of Pesticide Programs (7504C)
EPA, 401 M St. S.W.
Washington, D.C. 20460-0001

By express:

Document Processing Desk (**RED-SRRD-PRB**)
Office of Pesticide Programs (7504C)
Room 266A, Crystal Mall 2
1921 Jefferson Davis Hwy.
Arlington, VA 22202

6. **EPA'S REVIEWS**--EPA will screen all submissions for completeness; those which are not complete will be returned with a request for corrections. EPA will try to respond to data waiver and time extension requests within 60 days. EPA will also try to respond to all 8-month submissions with a final reregistration determination within 14 months after the RED has been issued.

REREGISTRATION ELIGIBILITY DECISION

Gibberellic Acid

LIST D

CASE 4110

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**GIBBERELIC ACID
REREGISTRATION ELIGIBILITY DECISION TEAM**

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GLOSSARY OF TERMS AND ABBREVIATIONS

ADI	Acceptable Daily Intake. A now defunct term for reference dose (RfD).
AE	Acid Equivalent
a.i.	Active Ingredient
ARC	Anticipated Residue Contribution
CAS	Chemical Abstracts Service
CI	Cation
CNS	Central Nervous System
CSF	Confidential Statement of Formula
DFR	Dislodgeable Foliar Residue
DRES	Dietary Risk Evaluation System
DWEL	Drinking Water Equivalent Level (DWEL) The DWEL represents a medium specific (i.e. drinking water) lifetime exposure at which adverse, non carcinogenic health effects are not anticipated to occur.
EEC	Estimated Environmental Concentration. The estimated pesticide concentration in an environment, such as a terrestrial ecosystem.
EP	End-Use Product
EPA	U.S. Environmental Protection Agency
FDA	Food and Drug Administration
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FFDCA	Federal Food, Drug, and Cosmetic Act
FOB	Functional Observation Battery
GLC	Gas Liquid Chromatography
GM	Geometric Mean
GRAS	Generally Recognized as Safe as Designated by FDA
HA	Health Advisory (HA). The HA values are used as informal guidance to municipalities and other organizations when emergency spills or contamination situations occur.
HDT	Highest Dose Tested
LC ₅₀	Median Lethal Concentration. A statistically derived concentration of a substance that can be expected to cause death in 50% of test animals. It is usually expressed as the weight of substance per weight or volume of water, air or feed, e.g., mg/l, mg/kg or ppm.
LD ₅₀	Median Lethal Dose. A statistically derived single dose that can be expected to cause death in 50% of the test animals when administered by the route indicated (oral, dermal, inhalation). It is expressed as a weight of substance per unit weight of animal, e.g., mg/kg.
LD ₁₀	Lethal Dose-low. Lowest Dose at which lethality occurs.
LEL	Lowest Effect Level
LOC	Level of Concern
LOD	Limit of Detection
LOEL	Lowest Observed Effect Level
MATC	Maximum Acceptable Toxicant Concentration
MCLG	Maximum Contaminant Level Goal (MCLG) The MCLG is used by the Agency to regulate contaminants in drinking water under the Safe Drinking Water Act.
µg/g	Micrograms Per Gram
mg/L	Milligrams Per Liter
MOE	Margin of Exposure
MP	Manufacturing-Use Product
MPI	Maximum Permissible Intake
MRID	Master Record Identification (number). EPA's system of recording and tracking studies submitted.
N/A	Not Applicable
NOEC	No effect concentration
NPDES	National Pollutant Discharge Elimination System

GLOSSARY OF TERMS AND ABBREVIATIONS

NOEL	No Observed Effect Level
NOAEL	No Observed Adverse Effect Level
OP	Organophosphate
OPP	Office of Pesticide Programs
PADI	Provisional Acceptable Daily Intake
PAG	Pesticide Assessment Guideline
PAM	Pesticide Analytical Method
PHED	Pesticide Handler's Exposure Data
PHI	Preharvest Interval
ppb	Parts Per Billion
PPE	Personal Protective Equipment
ppm	Parts Per Million
PRN	Pesticide Registration Notice
Q ₁ [*]	The Carcinogenic Potential of a Compound, Quantified by the EPA's Cancer Risk Model
RBC	Red Blood Cell
RED	Reregistration Eligibility Decision
REI	Restricted Entry Interval
RfD	Reference Dose
RS	Registration Standard
SLN	Special Local Need (Registrations Under Section 24 (c) of FIFRA)
TC	Toxic Concentration. The concentration at which a substance produces a toxic effect.
TD	Toxic Dose. The dose at which a substance produces a toxic effect.
TEP	Typical End-Use Product
TGAI	Technical Grade Active Ingredient
TLC	Thin Layer Chromatography
TMRC	Theoretical Maximum Residue Contribution
torr	A unit of pressure needed to support a column of mercury 1 mm high under standard conditions.
FAO/WHO	Food and Agriculture Organization/World Health Organization
WP	Wettable Powder
WPS	Worker Protection Standard

EXECUTIVE SUMMARY

The Environmental Protection Agency has completed an assessment of the potential human health and environmental risks associated with the pesticidal uses of Gibberellic Acid and its related isomers. For the purposes of this reregistration eligibility decision, the following compounds will be considered collectively under the term "Gibberellic Acids": Gibberellic Acid (GA_3); related isomers known as Gibberellins (GA_4) and (GA_7); and the salt of the acid, Potassium gibberellate.

Gibberellic Acids are naturally occurring plant hormones. Gibberellic Acids are used in agriculture as plant regulators to stimulate both cell division and cell elongation that affect leaves as well as stems (eventually affecting fruit development and fruit set). Applications of Gibberellic Acids can also hasten plant maturation and seed germination. Because they are naturally occurring compounds and have a nontoxic mode of action in target plants, Gibberellic Acid and related isomers have been classified as biochemical pesticides.

The Agency has determined that the uses of Gibberellic Acids, as currently registered, will not cause unreasonable risk to humans or the environment. These uses are eligible for reregistration. However, six of the uses currently on the labels are not covered by either the exemption from tolerance (40 CFR 180.1098), or a numeric tolerance (40 CFR 180.224). The Agency plans to propose to exempt from tolerance many plant regulators, including Gibberellic Acids, when used in low doses. This exemption will apply only when application rates do not exceed 250 grams of ai/acre/year. The Agency believes this action does not present unreasonable risks. It is based on low acute mammalian toxicity, low use rates, naturally occurring exposure in the diet from numerous plant sources, and minimal exposure in the diet derived from consumption of treated commodities under the proposed maximum label use rate.

The interim Worker Protection Standard (WPS) Restricted-Entry Interval (REI) for Gibberellic Acids was established at 12 hours, based on acute mammalian toxicity. However, the Agency has determined that an interim REI of 12 hours may, in certain circumstances, be reduced to 4 hours for pesticides with low acute mammalian toxicities in Toxicity Categories III and IV. The Gibberellic Acids are candidates for reduced interim REI's due to their very low acute toxicities (i.e., Toxicity Categories III and IV).

Before reregistering the products containing Gibberellic Acids, the Agency is requiring that revised Confidential Statements of Formula (CSF) and revised product labeling be submitted within eight months of the issuance of this document. After reviewing this information and finding it acceptable in accordance with Section 3(c)(5) of FIFRA, the Agency will reregister a product. Those products that contain Gibberellic Acids in combination with other active ingredients will be eligible for reregistration only when the other active ingredients are determined to be eligible for reregistration.

I. INTRODUCTION

In 1988, the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) was amended to accelerate the reregistration of products with active ingredients registered prior to November 1, 1984. The amended Act provides a schedule for the reregistration process to be completed in nine years. There are five phases to the reregistration process. The first four phases of the process focus on identification of data requirements to support the reregistration of an active ingredient and the generation and submission of data to fulfill the requirements. The fifth phase is a review by the U.S. Environmental Protection Agency (referred to as "the Agency") of all data submitted to support reregistration.

FIFRA Section 4(g)(2)(A) states that in Phase 5 "the Administrator shall determine whether pesticides containing such active ingredient are eligible for reregistration" before calling in data on products and either reregistering products or taking "other appropriate regulatory action." Thus, reregistration involves a thorough review of the scientific data base underlying a pesticide's registration. The purpose of the Agency's review is to reassess the potential hazards arising from the currently registered uses of the pesticide; to determine the need for additional data on health and environmental effects; and to determine whether the pesticide meets the "no unreasonable adverse effects" criterion of FIFRA.

This document presents the Agency's decision regarding the reregistration eligibility of the registered uses of Gibberellic Acids. The document consists of six sections. Section I is the introduction. Section II describes Gibberellic Acids, their uses, data requirements and regulatory history. Section III discusses the human health and environmental assessment based on the data available to the Agency. Section IV presents the reregistration decision for Gibberellic Acids. Section V discusses the reregistration requirements for Gibberellic Acids. Finally, Section VI contains the Appendices that support this Reregistration Eligibility Decision. Additional details concerning the Agency's review of applicable data are available on request.

II. CASE OVERVIEW

A. Chemical Overview

The following active ingredients are covered by this Reregistration Eligibility Decision:

- **Common Name:** Gibberellic Acid (GA₃), Gibberellins (GA₄) and (GA₇), Potassium Gibberellate
- **Chemical Name:** Gibberellic Acid (GA₃), Gibberellins (GA₄) and (GA₇), Potassium Gibberellate
- **Chemical Family:** Gibbane structure (from the fungus *Gibberella fujikuroi*)
- **CAS Registry Number:**

Gibberellic Acid (GA₃) and Gibberellins (GA₄ + GA₇) -- 77-06-5
Potassium gibberellate -- 125-67-7
- **OPP Chemical Code:**

Gibberellic Acid (GA₃) and Gibberellins (GA₄ + GA₇) -- 43801
Potassium gibberellate -- 43802
- **Empirical Formula:**

Gibberellic Acid (GA ₃)	-	C ₁₉ H ₂₂ O ₆
Gibberellins (GA ₄ + GA ₇)	-	C ₂₀ H ₂₆ O ₅ + C ₂₀ H ₂₄ O ₅
Potassium Gibberellate	-	C ₁₉ H ₂₁ KO ₆
- **Trade and Other Names:** ProGibb, ProVide, Activol, Grocel, and Gibrel.
- **Basic Manufacturer:**
Abbott Laboratories
AGTROL Chemical Products, Inc.

B. Use Profile

The following is information on the currently registered uses with an overview of use sites and application methods. A detailed table of these uses of Gibberellic Acids may be found Appendix A.

For Gibberellic Acid and related isomers:

Type of Pesticide: Plant regulator

Use Sites:

Gibberellic Acid:

TERRESTRIAL FOOD CROP: Artichoke; blueberry; broccoli; Brussels sprouts; cabbage; carrot (including tops); cauliflower; celery; cherry; cucumber; lettuce; melons; melons, cantaloupe; melons, honeydew; melons, water; peach; pepper; prune; rhubarb; spinach; squash (all or unspecified); strawberry.

TERRESTRIAL FOOD + FEED CROP: Apple; barley; beans; beans, dried-type; beans, mung; beans, succulent (lima); beans, succulent (snap); citrus fruits; corn, field; corn, sweet; corn, pop; cotton, (unspecified); grapefruit; grapes; hops; lemon; lime; mustard; oats; orange; peanuts (unspecified); peas, field; potato, white/Irish; rice; rye; sorghum; sorghum (unspecified); soybeans (unspecified); sugarbeet; sugarcane; tangelo; tomato; turnip; wheat

TERRESTRIAL FEED CROP: Sugar beets (including tops)

TERRESTRIAL NONFOOD CROP: Golf course turf; ornamental herbaceous plants; ornamental lawns and turf; ornamental woody shrubs and vines

TERRESTRIAL NONFOOD + OUTDOOR RESIDENTIAL: Ornamental and/or shade trees, ornamental herbaceous plants, ornamental lawns, ornamental woody shrubs and vines

GREENHOUSE FOOD CROP: Rhubarb

GREENHOUSE NONFOOD CROP: Ornamental woody shrubs and vines

Gibberellin Mixture (GA₄ + GA₇):

TERRESTRIAL FOOD CROP: Spinach (seed crop only; SLN, WA)

TERRESTRIAL FOOD + FEED CROP: Apple

TERRESTRIAL NON-FOOD CROP: Cherry, Pear

TERRESTRIAL NON-FOOD + OUTDOOR RESIDENTIAL:
Ornamental herbaceous plants

Potassium Gibberellate:

TERRESTRIAL FOOD CROP: Artichoke, Blueberry, Celery, Cherry, Cucumber (seed crop only), Lettuce (seed crop only), Prune

TERRESTRIAL FOOD + FEED CROP: Grapes, Hops, Lemon, Orange, Potato, white/Irish ("seed" crop only), Tangelo

TERRESTRIAL NON-FOOD CROP: Tobacco

TERRESTRIAL NON-FOOD + OUTDOOR RESIDENTIAL:
Ornamental and/or shade trees, Ornamental herbaceous plants, Ornamental nonflowering plants, Ornamental woody shrubs and vines

GREENHOUSE FOOD CROP: Rhubarb

INDOOR RESIDENTIAL: Ornamental herbaceous plants

Target: Higher Plants

Formulation Types Registered: Tablets, soluble granules, liquid concentrate.

Method and Rates of Application:

Gibberellic Acid (GA₃) and Gibberellin Mixture (GA₄ + GA₇):

Types of treatment:

Band treatment, Broadcast, Chemigation, Commercially grown nursery grass sod treatment, Dip treatment, Drench, High volume spray (dilute), Low-volume spray (concentrate), Seed treatment, Soil in-furrow treatment, Soil incorporated treatment, Soil sidedress treatment, Soil treatment, Spot treatment, Spray

Equipment:

Airblast, Aircraft, Center pivot irrigation, Dropper, Fixed-wing aircraft, Ground, hand held sprayer, Hand move irrigation, High volume ground sprayer, Mist-type seed treater, Moving wheel irrigation, Seed treater, Solid set irrigation, Sprayer

Timing:

At first squaring, At pegging, At planting, August, Bare root, Bloom, Crown, December, Dormant, Early bloom, Early spring, Early tillering, Fall, Foliar, Fruiting, January, Nonbearing, November, October, Petal fall, Postemergence, Postharvest, Posttransplant, Prebloom through foliar, Prebloom, Preemergence, Preharvest, Pretransplant, Seed piece, Seed, September, Transplant, When needed

Application Rates:

Refer to Appendix A.

Potassium Gibberellate:Types of Treatment:

Dip treatment; spray

Equipment:

aerosol can; sprayer

Timing:

Bloom; crown; December; fall; foliar; November; October; preharvest; "seed" (potatoes)

Application Rates:

Refer to Appendix A.

Use Practice Limitations:

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 apply through any type of irrigation system.
Do not apply within 7 to 40 days of harvest, depending on crop.

C. Estimated Usage of Pesticide

This section summarizes the best estimates available for the pesticide uses of Gibberellic Acids. These estimates are derived from a variety of published and proprietary sources available to the Agency. The data, reported on an aggregate and site (crop) basis, reflect annual fluctuations in use patterns as well as the variability in using data from various information sources.

The table below summarizes the pesticides use by site.

ESTIMATED ANNUAL U.S. USAGE OF GIBBERELIC ACIDS FOR 1990-1993

Site	Acres Grown	Acres Treated	Site Treated	---- Lbs A.I. Applied ----	
				Total	Applic Rate
	(000)	(000)	(%)	(000)	(lbs a.i./A)
FIELD CROPS					
Cotton	12,269 - 14,047	0 - 374	0 - 3	0 - 0.29	0.001 - 0.001
Hops --	40 - 40	1.4 - 1.4	3 - 3	0.02 - 0.02	0.01 - 0.01
- OR	7 - 7	0.8 - 0.8	11 - 11	0.01 - 0.01	< 0.02 - 0.02
- WA	28 - 28	0.6 - 0.6	2 - 2	0.01 - 0.01	< 0.02 - 0.02
Potatoes, Irish	1,329 - 1,401	0 - 3	0 - < 1	0 - 0.44	0.15 - 0.15
Rice	2,865 - 3,023	0 - 5	0 - < 1	0 - 0.28	0.01 - 0.06
Tobacco	703 - 754	0 - 4	0 - < 1	0 - 0.11	0.03 - 0.03
FRUITS & NUTS					
Blueberries, bearing --	33 - 36	0.7 - 1.0	2 - 3	0.15 - 0.18	0.10 - 0.17
- MI	15 - 16	* - 0.5	* - 3	* - 0.08	0.17 - 0.17
Citrus Fruit --					
- Grapefruit	173 - 192	1 - 4	1 - 2	* - 0.22	0.03 - 0.04
- Lemons	67 - 69	2 - 10	3 - 14	0.19 - 0.45	0.03 - 0.06
- CA	48 - 49	2 - 4	4 - 9	0.19 - 0.21	< 0.06 - 0.10
- Oranges	791 - 819	34 - 50	4 - 6	2.0 - 3.4	0.04 - 0.06
Oranges, CA	188 - 191	32 - 40	17 - 21	2.0 - 3.4	0.06 - 0.10
Temples, bearing, FL	7 - 8	* - *	* - *	* - *	na - na
- Tangelos, bearing, FL	8 - 11	* - 0.6	* - 6	* - 0.05	0.04 - 0.04
- Tangerines, bearing	27 - 27	1.3 - 1.3	4 - 4	0.15 - 0.19	0.05 - 0.05
FL	14 - 14	0.7 - 0.7	5 - 5	0.10 - 0.10	0.05 - 0.05

ESTIMATED ANNUAL U.S. USAGE OF GIBBERELIC ACIDS FOR 1990-1993(CONT'D)

Site	Acres Grown	Acres Treated	Site Treated	---- Lbs A.I. Applied ----	
				Total	Applic Rate
	(000)	(000)	(%)	(000)	(lbs a.i./A)
CA	8 - 8	0.6 - 0.6	8 - 8	0.05 - 0.09	< 0.06 - 0.08

Grapes, bearing --	760 - 765	112 - 337	15 - 44	9 - 48	0.03 - 0.14
- AZ	5 - 5	2.5 - 2.5	50 - 50	0.40 - 0.40	0.08 - 0.08
- CA	637 - 656	107 - 332	16 - 52	8 - 47	0.03 - 0.15
- NY	33 - 33	* - 0.3	* - 1	* - na	na - na
- OR	4 - 5	0 - 0.1	0 - 3	0 - 0.01	$\leq$ 0.10 - 0.10
Pecans, bearing	na - na	* - *	* - *	* - *	na - na
Pome Fruit --					
Apples, bearing	446 - 460	77 - 124	17 - 27	2.3 - 3.7	0.02 - 0.03
- MD	4 - 4	1 - 1	18 - 18	0.02 - 0.02	$\leq$ 0.02 - 0.02
- MI	53 - 56	1 - 1	2 - 2	< 0.05 - 0.05	0.01 - 0.02
-OR	8 - 10	3 - 4	41 - 37	0.10 - 0.10	0.02 - 0.03
-PA	22 - 24	1 - 1	6 - 5	< 0.05 - 0.05	0.01 - 0.01
-WA	139 - 147	61 - 85	44 - 58	1.9 - 2.6	0.03 - 0.03
Pears	82 - 83	1 - 2	< 1 - 2	< 0.02 - 0.03	0.04 - 0.04
Stone Fruit --					
- Cherries	136 - 140	20 - 26	14 - 19	0.61 - 0.88	0.03 - 0.04
Sweet, bearing	45 - 46	9 - 10	19 - 21	0.37 - 0.42	0.04 - 0.04
-CA	11 - 11	0.2 - 0.4	2 - 3	0.01 - 0.02	$\leq$ 0.07 - 0.07
-OR	10 - 10	3 - 3	27 - 32	0.10 - 0.16	0.04 - 0.05
-WA	14 - 14	4 - 6	26 - 42	0.20 - 0.20	0.04 - 0.04
Tart, bearing	47 - 50	11 - 11	23 - 24	0.24 - 0.25	0.01 - 0.01
-MI	33 - 34	9 - 9	26 - 28	0.20 - 0.22	0.01 - 0.01
- Peaches, bearing	175 - 179	* - 0.5	* - < 1	* - 0.03	< 0.04 - 0.04
- Plums/Prunes	142 - 147	1 - 1	1 - 1	< 0.02 - 0.06	0.09 - 0.09
- Other Stone Fruit	183 - 186	0 - 1	0 - < 1	0 - 0.06	0.04 - 0.09
VEGETABLES					
- Artichokes, globe, CA	10 - 10	4 - 5	39 - 55	0.08 - 0.09	< 0.02 - 0.03
- Carrots --	110 - 110	3 - 4	3 - 4	0.01 - 0.01	0.003 - 0.003
- TX	9 - 9	3 - 4	29 - 46	0.01 - 0.01	0.003 - 0.003
- Celery, CA	21 - 25	0 - 0.1	0 - < 1	0 - 0.01	< 0.01 - 0.02
- Cucumbers, processing	108 - 121	* - *	* - *	* - *	na - na
- Melons --	353 - 382	1 - 2	< 1 - < 1	< 0.02 - 0.09	0.05 - 0.05
- Watermelons	270 - 270	* - *	* - *	* - *	na - na
- Onions, dry	143 - 149	0 - *	0 - *	0 - *	na - na
- Peppers, bell	69 - 69	* - *	* - *	* - *	na - na
- Spinach, fresh	20 - 20	* - *	* - *	* - *	na - na
- Tomatoes, fresh --		137 - 142	0 - 2	0 - 2	0 - 0.43
0.03					0.03 -
- FL	52 - 55	0 - 2	0 - 3	0 - 0.30	0.03 - 0.03

ESTIMATED ANNUAL U.S. USAGE OF GIBBERELIC ACIDS FOR 1990-1993(CONT'D)

Site	Acres Grown	Acres Treated	Site Treated	---- Lbs A.I. Applied ----	
				Total	Applic Rate
	(000)	(000)	(%)	(000)	(lbs a.i./A)
NON-AGRICULTURE					
Nursery/Greenhouse --	500 - 500	na - na	< 1 - < 1	< 0.30 - < 0.30	na - na
- Greenhouse, CA					
Cut Flowers/Greens	2 - 2	0.01 - 0.02	< 1 - 1	< 0.001 - < 0.001	< 0.03 - 0.04
Container Plants	2 - 2	0.02 - 0.02	1 - 1	0.003 - 0.006	≤ 0.13 - 0.25
Transplant Material, etc	na - na	< 0.01 - 0.03	na - na	< 0.001 - 0.001	< 0.04 - 0.04
- Outdoor, CA					
Cut Flowers/Greens	10 - 10	0.01 - 0.01	< 1 - < 1	< 0.001 - 0.001	< 0.03 - 0.05
Container/Field Plants	27 - 27	0.03 - 0.03	< 1 - < 1	0.002 - 0.003	≤ 0.10 - 0.11
Transplant Material, etc	na - na	< 0.01 - < 0.01	na - na	< 0.001 - < 0.001	< 0.06 - 0.06
SUM OF ABOVE (@)	21,699 -23,905	259 - 959	na - na	< 15 - 59	na - na

* USDA indicated some usage, but survey reports were not sufficient to estimate usage, which probably was relatively small.

@ Each summation excludes data for sub-categories if there are data for the corresponding higher-level category (e.g., excluding bearing sweet and tart cherries separately because total cherries is included). In the summations, "*" and "na" count as zeroes.

NOTE 1: na = not available or not applicable.

NOTE 2: Ranges result from different sources and/or years.

SOURCES --

- Anderson & Gianessi, Agricultural Pesticide Use in CA, 1990 & 1991
- CA EPA, Pesticide Use Report, Annual 1990
- Gianessi & Anderson, Pesticide Use in U.S. Crop Production, National Summary Report, 2/95
- Gianessi & Anderson, Pesticide Use in U.S. Crop Production, National Data Report, 2/95
- US Dept. of Commerce, 1992 Census of Agriculture, CA
- US EPA 1990-93 proprietary sources
- USDA/NASS, Agricultural Chemical Usage, 1990, Vegetables Summary
- USDA/NASS, Agricultural Chemical Usage, 1991 Fruits & Nuts Summary
- USDA/NASS, Agricultural Chemical Usage, 1990-93 Field Crops Summaries
- USDA/NASS, Agricultural Chemical Usage, 1993 Fruits Summary
- USDA/NASS, Agricultural Chemical Usage, Vegetables, 1992 Summary
- USDA/NASS, Citrus Fruits, 1991-93 Summaries
- USDA/NASS, Crop Production, 1990-93 Summaries
- USDA/NASS, Noncitrus Fruits & Nuts, 1993-94 Preliminaries
- USDA/NASS, Vegetables, 1992-94 Summaries

D. Data Requirements

In Phase 4 of the Reregistration Process, data gaps for Gibberellic Acids were identified and a DCI was issued in September of 1993 for studies relating to product chemistry and ecological effects. These data were required to support the uses of products containing the active ingredients Gibberellic Acid, Gibberellins, and Potassium Gibberelate. Appendix B includes all data requirements identified that are needed to

support reregistration for currently registered uses.

E. Regulatory History

The plant regulator, Gibberellic Acid, was initially registered in the United States in 1947 as PROVIDE GROWTH REGULATOR SOLUTION (EPA Reg. No. 275-2) for applications to apple trees as a means of controlling fruit russet fungus. Gibberellic Acids are naturally occurring plant hormones that act as plant regulators, promoting cell division and cell elongation leading to increased fruit set and crop yields.

During Phase 4 of the Reregistration Process, the data base for Gibberellic Acids was evaluated and determined to be inadequate in satisfying certain requirements for biochemical pesticides, which include plant growth regulators. The following were identified as outstanding data gaps and a DCI was issued in September 1993:

<u>Guideline No.</u>	<u>Study</u>
151B-17g	Solubility
151B-17i	pH
151B-17j	Stability
151B-17p	Octanol/water partition coefficient
154B-11	Non-target insect

The biochemical data requirements for the reregistration of Gibberellic Acids have been satisfied through the submission of data in response to the 1993 DCI. These data are adequate to support the registration of Gibberellic Acids on all RAC's, as well as all of the currently registered uses specified in Section IV.

This Reregistration Eligibility Decision reflects a reassessment of all data that were submitted in response to the Reregistration Process.

III. SCIENCE ASSESSMENT

A. Physical Chemistry Assessment

Gibberellic Acid is a plant hormone that was first isolated in 1938 from cultures of *Gibberella fujikuroi* (Sawada) and *Fusarium moniliforme*, the causative agents for Bakanae disease in rice. More than 60 Gibberellins are known; however, only three, Gibberellic Acid (GA₃), Gibberellins -- a mixture of GA and GA, and Potassium Gibberellate, are registered as biopesticides in the United States.

Gibberellic Acid is an odorless, fine, white powder at 23°C. It has a melting point of 223-226°C and a bulk density of 600 mg/ml at 23.8°C. Gibberellic Acid is soluble in water (460 mg/ml), while its sodium, potassium, and ammonium salts are very soluble in

water (5g/l of water). Gibberellic Acids have a shelf life of at least 2 years under normal conditions in unopened containers. Potassium Gibberellate has a pH of 5.5- 6.5 while Gibberellic Acid has a pH of 4.

B. Human Health Assessment

1. Toxicology Assessment

Adequate mammalian toxicology data on Gibberellic Acids are available and will support a Reregistration Eligibility Decision (RED).

a. Mammalian Toxicity

Certain mammalian toxicity studies conducted with Gibberellic Acids have been submitted and adequately satisfy the requirements as set forth in 40 CFR 158.690 -- Biochemical Pest Control Agents.

TABLE II: ACUTE MAMMALIAN TOXICITY REQUIREMENTS FOR GIBBERELIC ACIDS

Guideline	Test Material	Results	Toxicity Category	MRID
152B-10 Acute oral tox. (rat)	GA ₄ + GA ₇ , 90%	LD 50 (♂ & ♀) > 5g/kg	IV	40873201
	GA ₃ , 7.5%	LD 50 > 5g/kg (combined)	IV	41591103
152B-11 Acute dermal tox. (rabbit)	GA ₄ + GA ₇ , 90%	LD 50 (♂ & ♀) > 2g/kg	III	40873202
	GA ₃ , 7.5%	LD 50 > 2 g/kg (combined)	III	41591104
152B-12 Acute inhalation (rat)	GA ₄ + GA ₇ , 90%	LC50 negative at 2.98mg/l; maximum attainable exposure.	III	40873203
	GA ₃ , 7.5%	LC50 > 5.9 mg/l (combined)	III	41501105
152B-13* Eye irritation (rabbit)	GA ₄ + GA ₇ , 90%	PEIS ranged from 19.3 at 1 hr. to 4. 7 at 96 hrs. All irritation cleared by 7 days.	III	40873204
	GA ₃ , 7.5%	Eye irritation clearing in 7 days or less.	III	41591106
152B-14* Dermal irritation (rabbit)	GA ₄ + GA ₇ , 90%	P.I.S. = 0	IV	40873205
	GA ₃ , 7.5%	Mild or slight irritant.	IV	41591107
152B-15* Dermal sensitization	GA ₄ + GA ₇ , 90%	Reported as mild sensitizer	IV	40873206
	GA ₃ , 10%	Not a contact dermal sensitizer.	IV	41560406
152B-16* Hypersensitivity	All products	All incidents must be reported to the Agency.		

* Not required for TGAI.

In the evaluation of the toxicology data base for the reregistration eligibility decision for Gibberellic Acids, the Agency reevaluated the primary eye irritation study conducted with Gibberellins (TGAI mixture of GA₄ + GA₇) (MRID 40873204) and concluded that the eye irritation potential is more appropriately reclassified as Toxicity Category III rather than Toxicity Category II as initially classified.

b. Subchronic Toxicity

Two subchronic oral toxicity studies for Gibberellic Acids were reviewed in connection with the RED process. In the first subchronic dietary study (MRID 41617501), rats of both sexes were fed diets containing Gibberellic Acid (GA₃, purity 88.5%) at concentrations of 0,

1,000, 10,000, or 50,000 ppm for 13 weeks. A group of control animals and high-dose animals were fed regular rodent diet for an additional 4-week recovery period. The consumption of test material was 53-117, 550-1178, or 2994-5786 mg/kg/day (males) and 67-130, 730-1283, or 3872-6241 mg/kg/day (females). The only treatment-related clinical sign of toxicity was a low incidence of soft stools in both sexes receiving the highest dose. Very slightly decreased body weight gains were observed in mid-dose males and high dose animals of both sexes. Slightly increased total food consumption in all treated groups were observed. Evidence suggestive of a compound-related effect on kidney function included significantly increased blood urea nitrogen levels (BUN) and increased relative kidney weights in female rats in the high-dose group. BUN levels and kidney weights were comparable to controls at the end of a 4-week recovery period, indicating reversibility of renal effects. Other effects observed in high-dose males included decreased globulin levels at termination of the study and decreased glucose levels ($p \leq 0.05$) at the end of the 4-week recovery period. Increased relative liver weights were observed in males at 50,000 ppm and in females at 10,000 ppm and 50,000 ppm. At the end of the recovery period, increased relative liver weights were still evident in females (11%), but not in males. In the absence of clinical chemistry correlates and gross and microscopic hepatic abnormalities, the liver weight changes are considered compensatory rather than a toxic effect of the test material. Under the conditions of this study, the NOEL is 10,000 ppm; the LOEL is 50,000 ppm, based on the occurrence of soft stools in both sexes, and increased BUN levels, liver and kidney weights in females.

In the second study (MRID 41616601), rats were fed diets containing 0, 1,000, 10,000 or 25,000 ppm Gibberellins ($GA_4 + GA_7$, purity 85.5%) for 13 weeks. Additional groups of 10 control and 10 high-dose animals were held for a 4-week recovery period. The 25,000 ppm exposure group was fed a diet containing 50,000 ppm during the first 14 days of the study; however, due to low weight gain and clinical signs the dosage was reduced for the duration of the study. The average calculated doses for the 1,000, 10,000, and 25,000 ppm groups, the latter corrected for exposure to 50,000 ppm, were 67, 704, and 2238 mg/kg/day for males and 85, 814, and 2403 mg/kg/day for females. No treatment-related effects were observed at the 1,000 or 10,000 ppm dietary levels. One male in the 25,000 ppm treatment group died during the third week of the study. Compared to controls, treatment of rats of both sexes at 25,000 ppm had significant effects on clinical signs, food consumption (during the first 5 weeks of the study), body weight, organ-to-body weight ratios, hematology, clinical chemistry and gross microscopic pathology. Clinical signs in the high-dose groups included hunched posture, thin rough coat, a bloody crust on the nose and urine stains. Body weights for males and

females were significantly lower than controls throughout the study, including the recovery phase. There was a marked increase in body weights when the treatment was reduced from 50,000 to 25,000 ppm after 14 days, and by the end of the recovery period at week 17, body weights were within 91% of control groups for both sexes.

Males had significantly decreased hemoglobin and hematocrit values and significantly lower total bilirubin, cholesterol, and alkaline phosphatase values. Females had significantly lower total protein, albumin and calcium values and significantly higher globulin, total bilirubin, cholesterol and alkaline phosphatase values. Both sexes had significantly increased relative brain weights and males had significantly increased relative kidney and testis weights. Gross pathological changes in the kidneys (rough surfaces and depressed areas in the cortex) were present in both sexes. Histologically, chronic tubular nephritis, tubular dilation, and focal loss of nephrons were observed. Histological changes in the liver were marginal in incidence and severity. Under the conditions of the study, the NOEL is 10,000 ppm; the LOEL is 25,000 ppm based on alterations in clinical chemistry, decreased food consumption, decreased body weights, increases in relative organ weights (brain, kidney, and testis), and gross and histopathological changes in the kidney.

c. Developmental Toxicity

Gibberellic Acid (GA_3) was administered to rats at doses of 0, 100 or 1,000 mg/kg/day for 8 weeks without significant clinical, hematological or pathologic evidence of toxicity. The maternal toxicity NOEL was greater than 1000 mg/kg/day (HTD))(MRID 40155201).

In a separate study, artificially inseminated rabbits were treated with Gibberellins ($GA_4 + GA_7$) by oral gavage at 0, 100, 300, or 1000 mg/kg/day (MRID 41143201). The highest concentration caused increased mortality, abortion rates, clinical signs of toxicity and gross pathological observations. The maternal and developmental NOELs were established at 300 mg/kg/day.

d. Mutagenicity

Gibberellic Acid (GA_3) (MRID 40261601) was tested in an Ames assay with *Salmonella typhimurium* test strains TA 98, TA 100, TA 1535, TA 1537, and TA 1538 at concentrations ranging from 0 to 10,000 ug/plate with negative test results up to limit dose of 5,000 and 10,000 ug/plate. The mutagenicity of Gibberellins ($GA_4 + GA_7$) (MRID 40873207) was tested in an Ames assay with *Salmonella typhimurium* test strains TA

98, TA 100, TA 1535, TA 1537, and TA 1538 at concentrations ranging from 0 to 10,000 ug/plate. Test results were negative up to 10,000 ug/plate in the standard set of five histidine negative strains of *Salmonella typhimurium* LT2.

A mouse-micronucleus assay on Gibberellins ($GA_4 + GA_7$) indicated that no increased incidence of micronucleated-polychromatic erythrocytes (m-PCE) were found at levels up to 1200 mg/kg (MRID 40873208).

An unscheduled DNA synthesis in rat hepatocytes conducted with Gibberellins technical 90% ($GA_4 + GA_7$) was negative for induction of UDS up to 1260 ug/ml, the limit of solubility (MRID 40261603). A second unscheduled DNA synthesis in rat hepatocytes with Gibberellins also was negative (MRID 40873209).

e. Immunotoxicity

The guideline requirement for immunotoxicity was waived based on the results of a residue study (no detectable residue noted with a detection limit of 1 ppm), low application rates, and nominal potential human exposure.

2. Exposure Assessment

a. Dietary Exposure and Risk Assessment

Tolerances (40 CFR 180.224) for Gibberellins (specifically (GA_3), and the mixture of Gibberellins (GA_4 and GA_7)) have been established for (1) residues of Gibberellic Acid on the following RAC's, and (2) for the combined residues of the gibberellin mixture (GA_4 and GA_7) on the following RAC's:

Gibberellic Acid (0.15 ppm) Gibberellin Mixture (0.5 ppm)

Artichokes	Leafy vegetables	Apples
Blueberries	Stone fruits	
Citrus fruits	Sugarcane	
Grapes	Sugarcane fodder	
Hops	Sugarcane forage	

An exemption from the requirement of a tolerance (40 CFR

180.1098) has been established for Gibberellins (specifically GA_3) when used as a plant regulator at less than 20g ai/acre in or on the following RAC's:

Barley	Cucumbers	Oranges	Strawberries
Beans	Grapefruit	Peanuts	Squash
Beets (sugar)	Lemons	Peppers	S u g a r c a n e
Broccoli	Lettuce	Potatoes	Tomatoes
Brussels sprouts	Melons	Rice	Turnips
Cabbage	Mints	Rye	Watercress
Cauliflower	Mustard greens	Sorghum (milo)	Wheat
Corn (all)	Oats	Soybean	
Cotton	Onions	Spinach	

The Agency plans to propose an exemption from the requirements of a tolerance for certain Gibberellic Acids (specifically Gibberellic Acid (GA_3), a mixture of Gibberellins ($GA_4 + GA_7$) and Potassium Gibberelate) for all RAC's when treated with application rates under 250 g ai/acre/year. The Agency believes this action does not present unreasonable risks because it is based on Gibberellic Acids' low mammalian toxicity, low use rates, natural background dietary exposure and minimal exposure in the diet derived from consumption of treated commodities under the proposed use rates.

b. Occupational Exposure and Risk Assessment

Based on the application methods listed on the product labels, the potential for eye, dermal, and inhalation exposure to agricultural workers does exist. However, the lack of acute toxicity (i.e., Gibberellic Acids are in Toxicity Categories III and IV) does not trigger additional requirements for evaluation of worker exposure over the existing precautionary labeling currently required under the provisions of the Worker Protection Standards discussed in Section V.

C. Environmental Assessment

There are no outstanding data requirements. Sufficient data have been provided for an environmental fate and effects assessment.

1. Ecological Toxicity Data

All of the ecological effects data requirements for Gibberellic Acids have been adequately fulfilled. These data indicate that Gibberellic Acids are not likely to cause adverse effects in nontarget avian, aquatic, and insect species.

TABLE IV: ENVIRONMENTAL EXPRESSION - TIER I GUIDELINE REQUIREMENTS FOR GIBBERELIC ACIDS

Guideline No.	Study	Results	MRID
154B-6	Avian acute oral	Gibberellic Acid is practically non-toxic to Bobwhite Quail. The LD ₅₀ is > 2250 mg a.i./kg. The NOEL > 2250 mg a.i./kg (HTD).	42084401
154B-7	Avian acute dietary	Gibberellic Acid is practically non-toxic to Bobwhite Quail. LC ₅₀ is > 4640 ppm (HTD).	121075
154B-8	Fish Toxicity - Rainbow Trout	The LC ₅₀ of Gibberellic Acid is > 150 ppm. Gibberellic Acid is practically non-toxic to coldwater fish. The NOEL > 150 ppm (HTD).	42167401
154B-9	Invertebrate toxicity	The LC ₅₀ of Gibberellic Acid is > 143 ppm. Gibberellic Acid is practically non-toxic to aquatic invertebrates. The NOEL > 143 ppm (HTD).	42084402
154B-10	Nontarget Plants	Waived because Gibberellic Acid is a growth stimulator that is naturally produced in plants.	
154B-11	Nontarget Insects	Gibberellic Acid is classified as relatively non-toxic to honey bees.	43370201

2. Environmental Fate

Environmental fate studies are not required for biochemical pesticides unless adverse effects on nontarget species are observed as a result of acute testing (Tier I) for ecological effects. No adverse effects are suggested by the data as described in Table IV above.

IV. RISK MANAGEMENT AND REREGISTRATION DECISION

A. Determination of Eligibility

Section 4(g)(2)(A) of FIFRA calls for the Agency to determine, after submission of relevant data concerning an active ingredient, whether products containing the active ingredients are eligible for reregistration. The Agency has previously identified and required the submission of the generic (i.e. active ingredient specific) data required to support reregistration of products containing Gibberellic Acids as their active ingredients. The Agency has completed its review of these generic data, and has determined that the data are sufficient to support reregistration of all products containing Gibberellic Acids. Appendix B identifies the generic data requirements that the Agency reviewed as part of its determination of reregistration eligibility of Gibberellic Acids, and lists the submitted studies that the Agency found acceptable.

The data identified in Appendix B were sufficient to allow the Agency to assess the currently registered uses of Gibberellic Acids and to determine that Gibberellic Acids can

be used without resulting in unreasonable adverse effects to humans and the environment. The Agency therefore finds that products containing Gibberellic Acids as the active ingredients are eligible for reregistration. The reregistration of particular products is addressed in Section V of this document.

The Agency made its reregistration eligibility determination based upon the target data base required for reregistration, the current guidelines for conducting acceptable studies to generate such data, published scientific literature, etc. and the data identified in Appendix B. Although the Agency has found that certain currently registered uses of Gibberellic Acids are eligible for reregistration, it should be understood that the Agency may take appropriate regulatory action, and/or require the submission of additional data to support the registration of products containing Gibberellic Acids, if new information comes to the Agency's attention or if the data requirements for registration (or the guidelines for generating such data) change.

1. Eligibility Decision

Based on the reviews of the generic data for the active ingredients Gibberellic Acids, the Agency has sufficient information on the health effects of Gibberellic Acids and on its potential for causing adverse effects in fish and wildlife and the environment. The Agency has determined that products containing Gibberellic Acids, when labeled and used as specified in this Reregistration Eligibility Decision, will not pose unreasonable risks or adverse effects to humans or the environment. Therefore, the Agency concludes that products containing Gibberellic Acids for certain uses are eligible for reregistration.

2. Eligible Uses

The Agency has determined that certain uses of Gibberellic Acids are eligible for reregistration.

TERRESTRIAL FOOD CROP: Artichoke; blueberry; broccoli; Brussels sprouts; cabbage; carrot (including tops); cauliflower; celery; cherry; cucumber; lettuce; melons; melons, cantaloupe; melons, honeydew; melons, water; peach; pepper; prune; rhubarb; spinach; squash (all or unspecified); strawberries.

TERRESTRIAL FOOD + FEED CROP: Apple; barley; beans; beans, dried-type; beans, mung; beans, succulent (lima); beans, succulent (snap); citrus fruits; corn, field; corn, sweet; corn, pop; cotton, (unspecified); grapefruit; grapes; hops; lemon; lime; mustard; oats; orange; peanuts (unspecified); peas, field; potato, white/Irish; rice; rye; sorghum; sorghum (unspecified); soybeans (unspecified); sugarbeet; sugarcane; tangelo; tomato; turnip; wheat

TERRESTRIAL FEED CROP: Sugar beets (including tops)

TERRESTRIAL NONFOOD CROP: Golf course turf, ornamental herbaceous plants, ornamental lawns, ornamental woody shrubs and vines

TERRESTRIAL NONFOOD + OUTDOOR RESIDENTIAL: Ornamental and/or shade trees, ornamental herbaceous plants, ornamental lawns, ornamental woody shrubs and vines

GREENHOUSE FOOD CROP: Rhubarb

GREENHOUSE NONFOOD CROP: Ornamental woody shrubs and vines

Gibberellin Mixture (GA₄ + GA₇):

TERRESTRIAL FOOD CROP: Spinach (seed crop only; SLN, WA)

TERRESTRIAL FOOD + FEED CROP :Apple

TERRESTRIAL NON-FOOD CROP: Cherry

TERRESTRIAL NON-FOOD + OUTDOOR RESIDENTIAL: Ornamental herbaceous plants

Potassium Gibberellate:

TERRESTRIAL FOOD CROP: Artichoke, Blueberry, Celery, Cherry, Cucumber (seed crop only), Lettuce (seed crop only), Prune

TERRESTRIAL FOOD + FEED CROP: Grapes, Hops, Lemon, Orange, Potato, white/Irish ("seed" crop only), Tangelo

TERRESTRIAL NON-FOOD + OUTDOOR RESIDENTIAL: Ornamental and/or shade trees, Ornamental herbaceous plants, Ornamental nonflowering plants, Ornamental woody shrubs and vines

GREENHOUSE FOOD CROP: Rhubarb

INDOOR RESIDENTIAL: Ornamental herbaceous plants

The following uses of Gibberellic Acids do not have a tolerance (40 CFR 180.224) or an exemption from tolerance (40 CFR 180.1098). The Agency plans to propose such an exemption in the Winter of 1996 and, pending public comment, issue a final rule in the Spring of 1996.

Carrots

Pears

Peas

Small grains*

Cucurbits*

* Certain specific crops are currently covered by 40 CFR 180.1098.

B. Regulatory Position

The following is a summary of the regulatory positions and rationales for Gibberellic Acids. Where labeling revisions are imposed, specific language is set forth in Section V of this document.

1. Tolerance Reassessment

The Agency plans to propose to exempt many plant growth regulators from the requirement of a tolerance including Gibberellic Acids [i.e., Gibberellic Acid (GA_3), Gibberellins (a mixture of $GA_4 + GA_7$), and Potassium Gibberellate] in the Winter of 1996. This proposed tolerance exemption will exempt the plant regulators from the requirements of a tolerance when applied to growing crops (all RACs) at application rates not exceeding 250 grams a.i./acre/year. This proposed exemption is based on the plant regulator's low use rate, natural exposure in the diet from numerous plant food sources, minimally anticipated increase in dietary exposure over the naturally occurring exposure in the diet when using the maximum label rates, and low mammalian toxicity. Pending public comment, the Agency anticipates issuing a final rule regarding this tolerance exemption in the Spring of 1996.

2. Endangered Species Statement

Based on the current use patterns, the potential for adverse effects to endangered plant and animal species from applications of Gibberellic Acids is not expected.

3. Labeling Rationale**Precautionary Labeling:**

The Agency has reexamined the toxicological data base for Gibberellic

Acids and concluded that the current precautionary labeling (i.e. Signal Word, Statement of Practical Treatment, and other label statements associated with mitigating risks) adequately mitigate the risks associated with the use of this plant regulator.

Workers Protection Requirements:

The 1992 Worker Protection Standards for Agricultural Pesticides (WPS) established certain worker-protection requirements (personal protective equipment, restricted entry intervals, etc.) to be specified on the label of all products that contain uses within the scope of WPS. Uses within the scope of the WPS include all commercial (non-homeowner) and research uses on farms, forests, nurseries, and greenhouses that produce agricultural plants (including food, feed, and fiber plants, trees, turf grasses, flowers, shrubs, ornamental, and seedlings). Uses within the scope include not only uses on plants, but also uses on soil or planting medium that the plants are (or will be) grown in.

At this time some of the registered uses of Gibberellic Acids are within the scope of the WPS. Those that are outside the scope of WPS include use:

- * on plants grown for other than commercial or research purposes, which may include plants in habitations, home fruit and vegetable gardens, and home greenhouses,
- * on plants that are in ornamental gardens, parks golf courses, and public or private lawns grounds and that are intended only for decorative or environmental benefit. (However, pesticides used on sod farms ARE covered by WPS).
- * in a manner not directly related to the production of agricultural plants, including, for example; control of vegetation along rights-of-way, in hedgerows and fencerows and other noncrop areas.

Any product whose labeling reasonably permits use in the production of an agricultural plant on any farm, forest, nursery, or greenhouse must comply with the labeling requirements of PR Notice 93-7, "Labeling Revisions Required by the Worker Protection Standards WPS)". The labeling statements required by PR Notice 93-7 and 93-11 are to be on the product label exactly as instructed in those notices.

On April 25, 1995, the Agency established a policy that allows registrants to reduce the interim WPS restricted entry interval (REI) from 12 hours to 4 hours for certain low risk pesticides. This policy identifies the Gibberellic Acids as candidates eligible for a reduced WPS REI. The procedures for requesting a

reduction in the REI are outlined in Section V.

Personal Protective Equipment (PPE):

All PPE labeling requirements for products containing Gibberellic Acids were established using the process described in PR Notice 93-7 or more recent EPA guidelines.

At this time some of the registered use of Gibberellic Acids are within the scope of WPS while others are not. The PPE requirements will pertain to both the WPS and non-WPS uses, because the potential exposure for WPS and non-WPS uses are similar. This RED will not impose any changes to the PPE WPS labeling requirements established in PR Notices 93-7 and 93-11.

Restricted-Entry Intervals (REI):

Under the WPS, interim REI's for all uses within the scope of the WPS were established on the basis of the acute mammalian toxicity of the active ingredient. The toxicity categories of the active ingredient for acute dermal toxicity, eye irritation potential, and skin irritation potential were used to determine the interim WPS REI. If one or more of the active ingredient's toxicity categories is classified as toxicity category I, the interim WPS REI is established at 48 hours. If none of the acute toxicity effects are in category I, but one or more of the three is classified as category II, the interim WPS REI is established at 24 hours. If none of the three acute toxicity effects are in category I or II, the interim WPS REI is established at 12 hours. The interim WPS REI for Gibberellic Acids is 12 hours, since the acute mammalian toxicity is in Toxicity Categories III and IV. In certain instances, the Agency has determined that the interim REI of 12 hours may be reduced to 4 hours for pesticides with low acute toxicities (i.e. products with acute mammalian toxicities in categories III and IV.).

The interim Worker Protection Standard (WPS) Restricted-Entry Interval (REI) for Gibberellic Acids was established at 12 hours, based on acute mammalian toxicity. However, the Agency has determined that an interim REI of 12 hours may, in certain circumstances, be reduced to 4 hours for pesticides with low acute mammalian toxicities in Toxicity Categories III and IV. The Gibberellic Acids are candidates for reduced interim REI's due to their very low acute toxicities (i.e., Toxicity Categories III and IV). The procedure for requesting a reduction in the REI is specified in Section V.

V. ACTIONS REQUIRED OF REGISTRANTS

This section specifies the data requirements and responses necessary for the reregistration

of both manufacturing-use and end-use products.

A. Manufacturing-Use Products

1. Additional Generic Data Requirements

The generic data base supporting the reregistration of Gibberellic Acids for the above eligible uses has been reviewed and determined to be substantially complete. At this time no additional data are being required. However, the Agency is requiring that a revised Confidential Statement of Formula (CSF) and revised product labeling be submitted within eight months of the issuance of this document for all products.

2. Labeling Requirements for Manufacturing-Use Products

At this time, no additional labeling requirements are being imposed on manufacturing use products containing Gibberellic Acids as an active ingredient.

B. End-Use Products

1. Additional Product-Specific Data Requirements

Section 4(g)(2)(B) of FIFRA calls for the Agency to obtain any needed product-specific data regarding the pesticide after a determination of eligibility has been made. The data base supporting the reregistration of the above eligible end uses of Gibberellic Acids is substantially complete and no additional product specific data is being required at this time. However, the Agency is requiring that a revised CSF and revised product labeling be submitted within 8 months of the issuance of this document for all products.

2. Labeling Requirements for End-Use Products

Worker Protection Standard:

Personal Protective Equipment (PPE):

Using the tests in PR Notices 93-7 and 93-11 that establish minimum (baseline) requirements for PPE, your product label must bear the appropriate precautionary language relating to PPE. Because some of the registered uses of Gibberellic Acids are within the scope of the WPS and some are not, the minimum (baseline) requirements will pertain to both the WPS and nonWPS uses, because the potential exposure is similar.

Restricted-Entry Interval (REI):

The interim WPS REI for Gibberellic Acids is 12 hours, which is based on the acute mammalian toxicity. The Agency has determined that the interim REI of 12 hours may, in certain circumstances, be reduced to 4 hours for pesticides with low acute mammalian toxicities (i.e. products with acute mammalian toxicities in Categories III and IV).

Registrants of products containing Gibberellic Acids who wish their product to be considered a candidate for a REI reduction from 12 hours to 4 hours must notify the Agency. For each product, the following information must be submitted:

1. An application for Reregistration (EPA Form 8570-1).
2. One copy of the current product label, clearly marked to highlight the interim WPS REI.
3. Two copies of the revised label, clearly marked to highlight the revised WPS REI.
4. The following certification statement:

"I certify that this notification is complete in accordance with the provisions of the Agency's reduced REI Policy and that no other changes have been made to the labeling or confidential statement of formula of this product. I further understand that if this notification does not comply with the terms of the Agency's reduced REI Policy, this product may be in violation of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and I may be subject to enforcement action and penalties under Sections 12 and 14 of FIFRA. I understand that the Agency may direct a change in the REI of a product if the Agency determines that a change is appropriate, and that products may be subject to regulatory and enforcement action if the appropriate changes are not made."

Notifications should be sent to:

By U.S. Mail:

Document Processing Desk (WPS:95-1)(BPPD)
Office of Pesticide Programs (7504W)
Environmental Protection Agency
401 M Street, S.W.
Washington, DC 20460-0001

By Express:

Document Processing Desk (WPS:95-1)(BPPD)
Office of Pesticide Programs (7504W)
Room 266A, Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202

C. Existing Stocks

Registrants may generally distribute and sell products bearing old labels/labeling for 26 months from the date of the issuance of this Reregistration Eligibility Decision (RED). Persons other than the registrant may generally distribute or sell such products for 50 months from the date of the issuance of this RED. However, existing stocks time frames will be established on a case-by-case, depending on the number of products involved, the number of label changes, and other factors. Refer to "Existing Stocks of Pesticide Products; Statement of Policy"; Federal Register, Volume 56, No. 123, June 26, 1991.

The Agency has determined that registrants may distribute and sell Gibberellic Acids products bearing old labels/labeling for 26 months from the date of issuance of this RED. Persons other than the registrant may distribute or sell such products for 50 months from the date of the issuance of this RED. Registrants and persons other than registrants remain obligated to meet pre-existing Agency imposed label changes and existing stocks requirements applicable to products they sell or distribute.

VI. APPENDICES

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

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FOOD/FEED USES

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Spray, Petal fall, Sprayer	SC/L	NA	.01777	1b	A	*	NS	NS	.055	1b	NS	7	.5	C46, CAD
Spray, Preharvest, Sprayer	SC/L	NA	.04375	1b	A	*	NS	NS	NS	NS	14	.5	C46, CAD	

Spray, Fall, Sprayer	SC/S	NA	.01102	1b A	*	1	NS	NS	NS	NS	NS	H01(7)
	SC/S	NA	.01102	1b A	*	NS	NS	NS	NS	.5	CA	C46, CAD, H01(7)
	SC/L	NA		UC	*	1	NS	NS	NS	NS	AZ	H01(7)
	SC/L	NA		UC	*	NS	NS	NS	NS	.5		C46, C92, H01(7)
	SC/L	NA		UC	*	NS	NS	NS	NS	.5	CA	C46, C92, H01(7)
	SC/L	NA		UC	*	NS	NS	NS	NS	NS	CA	C46, H01(7)
			.01055	1b A	*							
	SC/S	NA	.01102	1b A	*	NS	NS	NS	NS	.5		C46, C92, H01(7)
	SC/S	NA	.04409	1b A	*	NS	NS	NS	NS	.5		C92, H01(7)
	SC/S	NA	.02205	1b A	*	NS	NS	NS	NS	.5	CA	C46, C92, H01(7)
	SC/S	NA	.02205	1b A	*	NS	NS	NS	NS	NS	CA	H01(7)
	WP	NA	.02205	1b A	*	NS	NS	NS	NS	.5	CA	C46, C92, H01(7)

Chemigation, Early tillering, Center pivot irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Early tillering, Hand move irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

[illegible]

FOOD/FEED USES (con't)

[illegible]

Chemigation, Early tillering, Moving wheel irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Early tillering, Solid set irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Postemergence, Center pivot irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Postemergence, Hand move irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Postemergence, Moving wheel irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Postemergence, Solid set irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Seed treatment, When needed, Seed treater	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Spray, Early tillering, Aircraft	EC	NA	UC	*	2	NS	NS	NS	NS	.5	C46, C92
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Spray, Early tillering, Ground	EC	NA	UC	*	2	NS	NS	NS	NS	.5	C46, C92
Spray, Early tillering, Sprayer	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Spray, Postemergence, Aircraft	EC	NA	UC	*	2	NS	NS	NS	NS	.5	C46, C92
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Spray, Postemergence, Ground	EC	NA	UC	*	2	NS	NS	NS	NS	.5	C46, C92
Spray, Postemergence, Sprayer	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

[illegible]

FOOD/FEED USES (con't)

[illegible]

Broadcast, Foliar, Sprayer	SC/L	NA	1.008E-05	lb A	*	6	NS	NS	NS	7	.5	C92
Chemigation, Early bloom, Center pivot irrigation	EC	NA		UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Early bloom, Hand move irrigation	EC	NA		UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Early bloom, Moving wheel irrigation	EC	NA		UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Early bloom, Solid set irrigation	EC	NA		UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Foliar, Center pivot irrigation	SC/L	NA	1.008E-05	lb A	*	6	NS	NS	NS	7	.5	C92
Chemigation, Foliar, Hand move irrigation	SC/L	NA	1.008E-05	lb A	*	6	NS	NS	NS	7	.5	C92
Chemigation, Foliar, Moving wheel irrigation	SC/L	NA	1.008E-05	lb A	*	6	NS	NS	NS	7	.5	C92
Chemigation, Foliar, Solid set irrigation	SC/L	NA	1.008E-05	lb A	*	6	NS	NS	NS	7	.5	C92
Spray, Early bloom, Aircraft	EC	NA		UC	*	NS	NS	NS	NS	NS	.5	C92
Spray, Early bloom, Sprayer	EC	NA		UC	*	NS	NS	NS	NS	NS	.5	C92

Spray, Early bloom, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46, C92

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

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FOOD/FEED USES (con't)

[illegible]

Use Group: TERRESTRIAL FOOD+FEED CROP (con't)

Spray, Early bloom, Ground	FlC	NA	UC	*	NS	NS	NS	NS	NS	C46
	EC	NA	UC	*	NS	NS	NS	NS	.5	C46
	EC	NA	UC	*	NS	NS	NS	NS	.5	C46, C92
Spray, Foliar, Aircraft	FlC	NA	UC	*	NS	NS	NS	NS	NS	C46
	EC	NA	UC	*	NS	NS	NS	NS	7 .5	C46, C92
	FlC	NA	UC	*	NS	NS	NS	NS	7 NS	C46
Spray, Foliar, Ground	EC	NA	UC	*	NS	NS	NS	NS	7 .5	C46, C92
	FlC	NA	UC	*	NS	NS	NS	NS	7 NS	C46

Use Group: TERRESTRIAL FOOD+FEED CROP

Spray, Early bloom, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46, C92
	FlC	NA	UC	*	NS	NS	NS	NS	NS	NS	C46
Spray, Early bloom, Ground	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46, C92
	FlC	NA	UC	*	NS	NS	NS	NS	NS	NS	C46
Spray, Foliar, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	7	.5	C46, C92
	FlC	NA	UC	*	NS	NS	NS	NS	7	NS	C46
Spray, Foliar, Ground	EC	NA	UC	*	NS	NS	NS	NS	7	.5	C46, C92
	FlC	NA	UC	*	NS	NS	NS	NS	7	NS	C46

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

[illegible]

FOOD/FEED USES (con't)

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Spray, Early bloom, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46, C92
	FlC	NA	UC	*	NS	NS	NS	NS	NS	NS	C46
Spray, Early bloom, Ground	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46, C92
	FlC	NA	UC	*	NS	NS	NS	NS	NS	NS	C46
Spray, Foliar, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	7	.5	C46, C92
	FlC	NA	UC	*	NS	NS	NS	NS	7	NS	C46
Spray, Foliar, Ground	EC	NA	UC	*	NS	NS	NS	NS	7	.5	C46, C92
	FlC	NA	UC	*	NS	NS	NS	NS	7	NS	C46

Spray, Early bloom, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46, C92
	FlC	NA	UC	*	NS	NS	NS	NS	NS	NS	C46
Spray, Early bloom, Ground	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46, C92
	FlC	NA	UC	*	NS	NS	NS	NS	NS	NS	C46
Spray, Foliar, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	7	.5	C46, C92
	FlC	NA	UC	*	NS	NS	NS	NS	7	NS	C46

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

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FOOD/FEED USES (con't)

[illegible]

Use Group: TERRESTRIAL FOOD+FEED CROP (con't)

Spray, Foliar, Ground	EC	NA	UC	*	NS	NS	NS	NS	7	.5	C46, C92
	F1C	NA	UC	*	NS	NS	NS	NS	7	NS	C46

BLUEBERRY Use Group: TERRESTRIAL FOOD CROP

High volume spray (dilute), Bloom, High volume ground sprayer	SC/L	NA	UC	*	1	NS	NS	NS	NS	.5		C46, C92, H01(40)
	SC/L	NA	.50625 lb A UC	*	1	NS	NS	NS	NS			C46, H01(40)
	SC/L	NA	UC	*	NS	4/1 yr	NS	NS	NS	.5	CA	C46, C92, H01(7)
	SC/S	NA	.5291 lb A	*	1	NS	NS	NS	NS	.5		C46, C92, H01(40)
	SC/S	NA	.08818 lb A	*	NS	NS	NS	NS	NS	.5	CA	C92, H01(7)
	WP	NA	.5291 lb A	*	1	NS	NS	NS	NS	.5		C46, C92, H01(40)
High volume spray (dilute), Foliar, High volume ground sprayer	SC/L	NA	UC	*	1	NS	NS	NS	NS	.5		C46, C92, H01(40)
	SC/L	NA	.50625 lb A UC	*	1	NS	NS	NS	NS			C46, H01(40)
	SC/L	NA	UC	*	NS	NS	NS	NS	NS	.5	CA	C46, C92, H01(7)
	SC/S	NA	.08818 lb A	*	NS	NS	NS	NS	10	.5	CA	C92, H01(7)
	WP	NA	.5291 lb A	*	1	NS	NS	NS	NS	.5		C46, C92, H01(40)

BROCCOLI	Use Group: TERRESTRIAL FOOD CROP
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Band treatment, Posttransplant, Spraver	EC	NA	UC	*	2	NS	NS	NS	NS	14	.5	C92
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Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

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FOOD/FEED USES (con't)

[illegible]

Broadcast, Foliar, Sprayer	SC/L	NA	2.016E-05 lb A	*	3	NS	NS	NS	10	.5	C92
Chemigation, Foliar, Center pivot irrigation	SC/L	NA	2.016E-05 lb A	*	3	NS	NS	NS	10	.5	C92
Chemigation, Foliar, Hand move irrigation	SC/L	NA	2.016E-05 lb A	*	3	NS	NS	NS	10	.5	C92
Chemigation, Foliar, Moving wheel irrigation	SC/L	NA	2.016E-05 lb A	*	3	NS	NS	NS	10	.5	C92
Chemigation, Foliar, Solid set irrigation	SC/L	NA	2.016E-05 lb A	*	3	NS	NS	NS	10	.5	C92
Chemigation, Posttransplant, Center pivot irrigation	EC	NA	UC	*	2	NS	NS	NS	14	.5	C92
Chemigation, Posttransplant, Hand move irrigation	EC	NA	UC	*	2	NS	NS	NS	14	.5	C92
Chemigation, Posttransplant, Moving wheel irrigation	EC	NA	UC	*	2	NS	NS	NS	14	.5	C92
Chemigation, Posttransplant, Solid set irrigation	EC	NA	UC	*	2	NS	NS	NS	14	.5	C92
Spray, Foliar, Aircraft	EC	NA	UC	*	2	NS	NS	NS	14	.5	C46
Spray, Foliar, Ground	EC	NA	UC	*	2	NS	NS	NS	14	.5	C46
Spray, Posttransplant, Aircraft	EC	NA	UC	*	2	NS	NS	NS	14	.5	C46
	EC	NA	UC	*	2	NS	NS	NS	14	.5	C46, C92
	EC	NA	UC	*	2	NS	NS	NS	14	.5	C92

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

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FOOD/FEED USES (con't)

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Spray, Posttransplant, Ground	EC	NA	UC	*	2	NS	NS	NS	14	.5	C46
	EC	NA	UC	*	2	NS	NS	NS	14	.5	C46, C92

Band treatment, Posttransplant, Sprayer	EC	NA		UC	*	2	NS	NS	NS	14	.5	C92
Broadcast, Foliar, Sprayer	SC/L	NA	2.016E-05	lb A	*	3	NS	NS	NS	10	.5	C92
Chemigation, Foliar, Center pivot irrigation	SC/L	NA	2.016E-05	lb A	*	3	NS	NS	NS	10	.5	C92
Chemigation, Foliar, Hand move irrigation	SC/L	NA	2.016E-05	lb A	*	3	NS	NS	NS	10	.5	C92
Chemigation, Foliar, Moving wheel irrigation	SC/L	NA	2.016E-05	lb A	*	3	NS	NS	NS	10	.5	C92
Chemigation, Foliar, Solid set irrigation	SC/L	NA	2.016E-05	lb A	*	3	NS	NS	NS	10	.5	C92
Chemigation, Posttransplant, Center pivot irrigation	EC	NA		UC	*	2	NS	NS	NS	14	.5	C92
Chemigation, Posttransplant, Hand move irrigation	EC	NA		UC	*	2	NS	NS	NS	14	.5	C92
Chemigation, Posttransplant, Moving wheel irrigation	EC	NA		UC	*	2	NS	NS	NS	14	.5	C92
Chemigation, Posttransplant, Solid set irrigation	EC	NA		UC	*	2	NS	NS	NS	14	.5	C92
Spray, Foliar, Aircraft	EC	NA		UC	*	2	NS	NS	NS	14	.5	C46

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

[illegible]

FOOD/FEED USES (con't)

[illegible]

Use Group: TERRESTRIAL FOOD CROP (con't)

Spray, Foliar, Ground	EC	NA	UC	*	2	NS	NS	NS	14	.5	C46
Spray, Posttransplant, Aircraft	EC	NA	UC	*	2	NS	NS	NS	14	.5	C46
	EC	NA	UC	*	2	NS	NS	NS	14	.5	C46, C92
	EC	NA	UC	*	2	NS	NS	NS	14	.5	C92
	FlC	NA	UC	*	2	NS	NS	NS	14	NS	C46
Spray, Posttransplant, Ground	EC	NA	UC	*	2	NS	NS	NS	14	.5	C46
	EC	NA	UC	*	2	NS	NS	NS	14	.5	C46, C92
	FlC	NA	UC	*	2	NS	NS	NS	14	NS	C46

CABBAGE	Use Group: TERRESTRIAL FOOD CROP
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Band treatment, Posttransplant, Sprayer	EC	NA		UC	*	2	NS	NS	NS	14	.5	C92
Broadcast, Foliar, Sprayer	SC/L	NA	2.016E-05	lb A	*	3	NS	NS	NS	10	.5	C92
Chemigation, Foliar, Center pivot irrigation	SC/L	NA	2.016E-05	lb A	*	3	NS	NS	NS	10	.5	C92
Chemigation, Foliar, Hand move irrigation	SC/L	NA	2.016E-05	lb A	*	3	NS	NS	NS	10	.5	C92
Chemigation, Foliar, Moving wheel irrigation	SC/L	NA	2.016E-05	lb A	*	3	NS	NS	NS	10	.5	C92
Chemigation, Foliar, Solid set irrigation	SC/L	NA	2.016E-05	lb A	*	3	NS	NS	NS	10	.5	C92
Chemigation, Posttransplant, Center pivot irrigation	EC	NA		UC	*	2	NS	NS	NS	14	.5	C92

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

[illegible]

FOOD/FEED USES (con't)

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Use Group: TERRESTRIAL FOOD CROP (con't)

Spray, Foliar, Ground	WP	NA	.004409	1b A	*	2	NS	NS	NS	10	.5	C46, C92, H01(7)
	SC/L	NA		UC	*	2	NS	NS	NS	10	.5	C46, C92, H01(7)
	SC/L	NA		UC	*	2	NS	NS	NS	10	NS	C46, H01(7)
	SC/S	NA	.004409	1b A	*	2	NS	NS	NS	10	.5	C46, C92, H01(7)
	SC/S	NA	.004409	1b A	*	2	NS	NS	NS	10	NS	H01(7)
	WP	NA	.004409	1b A	*	2	NS	NS	NS	10	.5	C46, C92, H01(7)

Use Group: TERRESTRIAL FOOD CROP

Band treatment, Posttransplant, Sprayer	EC	NA	UC	*	2	NS	NS	NS	14	.5	C92
Broadcast, Foliar, Sprayer	SC/L	NA	2.016E-05 lb A	*	3	NS	NS	NS	10	.5	C92
Chemigation, Foliar, Center pivot irrigation	SC/L	NA	2.016E-05 lb A	*	3	NS	NS	NS	10	.5	C92
Chemigation, Foliar, Hand move irrigation	SC/L	NA	2.016E-05 lb A	*	3	NS	NS	NS	10	.5	C92
Chemigation, Foliar, Moving wheel irrigation	SC/L	NA	2.016E-05 lb A	*	3	NS	NS	NS	10	.5	C92
Chemigation, Foliar, Solid set irrigation	SC/L	NA	2.016E-05 lb A	*	3	NS	NS	NS	10	.5	C92
Chemigation, Posttransplant, Center pivot irrigation	EC	NA	UC	*	2	NS	NS	NS	14	.5	C92
Chemigation, Posttransplant, Hand move irrigation	EC	NA	UC	*	2	NS	NS	NS	14	.5	C92

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

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FOOD/FEED USES (con't)

[illegible]

Use Group: TERRESTRIAL FOOD CROP (con't)

Chemigation, Posttransplant, Moving wheel irrigation	EC	NA	UC	*	2	NS	NS	NS	14	.5	C92
Chemigation, Posttransplant, Solid set irrigation	EC	NA	UC	*	2	NS	NS	NS	14	.5	C92
Spray, Foliar, Aircraft	EC	NA	UC	*	2	NS	NS	NS	14	.5	C46
Spray, Foliar, Ground	EC	NA	UC	*	2	NS	NS	NS	14	.5	C46
Spray, Posttransplant, Aircraft	EC	NA	UC	*	2	NS	NS	NS	14	.5	C46
	EC	NA	UC	*	2	NS	NS	NS	14	.5	C46, C92
	EC	NA	UC	*	2	NS	NS	NS	14	.5	C92
	FlC	NA	UC	*	2	NS	NS	NS	14	NS	C46
Spray, Posttransplant, Ground	EC	NA	UC	*	2	NS	NS	NS	14	.5	C46
	EC	NA	UC	*	2	NS	NS	NS	14	.5	C46, C92
	FlC	NA	UC	*	2	NS	NS	NS	14	NS	C46

CELERY	Use Group: TERRESTRIAL FOOD CROP
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Spray, Foliar, Sprayer	SC/S	NA	.02205 lb A	*	NS	NS	NS	NS	21	.5		C46, CAD, H01(7)
Spray, Preharvest, Aircraft	SC/S	NA	.02205 lb A	*	1	NS	NS	NS	NS	.5		C92, H01(7)
Spray, Preharvest, Sprayer	SC/L	NA		UC	*	NS	NS	NS	NS	.5		C46, C92, H01(7)
	SC/L	NA		UC	*	NS	NS	NS	NS	.5	OR, 013	C46, C92
	SC/L	NA		UC	*	NS	NS	NS	NS	NS		C46
			.02109 lb A	*								

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

SITE Application Type, Application Timing, Application Equipment) Surface Type (Antimicrobial only) & Efficacy Influencing Factor (Antimicrobial only)	Form(s)	Min. Appl. Rate (AI unless noted otherwise)	Max. Appl. Rate (AI unless noted otherwise)	Soil Tex. @ Max. /crop /year	Max. # Apps /year	Max. Dose [(AI unless noted otherwise)/A] /crop /year	Min. Restr. Interv (days)	Geographic Allowed Interv [day(s)]	Limitations Disallowed	Use Limitations Codes
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USES ELIGIBLE FOR REREGISTRATION

[illegible]

CELERY (con't) Use Group: TERRESTRIAL FOOD CROP (con't)

	SC/S	NA	.02205	1b A	*	1	NS	NS	NS	NS	.5	C92, H01(7)
	SC/S	NA	.02205	1b A	*	1	NS	NS	NS	NS	NS	
	SC/S	NA	.02205	1b A	*	1	NS	NS	NS	NS	NS CA	
	SC/S	NA	.02205	1b A	*	NS	NS	NS	NS	NS	.5	C46, C92
	SC/S	NA	.02205	1b A	*	NS	NS	NS	NS	NS	.5	C46, C92, H01(7)
	SC/S	NA	.02205	1b A	*	NS	NS	NS	NS	NS	NS	
	WP	NA	.02205	1b A	*	NS	NS	NS	NS	NS	.5	C46, C92

CHERRY Use Group: TERRESTRIAL FOOD CROP

High volume spray (dilute), Foliar, Airblast	SC/S	NA	.06614	1b A	*	1	NS	NS	NS	NS	NS		H01(30)
High volume spray (dilute), Foliar, High volume ground sprayer	SC/L	NA		UC	*	NS	NS	NS	NS	NS	.5	CA	C46, C92
	SC/L	NA		UC	*	NS	NS	NS	NS	NS	.5	CA	C46, C92, H01(7)
	SC/L	NA	.10125	1b A	*	NS	NS	NS	NS	NS	NS		C46, H01(7)
	SC/L	NA		UC	*	NS	NS	NS	NS	NS	NS	CA	C46
	SC/S	NA	.03968	1b A	*	1	NS	NS	NS	NS	.5	CA	C92, H01(7)
	SC/S	NA	.1058	1b A	*	NS	NS	NS	NS	NS	.5		C46, CAD, H01(7)
	SC/S	NA	.03307	1b A	*	NS	NS	NS	NS	NS	.5	CA	C46, C92
	WP	NA	.03307	1b A	*	NS	NS	NS	NS	NS	.5	CA	C46, C92

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

SITE Application Type, Application Timing, Application Equipment) Surface Type (Antimicrobial only) & Efficacy Influencing Factor (Antimicrobial only)	Form(s)	Min. Appl. Rate (AI unless noted otherwise)	Max. Appl. Rate (AI unless noted otherwise)	Soil Tex. @ Max. /crop /year	Max. # Apps /year	Max. Dose [(AI unless noted otherwise)/A] /crop /year	Min. Restr. Interv (days)	Geographic Allowed Interv [day(s)]	Limitations Disallowed	Use Limitations Codes
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USES ELIGIBLE FOR REREGISTRATION

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CHERRY (con't) Use Group: TERRESTRIAL FOOD CROP (con't)

High volume spray (dilute), Nonbearing, High volume ground sprayer	WP	NA	.08818	lb A	*	NS	NS	NS	NS	NS	.5		C46, C92
High volume spray (dilute), Preharvest, High volume ground sprayer	SC/S	NA	.05291	lb A	*	1	NS	NS	NS	NS	NS	CA	
Low volume spray (concentrate), Foliar, Low volume ground sprayer	SC/L	NA		UC	*	NS	NS	NS	NS	NS	.5	CA	C46, C92
	SC/L	NA		UC	*	NS	NS	NS	NS	NS	.5	CA	C46, C92, H01(7)
	SC/L	NA		UC	*	NS	NS	NS	NS	NS	NS	CA	C46
	SC/S	NA	.03968	lb A	*	1	NS	NS	NS	NS	.5	CA	C92, H01(7)
	SC/S	NA	.03968	lb A	*	NS	NS	NS	NS	NS	.5	CA	C46, C92
	WP	NA	.03968	lb A	*	NS	NS	NS	NS	NS	.5	CA	C46, C92
Low volume spray (concentrate), Nonbearing, Low volume ground sprayer	WP	NA	.08818	lb A	*	NS	NS	NS	NS	NS	.5		C46, C92
Spray, Foliar, Sprayer	SC/L	NA	.04219	lb A	*	NS	NS	NS	NS	7	NS	CA	C46
	SC/L	NA		UC	*	NS	NS	NS	NS	NS	.5		C46, C92, H01(7)
	SC/L	NA		UC	*	NS	NS	NS	NS	NS	NS		C46, H01(7)
	SC/S	NA	.1058	lb A	*	1	NS	NS	NS	7	.5		C92, H01(7)
	SC/S	NA	.06614	lb A	*	1	NS	NS	NS	NS	NS		H01(30)
	SC/S	NA	.06614	lb A	*	NS	NS	NS	NS	NS	.5		C46, C92, H01(30)
	SC/S	NA	.1058	lb A	*	NS	NS	NS	NS	NS	.5		C46, C92, H01(7)
	SC/S	NA	.1058	lb A	*	NS	NS	NS	NS	NS	NS	CA	H01(7)

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

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FOOD/FEED USES (con't)

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Spray, Nonbearing, Sprayer	WP	NA	.1058	1b	A	*	NS	NS	NS	NS	NS	.5		C46, C92, H01(7)
	SC/L	NA			UC	*	NS	NS	NS	NS	NS	.5	CA	C46, C92, H01(7)
Spray, Preharvest, Sprayer	SC/S	NA	.08818	1b	A	*	1	NS	NS	NS	7	.5	CA	C92, H01(7)
	SC/S	NA	.05291	1b	A	*	NS	NS	NS	NS	NS	.5		C46, C92

Chemigation, Foliar, Center pivot irrigation	EC	NA	UC	*	NS	3/1 yr	NS	NS	NS	.5	C92
Chemigation, Foliar, Hand move irrigation	EC	NA	UC	*	NS	3/1 yr	NS	NS	NS	.5	C92
Chemigation, Foliar, Moving wheel irrigation	EC	NA	UC	*	NS	3/1 yr	NS	NS	NS	.5	C92
Chemigation, Foliar, Solid set irrigation	EC	NA		*	NS	3/1 yr	NS	NS	NS	.5	C92
Chemigation, Pretransplant, Center pivot irrigation	EC	NA	UC	*	NS	3/1 yr	NS	NS	NS	.5	C92
Chemigation, Pretransplant, Hand move irrigation	EC	NA	UC	*	NS	3/1 yr	NS	NS	NS	.5	C92
Chemigation, Pretransplant, Moving wheel irrigation	EC	NA	UC	*	NS	3/1 yr	NS	NS	NS	.5	C92
Chemigation, Pretransplant, Solid set irrigation	EC	NA	UC	*	NS	3/1 yr	NS	NS	NS	.5	C92
Dip treatment, Pretransplant, Not on label	EC	NA	UC	*	NS	3/1 yr	NS	NS	NS	.5	C92
Spray, Foliar, Aircraft	EC	NA	UC	*	NS	3/1 yr	NS	NS	NS	.5	C92

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

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FOOD/FEED USES (con't)

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Use Group: TERRESTRIAL FOOD+FEED CROP (con't)

Spray, Foliar, Sprayer	EC	NA	UC	*	NS	3/1 yr	NS	NS	NS	.5	C92
Spray, Pretransplant, Aircraft	EC	NA	UC	*	NS	3/1 yr	NS	NS	NS	.5	C92
Spray, Pretransplant, Sprayer	EC	NA	UC	*	NS	3/1 yr	NS	NS	NS	.5	C92

Use Group: TERRESTRIAL FOOD+FEED CROP

Band treatment, Postemergence, Sprayer	EC	NA		UC	*	NS	NS	NS	NS	NS	.5	C92
Broadcast, Foliar, Sprayer	SC/L	NA	2.688E-05	lb A	*	1	NS	NS	NS	NS	.5	C92
Chemigation, At planting, Center pivot irrigation	EC	NA		UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, At planting, Hand move irrigation	EC	NA		UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, At planting, Moving wheel irrigation	EC	NA		UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, At planting, Solid set irrigation	EC	NA		UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Foliar, Center pivot irrigation	SC/L	NA	2.688E-05	lb A	*	1	NS	NS	NS	NS	.5	C92
Chemigation, Foliar, Hand move irrigation	SC/L	NA	2.688E-05	lb A	*	1	NS	NS	NS	NS	.5	C92
Chemigation, Foliar, Moving wheel irrigation	SC/L	NA	2.688E-05	lb A	*	1	NS	NS	NS	NS	.5	C92
Chemigation, Foliar, Solid set irrigation	SC/L	NA	2.688E-05	lb A	*	1	NS	NS	NS	NS	.5	C92

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

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FOOD/FEED USES (con't)

[illegible]

Use Group: TERRESTRIAL FOOD+FEED CROP (con't)

Spray, Preemergence, Ground	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46, C92
Spray, Preemergence, Sprayer	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92

Use Group: TERRESTRIAL FOOD+FEED CROP

Seed treatment, When needed, Seed treater EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
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Use Group: TERRESTRIAL FOOD+FEED CROP

Band treatment, Postemergence, Sprayer	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, At planting, Center pivot irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, At planting, Hand move irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, At planting, Moving wheel irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, At planting, Solid set irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Postemergence, Center pivot irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Postemergence, Hand move irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Postemergence, Moving wheel irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Postemergence, Solid set irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

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FOOD/FEED USES (con't)

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Use Group: TERRESTRIAL FOOD+FEED CROP (con't)

Chemigation, Preemergence, Center pivot irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Chemigation, Preemergence, Hand move irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Chemigation, Preemergence, Moving wheel irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Chemigation, Preemergence, Solid set irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Seed treatment, When needed, Seed treater	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Soil in-furrow treatment, At planting, Sprayer	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Spray, At planting, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Spray, Postemergence, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Spray, Postemergence, Sprayer	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Spray, Preemergence, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C46, C92
	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Spray, Preemergence, Ground	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C46, C92
Spray, Preemergence, Sprayer	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92

Use Group: TERRESTRIAL FOOD+FEED CROP

Band treatment, Foliar, Sprayer	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Broadcast, Bloom, Sprayer	SC/L	NA	2.688E-05 lb A	*	NS	NS	NS	NS	NS	.5	C92

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

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FOOD/FEED USES (con't)

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Broadcast, Early bloom, Sprayer	SC/L	NA	2.688E-05	lb A	*	1	NS	NS	NS	NS	.5	C92
Broadcast, Foliar, Sprayer	SC/L	NA	1.344E-05	lb A	*	4	NS	NS	NS	NS	.5	C92
Chemigation, Bloom, Center pivot irrigation	SC/L	NA	2.688E-05	lb A	*	1	NS	NS	NS	NS	.5	C92
Chemigation, Bloom, Hand move irrigation	SC/L	NA	2.688E-05	lb A	*	1	NS	NS	NS	NS	.5	C92
Chemigation, Bloom, Moving wheel irrigation	SC/L	NA	2.688E-05	lb A	*	1	NS	NS	NS	NS	.5	C92
Chemigation, Bloom, Solid set irrigation	SC/L	NA	2.688E-05	lb A	*	1	NS	NS	NS	NS	.5	C92
Chemigation, Early bloom, Center pivot irrigation	EC	NA		UC	*	NS	NS	NS	NS	NS	.5	C92
	SC/L	NA	2.688E-05	lb A	*	1	NS	NS	NS	NS	.5	C92
Chemigation, Early bloom, Hand move irrigation	EC	NA		UC	*	NS	NS	NS	NS	NS	.5	C92
	SC/L	NA	2.688E-05	lb A	*	1	NS	NS	NS	NS	.5	C92
Chemigation, Early bloom, Moving wheel irrigation	EC	NA		UC	*	NS	NS	NS	NS	NS	.5	C92
	SC/L	NA	2.688E-05	lb A	*	1	NS	NS	NS	NS	.5	C92

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

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FOOD/FEED USES (con't)

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Use Group: TERRESTRIAL FOOD+FEED CROP (con't)

Chemigation, Early bloom, Solid set irrigation	EC	NA		UC	*	NS	NS	NS	NS	NS	.5	C92
	SC/L	NA	2.688E-05	lb A	*	1	NS	NS	NS	NS	.5	C92
Chemigation, Foliar, Center pivot irrigation	EC	NA		UC	*	NS	NS	NS	NS	NS	.5	C92
	SC/L	NA	1.344E-05	lb A	*	4	NS	NS	NS	NS	.5	C92
Chemigation, Foliar, Hand move irrigation	EC	NA		UC	*	NS	NS	NS	NS	NS	.5	C92
	SC/L	NA	1.344E-05	lb A	*	4	NS	NS	NS	NS	.5	C92
Chemigation, Foliar, Moving wheel irrigation	EC	NA		UC	*	NS	NS	NS	NS	NS	.5	C92
	SC/L	NA	1.344E-05	lb A	*	4	NS	NS	NS	NS	.5	C92
Chemigation, Foliar, Solid set irrigation	EC	NA		UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Prebloom, Center pivot irrigation	EC	NA		UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Prebloom, Hand move irrigation	EC	NA		UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Prebloom, Moving wheel irrigation	EC	NA		UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Prebloom, Solid set irrigation	EC	NA		UC	*	NS	NS	NS	NS	NS	.5	C92

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

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FOOD/FEED USES (con't)

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Use Group: TERRESTRIAL FOOD+FEED CROP (con't)

Seed treatment, Seed, Not on label	SC/S	NA	.003307 lb cwt	*	NS	NS	NS	NS	NS	NS	
Seed treatment, When needed, Seed treater	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Soil in-furrow treatment, At planting, Not on label	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Spray, At first squaring, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	7	.5	C46
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46, C92
	FlC	NA	UC	*	NS	NS	NS	NS	NS	NS	C46
Spray, At first squaring, Ground	EC	NA	UC	*	NS	NS	NS	NS	7	.5	C46
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46, C92
	FlC	NA	UC	*	NS	NS	NS	NS	NS	NS	C46
Spray, Early bloom, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	7	.5	C46
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46, C92
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
	FlC	NA	UC	*	NS	NS	NS	NS	NS	NS	C46
Spray, Early bloom, Ground	EC	NA	UC	*	NS	NS	NS	NS	7	.5	C46
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46, C92
	FlC	NA	UC	*	NS	NS	NS	NS	NS	NS	C46
Spray, Early bloom, Sprayer	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Spray, Foliar, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

[illegible]

FOOD/FEED USES (con't)

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	SC/L	NA	1.344E-05 lb A	*	4	NS	NS	NS	7	.5	C92
Chemigation, Foliar, Moving wheel irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
	SC/L	NA	1.344E-05 lb A	*	4	NS	NS	NS	7	.5	C92
Chemigation, Foliar, Solid set irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
	SC/L	NA	1.344E-05 lb A	*	4	NS	NS	NS	7	.5	C92
Spray, Early bloom, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	7	.5	C46
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46, C92
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
	FlC	NA	UC	*	2	NS	NS	NS	NS	NS	C46
Spray, Early bloom, Ground	EC	NA	UC	*	NS	NS	NS	NS	7	.5	C46
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46, C92
	FlC	NA	UC	*	2	NS	NS	NS	NS	NS	C46
Spray, Early bloom, Sprayer	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Spray, Foliar, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	14	.5	C46, C92
	EC	NA	UC	*	NS	NS	NS	NS	7	.5	C46
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
	FlC	NA	UC	*	2	NS	NS	NS	14	NS	C46

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

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FOOD/FEED USES (con't)

[illegible]

Spray, Foliar, Ground	EC	NA	UC	*	NS	NS	NS	NS	14	.5		C46, C92
	EC	NA	UC	*	NS	NS	NS	NS	7	.5		C46
	FlC	NA	UC	*	2	NS	NS	NS	14	NS		C46
Spray, Foliar, Sprayer	EC	NA	UC	*	NS	NS	NS	NS	NS	.5		C92
	SC/L	NA	UC	*	4	NS	NS	NS	NS	.5	CA	C46, C92, H01(7)
	SC/S	NA	.004409 1b A	*	3	NS	NS	NS	5	.5		C14, C46, C92
	SC/S	NA	.004409 1b A	*	4	NS	NS	NS	NS	.5	CA	C46, C92, H01(7)
Spray, Prebloom through foliar, Sprayer	SC/S	NA	.004409 1b A	*	4	NS	NS	NS	NS	.5	CA	C92, H01(7)
	SC/L	NA	UC	*	4	NS	NS	NS	10	.5		C46, C92
	WP	NA	.004409 1b A	*	4	NS	NS	NS	10	.5	CA	C46, C92
Spray, Prebloom, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	7	.5		C46
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5		C46, C92
	FlC	NA	UC	*	2	NS	NS	NS	NS	NS		C46
Spray, Prebloom, Ground	EC	NA	UC	*	NS	NS	NS	NS	7	.5		C46
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5		C46, C92
	FlC	NA	UC	*	2	NS	NS	NS	NS	NS		C46
Spray, Prebloom, Sprayer	SC/L	NA	UC	*	4	NS	NS	NS	NS	.5	CA	C46, C92, H01(7)
	SC/S	NA	.004409 1b A	*	4	NS	NS	NS	NS	.5	CA	C46, C92, H01(7)
	SC/S	NA	.004409 1b A	*	4	NS	NS	NS	NS	.5	CA	C92, H01(7)

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

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FOOD/FEED USES (con't)

[illegible]

High volume spray (dilute), August, High volume ground sprayer	SC/L	NA		UC	*	1	NS	NS	NS	NS	.5		CA	C46, C92, H01(7)
High volume spray (dilute), Bloom, High volume ground sprayer	SC/L	NA		UC	*	1	NS	NS	NS	NS	.5		CA	C46, C92, H01(7)
	SC/L	NA	.05273 lb A	UC	*	1	NS	NS	NS	NS	TX			C46
	SC/S	NA	.05512 lb A	UC	*	1	NS	NS	NS	NS	.5		CA	C92
High volume spray (dilute), December, High volume ground sprayer	SC/L	NA		UC	*	1	NS	NS	NS	NS	.5		CA	C46, C92, H01(7)
	SC/L	NA		UC	*	1	NS	NS	NS	NS	.5	FL, TX		C46, C92
	SC/L	NA	.1181 lb A	UC	*	1	NS	NS	NS	NS	FL, TX			C46
	SC/S	NA	.1058 lb A	UC	*	1	NS	NS	NS	NS	.5		CA	C92
	SC/S	NA	.1235 lb A	UC	*	1	NS	NS	NS	NS	.5	FL, TX		C46, C92
	SC/S	NA	.1235 lb A	UC	*	1	NS	NS	NS	NS	.5	TX, FL		C46, CAD
	SC/S	NA	.1235 lb A	UC	*	1	NS	NS	NS	NS	NS	FL, TX		
	WP	NA	.1235 lb A	UC	*	1	NS	NS	NS	NS	.5	FL, TX		C46, C92
High volume spray (dilute), January, High volume ground sprayer	SC/L	NA		UC	*	1	NS	NS	NS	NS	.5	FL, TX		C46, C92
	SC/L	NA	.1181 lb A	UC	*	1	NS	NS	NS	NS	FL, TX			C46
	SC/S	NA	.1235 lb A	UC	*	1	NS	NS	NS	NS	.5	FL, TX		C46, C92
	SC/S	NA	.1235 lb A	UC	*	1	NS	NS	NS	NS	.5	TX, FL		C46, CAD

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

SITE Application Type, Application Timing, Application Equipment) Surface Type (Antimicrobial only) & Efficacy Influencing Factor (Antimicrobial only)	Form(s)	Min. Appl. Rate (AI unless noted otherwise)	Max. Appl. Rate (AI unless noted otherwise)	Soil Tex. @ Max. /crop /year	Max. # Apps Max. Rate unless noted otherwise)/A]	Max. Dose [(AI unless noted otherwise)/A]	Min. Restr. Interv (days)	Geographic Allowed Interv [day(s)]	Limitations Disallowed	Use Limitations Codes
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USES ELIGIBLE FOR REREGISTRATION

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RICE (con't) Use Group: TERRESTRIAL FOOD+FEED CROP (con't)

Chemigation, Foliar, Center pivot irrigation	EC	NA		UC	*	NS	NS	NS	NS	NS	.5		C92
	SC/L	NA	2.688E-05	lb A	*	1	NS	NS	NS	NS	.5		C92
Chemigation, Foliar, Hand move irrigation	EC	NA		UC	*	NS	NS	NS	NS	NS	.5		C92
	SC/L	NA	2.688E-05	lb A	*	1	NS	NS	NS	NS	.5		C92
Chemigation, Foliar, Moving wheel irrigation	EC	NA		UC	*	NS	NS	NS	NS	NS	.5		C92
	SC/L	NA	2.688E-05	lb A	*	1	NS	NS	NS	NS	.5		C92
Chemigation, Foliar, Solid set irrigation	EC	NA		UC	*	NS	NS	NS	NS	NS	.5		C92
	SC/L	NA	2.688E-05	lb A	*	1	NS	NS	NS	NS	.5		C92
Seed treatment, Seed, Mist-type seed treater	SC/L	NA		UC	*	NS	NS	NS	NS	NS	.5	CA	C46, C92, GI7
	SC/L	NA		UC	*	NS	NS	NS	NS	NS	NS	CA	C46, GI7
	SC/S	NA	.004409	lb cwt	*	NS	NS	NS	NS	NS	.5		C46, CAD, G66
	SC/S	NA	.004409	lb cwt	*	NS	NS	NS	NS	NS	.5		C46, CAD, GI7
	SC/S	NA	.004409	lb cwt	*	NS	NS	NS	NS	NS	.5	CA	C14, C46, C92, G78, GI7

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

[illegible]

FOOD/FEED USES (con't)

[illegible]

Use Group: TERRESTRIAL FOOD CROP (con't)

	WP	NA	.04409 lb A	* 1	NS	NS	NS	NS	.5	018		C46, C92
Spray, Pretransplant, Aircraft	EC	NA		UC	* NS	NS	NS	NS	.5			C92
Spray, Pretransplant, Sprayer	EC	NA		UC	* NS	NS	NS	NS	.5			C92
SUGAR BEET Use Group: TERRESTRIAL FOOD+FEED CROP												
Broadcast, Foliar, Sprayer	SC/L	NA	5.375E-05 lb A	* 1	NS	NS	NS	NS	.5			C92
Chemigation, Foliar, Center pivot irrigation	EC	NA		UC	* 2	NS	NS	NS	30	.5		C92
	SC/L	NA	5.375E-05 lb A	* 1	NS	NS	NS	NS	.5			C92
Chemigation, Foliar, Hand move irrigation	EC	NA		UC	* 2	NS	NS	NS	30	.5		C92
	SC/L	NA	5.375E-05 lb A	* 1	NS	NS	NS	NS	.5			C92
Chemigation, Foliar, Moving wheel irrigation	EC	NA		UC	* 2	NS	NS	NS	30	.5		C92
	SC/L	NA	5.375E-05 lb A	* 1	NS	NS	NS	NS	.5			C92
Chemigation, Foliar, Solid set irrigation	EC	NA		UC	* 2	NS	NS	NS	30	.5		C92
	SC/L	NA	5.375E-05 lb A	* 1	NS	NS	NS	NS	.5			C92
Spray, Foliar, Aircraft	EC	NA		UC	* 2	NS	NS	NS	30	.5		C46, C92
	EC	NA		UC	* 2	NS	NS	NS	30	.5		C92

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

[illegible][illegible]

FOOD/FEED USES (con't)

[illegible]

SUGAR BEET (con't)

Use Group: TERRESTRIAL FOOD+FEED CROP (con't)

Spray, Foliar, Ground	EC	NA	UC	*	2	NS	NS	NS	30	.5	C46, C92
Spray, Foliar, Sprayer	EC	NA	UC	*	2	NS	NS	NS	30	.5	C92

SUGAR BEETS (INCL. TOPS)

Use Group: TERRESTRIAL FEED CROP

Chemigation, Foliar, Center pivot irrigation	EC	NA	UC	*	2	NS	NS	NS	30	.5	C92
Chemigation, Foliar, Hand move irrigation	EC	NA	UC	*	2	NS	NS	NS	30	.5	C92
Chemigation, Foliar, Moving wheel irrigation	EC	NA	UC	*	2	NS	NS	NS	30	.5	C92
Chemigation, Foliar, Solid set irrigation	EC	NA	UC	*	2	NS	NS	NS	30	.5	C92
Spray, Foliar, Aircraft	EC	NA	UC	*	2	NS	NS	NS	30	.5	C46, C92
	EC	NA	UC	*	2	NS	NS	NS	30	.5	C92
Spray, Foliar, Ground	EC	NA	UC	*	2	NS	NS	NS	30	.5	C46, C92
Spray, Foliar, Sprayer	EC	NA	UC	*	2	NS	NS	NS	30	.5	C92

SUGARCANE

Use Group: TERRESTRIAL FOOD+FEED CROP

Chemigation, Foliar, Center pivot irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Foliar, Hand move irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Foliar, Moving wheel irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Foliar, Solid set irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

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FOOD/FEED USES (con't)

[illegible]

Use Group: TERRESTRIAL FOOD+FEED CROP (con't)

Soil sidedress treatment, Foliar, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	NS	.5			C92
Soil sidedress treatment, Foliar, Sprayer	EC	NA	UC	*	NS	NS	NS	NS	NS	.5			C92
Spray, Foliar, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	NS	.5			C46, C92
Spray, Foliar, Ground	EC	NA	UC	*	NS	NS	NS	NS	NS	.5			C46, C92
TANGELO Use Group: TERRESTRIAL FOOD+FEED CROP													
High volume spray (dilute), Bloom, High volume ground sprayer	SC/L	NA	UC	*	NS	NS	NS	NS	NS	.5		CA	C46, C92, H01(7)
	SC/L	NA	UC	*	NS	NS	NS	NS	NS	.5	FL		C46, C92
	SC/L	NA	UC	*	NS	NS	NS	NS	NS	NS	FL		C46
			.06328 lb A	*									
	SC/S	NA	.06614 lb A	*	1	NS	NS	NS	NS	NS			
	SC/S	NA	.06614 lb A	*	NS	NS	NS	NS	NS	.5			C46, C92, H01(30)
	SC/S	NA	.06614 lb A	*	NS	NS	NS	NS	NS	.5		CA	C92, H01(7)
	SC/S	NA	.06614 lb A	*	NS	NS	NS	NS	NS	.5	FL		C46, C92
	SC/S	NA	.06614 lb A	*	NS	NS	NS	NS	NS	.5	FL		C46, CAD
	SC/S	NA	.06614 lb A	*	NS	NS	NS	NS	NS	NS	FL		
High volume spray (dilute), Foliar, High volume ground sprayer	WP	NA	.06614 lb A	*	NS	NS	NS	NS	NS	.5	FL		C46, C92
	SC/L	NA	UC	*	NS	NS	NS	NS	NS	.5			C46, C92, H01(7)
	SC/L	NA	UC	*	NS	NS	NS	NS	NS	.5	CA		C46, C92

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

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FOOD/FEED USES (con't)

[illegible]

	SC/L	NA	.08438	UC 1b A	* *	NS	NS	NS	NS	NS	NS	CA	C46
	SC/S	NA	.06614	1b A	* *	NS	NS	NS	NS	NS	.5		C46, C92, H01(30)
	SC/S	NA	.08818	1b A	* *	NS	NS	NS	NS	NS	.5	CA	C92, H01(7)
	SC/S	NA	.08818	1b A	* *	NS	NS	NS	NS	NS	.5	CA	C46, C92
	SC/S	NA	.08818	1b A	* *	NS	NS	NS	NS	NS	NS	CA	
	WP	NA	.08818	1b A	* *	NS	NS	NS	NS	NS	.5	CA	C46, C92
High volume spray (dilute), November, High volume ground sprayer	SC/S	NA	.08818	1b A	* *	NS	NS	NS	NS	NS	.5	CA, 013	C46, CAD
High volume spray (dilute), October, High volume ground sprayer	SC/S	NA	.08818	1b A	* *	NS	NS	NS	NS	NS	.5	CA, 013	C46, CAD
Spray, Bloom, Sprayer	SC/S	NA	.06614	1b A	* *	NS	NS	NS	NS	NS	NS		

Band treatment, Posttransplant, Sprayer	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Early bloom, Center pivot irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Early bloom, Hand move irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Early bloom, Moving wheel irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Early bloom, Solid set irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

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FOOD/FEED USES (con't)

(.....)

Chemigation, Foliar, Center pivot irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Foliar, Hand move irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Foliar, Moving wheel irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Foliar, Solid set irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Posttransplant, Center pivot irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Posttransplant, Hand move irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Posttransplant, Moving wheel irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Posttransplant, Solid set irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Spray, Early bloom, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46, C92
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
	FlC	NA	UC	*	NS	NS	NS	NS	NS	NS	C46
Spray, Early bloom, Ground	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C46, C92
	FlC	NA	UC	*	NS	NS	NS	NS	NS	NS	C46
Spray, Early bloom, Sprayer	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

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FOOD/FEED USES (con't)

[illegible]

Spray, Foliar, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	7	.5		C46
	EC	NA	UC	*	NS	NS	NS	NS	7	.5		C46, C92
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5		C92
	F1C	NA	UC	*	NS	NS	NS	NS	7	NS		C46
Spray, Foliar, Ground	EC	NA	UC	*	NS	NS	NS	NS	7	.5		C46
	EC	NA	UC	*	NS	NS	NS	NS	7	.5		C46, C92
	F1C	NA	UC	*	NS	NS	NS	NS	7	NS		C46
Spray, Foliar, Sprayer	EC	NA	UC	*	NS	NS	NS	NS	NS	.5		C92
Spray, Posttransplant, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	NS	.5		C46
	EC	NA	UC	*	NS	NS	NS	NS	NS	.5		C92
Spray, Posttransplant, Ground	EC	NA	UC	*	NS	NS	NS	NS	NS	.5		C46
Spray, Prebloom, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	NS	.5		C46, C92
	F1C	NA	UC	*	NS	NS	NS	NS	NS	NS		C46
Spray, Prebloom, Ground	EC	NA	UC	*	NS	NS	NS	NS	NS	.5		C46, C92
	F1C	NA	UC	*	NS	NS	NS	NS	NS	NS		C46

Band treatment, Postemergence, Sprayer	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Postemergence, Center pivot irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

SITE Application Type, Application Timing, Application Equipment) Surface Type (Antimicrobial only) & Efficacy Influencing Factor (Antimicrobial only)	Form(s)	Min. Appl. Rate (AI unless noted otherwise)	Max. Appl. Rate (AI unless noted otherwise)	Soil Tex. @ Max. /crop /year Dose cycle	Max. # Apps Max. Rate /crop /year cycle	Max. Dose [(AI unless noted otherwise)/A] /crop /year cycle	Min. Restr. Interv (days) Interv [day(s)]	Geographic Allowed Disallowed	Limitations Disallowed	Use Limitations Codes
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USES ELIGIBLE FOR REREGISTRATION

[illegible]

TURNIP (con't)	Use Group: TERRESTRIAL FOOD+FEED CROP (con't)
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Chemigation, Postemergence, Hand move irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Chemigation, Postemergence, Moving wheel irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Chemigation, Postemergence, Solid set irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Soil in-furrow treatment, At planting, Sprayer	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Spray, At planting, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Spray, Foliar, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C46
	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C46, C92
Spray, Foliar, Ground	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C46
	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C46, C92
Spray, Postemergence, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92

WHEAT Use Group: TERRESTRIAL FOOD+FEED CROP

Chemigation, Early tillering, Center pivot irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Early tillering, Hand move irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Early tillering, Moving wheel irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Chemigation, Early tillering, Solid set irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

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FOOD/FEED USES (con't)

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Chemigation, Foliar, Center pivot irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Chemigation, Foliar, Hand move irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Chemigation, Foliar, Moving wheel irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Chemigation, Foliar, Solid set irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Chemigation, Postemergence, Center pivot irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Chemigation, Postemergence, Hand move irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Chemigation, Postemergence, Moving wheel irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Chemigation, Postemergence, Solid set irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Seed treatment, When needed, Seed treater	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Spray, Early tillering, Aircraft	EC	NA	UC	*	2	NS	NS	NS	NS	NS	.5	C46, C92
	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Spray, Early tillering, Ground	EC	NA	UC	*	2	NS	NS	NS	NS	NS	.5	C46, C92
Spray, Early tillering, Sprayer	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Spray, Foliar, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Spray, Foliar, Sprayer	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Spray, Postemergence, Aircraft	EC	NA	UC	*	2	NS	NS	NS	NS	NS	.5	C46, C92

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

[illegible]

NON-FOOD/NON-FEED (con't)

[illegible]

Use Group: TERRESTRIAL NON-FOOD+OUTDOOR RESIDENTIAL

Dip treatment, Bare root, Not on label	EC	NA		UC	*	NS	NS	NS	NS	NS	.5		C92
Spray, Foliar, Sprayer	EC	NA		UC	*	NS	NS	NS	NS	NS	.5		C92
	SC/S	NA		UC	*	NS	NS	NS	NS	NS	NS		
Spray, Transplant, Sprayer	EC	NA		UC	*	NS	NS	NS	NS	NS	.5		C92
ORNAMENTAL HERBACEOUS PLANTS													
				Use Group: TERRESTRIAL NON-FOOD CROP									
Drench, Foliar, Sprayer	SC/L	NA		UC	*	1	NS	NS	NS	NS	.5	CA	C46, C92
	SC/L	NA		UC	*	1	NS	NS	NS	NS	.5	FL	C46, C92
	SC/L	NA	1.115E-05 lb plant	UC	*	1	NS	NS	NS	NS	NS	FL	C46
	SC/S	NA	1.165E-05 lb plant	*	1	NS	NS	NS	NS	NS	.5	CA	C92
	SC/S	NA	1.165E-05 lb plant	*	1	NS	NS	NS	NS	NS	.5	FL	C46, C92
	SC/S	NA	1.165E-05 lb plant	*	1	NS	NS	NS	NS	NS	NS	FL	
	WP	NA	1.165E-05 lb plant	*	1	NS	NS	NS	NS	NS	.5	FL	C46, C92
Spray, Foliar, Sprayer	SC/L	NA		UC	*	1	NS	NS	NS	NS	.5	CA	C46, C92
	SC/L	NA		UC	*	1	NS	NS	NS	NS	.5	FL	C46, C92
	SC/L	NA	.002109 lb 1K sq.ft	UC	*	1	NS	NS	NS	NS	NS	FL	C46

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

[illegible]

NON-FOOD/NON-FEED (con't)

[illegible]

SC/S	NA	.002205 lb 1K sq.ft	*	1	NS	NS	NS	NS	.5	FL	C46, C92
SC/S	NA	1.165E-05 lb plant	*	1	NS	NS	NS	NS	.5	FL	C46, CAD
WP	NA	.002205 lb 1K sq.ft	*	1	NS	NS	NS	NS	.5	FL	C46, C92

Chemigation, Foliar, Center pivot irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Chemigation, Foliar, Hand move irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Chemigation, Foliar, Moving wheel irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Chemigation, Foliar, Solid set irrigation	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Dip treatment, Bare root, Not on label	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Soil treatment, Early spring, Sprayer	EC	NA	UC	*	1	NS	NS	NS	NS	NS	.5	C92
Spray, Foliar, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Spray, Foliar, Sprayer	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
	SC/S	NA	UC	*	NS	NS	NS	NS	NS	NS	NS	
Spray, Transplant, Aircraft	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
Spray, Transplant, Sprayer	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

[illegible]

NON-FOOD/NON-FEED (con't)

[illegible]

Use Group: TERRESTRIAL NON-FOOD CROP

Use Group: TERRESTRIAL NON-FOOD+OUTDOOR RESIDENTIAL

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

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NON-FOOD/NON-FEED (con't)

(.....)

Use Group: TERRESTRIAL NON-FOOD+OUTDOOR RESIDENTIAL (con't)

EC	NA	UC	*	NS	NS	NS	NS	30	.5	C46, C92
EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
F1C	NA	UC	*	NS	NS	NS	NS	30	NS	C46

Use Group: GREENHOUSE NON-FOOD CROP

Spot treatment, Prebloom, Dropper	SC/S	NA	UC	*	NS	NS	NS	NS	NS	NS
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Use Group: TERRESTRIAL NON-FOOD CROP

Spray, Bloom, Sprayer	SC/L	NA	UC	*	NS	NS	NS	NS	NS	.5		CA	C46, C92
	SC/S	NA	1.825 lb A	*	NS	6/1 yr	NS	NS	7	.5		CA	C92
Spray, Foliar, Sprayer	SC/L	NA	1.811 lb A	*	NS	NS	NS	NS	NS	.5	FL		C46, C92
	SC/S	NA	.002205 lb 1K sq.ft	*	NS	6/1 yr	NS	NS	7	.5		CA	C92

Use Group: TERRESTRIAL NON-FOOD+OUTDOOR RESIDENTIAL

Dip treatment, Bare root, Not on label	EC	NA	UC	*	NS	NS	NS	NS	NS	.5	C92
Spot treatment, Prebloom, Dropper	SC/S	NA	UC	*	NS	NS	NS	NS	NS	NS	
Spray, Foliar, Sprayer	EC	NA	UC	*	3	NS	NS	NS	NS	.5	C92
	EC	NA	UC	*	NS	3/1 yr	NS	NS	NS	.5	C46
	EC	NA	UC	*	NS	3/1 yr	NS	NS	NS	.5	C46, C92
	FlC	NA	UC	*	NS	NS	NS	NS	NS	NS	C46
	SC/S	NA	UC	*	NS	NS	NS	NS	NS	NS	

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

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NON-FOOD/NON-FEED (con't)

[illegible]

Use Group: TERRESTRIAL NON-FOOD+OUTDOOR RESIDENTIAL (con't)

Spray, Transplant, Sprayer	EC	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C92
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Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

[illegible]

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HEADER ABBREVIATIONS

SOIL TEXTURE FOR MAX APP. RATE

FORMULATION CODES

ABBREVIATIONS

UC : Unconverted due to lack of data (on label), or with one of following units: bag, bait, bait block, bait pack, bait station, bait station(s), block, briquet, briquets, bursts, cake, can, canister, capsule, cartridges, coil, collar, container, dispenser, drop, eartag, grains, lure, pack, packet, packets, pad, part, parts, pellets, piece, pieces, pill, pumps, sec, sec burst, sheet, spike, stake, stick, strip, tab, tablet, tablets, tag, tape, towlette, tray, unit, --

Case 4110[Gibberellic acid,] Chemical 043801[Gibberellic acid]

APPLICATION RATE

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DCNC : Dosage Can Not be Calculated
No Calc : No Calculation can be made
W : PPM calculated by weight
V : PPM Calculated by volume
U : Unknown whether PPM is given by weight or by volume
cwt : Hundred Weight
nnE-xx : nn times (10 power -xx); for instance, "1.234E-04" is equivalent to ".0001234"

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C14 : Grown for seed only.
C46 : Do not apply through any type of irrigation system.
C92 : 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.
CAD : Do not apply directly to water or wetlands.
G66 : Do not use treated seed for feed, food or oil purposes.
G78 : Do not use for food, feed or oil purposes.
GB6 : Do not feed crop waste to livestock.
GI7 : Do not use seed for food, feed or oil purposes.
H01 : ___ day(s) preharvest interval.
* NUMBER IN PARENTHESES REPRESENTS THE NUMBER OF TIME UNITS (HOURS,DAYS, ETC.) DESCRIBED IN THE LIMITATION.

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013 : Other
018 : Pacific Northwest States (Label verbatim)
AL : Alabama
AZ : Arizona
CA : California
FL : Florida
GA : Georgia
MS : Mississippi
NC : North Carolina
OR : Oregon
SC : South Carolina
TN : Tennessee
TX : Texas
WA : Washington
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Case 4110[Gibberellic acid,] Chemical 043802[Potassium gibberellate]

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FOOD/FEED USES

[illegible]

Spray, Fall, Sprayer	SC/L	NA		UC	*	NS	NS	NS	NS	NS	.5	C46, C93, H01(7)
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Spray, Bloom, Sprayer	SC/L	NA	UC	*	1	NS	NS	NS	NS	NS	.5	C46, C93, H01(40)
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Spray, Foliar, Sprayer	SC/L	NA	UC	*	1	NS	NS	NS	NS	.5	C46, C93, H01(40)
------------------------	------	----	----	---	---	----	----	----	----	----	-------------------

Spray, Preharvest, Sprayer	SC/L	NA		UC	*	NS	NS	NS	NS	NS	.5	C46, C93, H01(7)
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Spray, Foliar, Sprayer	SC/L	NA	UC	*	NS	NS	NS	NS	NS	.5	C46, C93, H01(30)
------------------------	------	----	----	---	----	----	----	----	----	----	-------------------

Spray, Preharvest, Sprayer	SC/L	NA	UC	*	NS	NS	NS	NS	NS	NS	.5	C46, C93
----------------------------	------	----	----	---	----	----	----	----	----	----	----	----------

Spray, Foliar, Sprayer	SC/L	NA	UC	*	3	NS	NS	NS	5	.5	C14, C46, C93
------------------------	------	----	----	---	---	----	----	----	---	----	---------------

Spray, Bloom, Sprayer	SC/L	NA	UC	*	1	NS	NS	NS	NS	.5	C46, C93
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Spray, Foliar, Sprayer	SC/L	NA	UC	*	NS	NS	NS	NS	NS	.5	C46, C93
------------------------	------	----	----	---	----	----	----	----	----	----	----------

Spray, Foliar, Sprayer	SC/L	NA	UC	*	NS	NS	NS	NS	NS	.5	C46, C93
------------------------	------	----	----	---	----	----	----	----	----	----	----------

Spray, December, Sprayer	SC/L	NA	UC	*	1	NS	NS	NS	NS	.5	C46, C93, H01(30)
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Spray, November, Sprayer	SC/L	NA	UC	*	1	NS	NS	NS	NS	.5	C46, C93, H01(30)
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Case 4110[Gibberellic acid,] Chemical 043802[Potassium gibberellate]

SITE Application Type, Application Timing, Application Equipment) Surface Type (Antimicrobial only) & Efficacy Influencing Factor (Antimicrobial only)	Form(s)	Min. Appl. Rate (AI unless noted otherwise)	Max. Appl. Rate (AI unless noted otherwise)	Soil Tex. @ Max. /crop /year	Max. # Apps Max. Rate unless noted otherwise)/A]	Max. Dose (AI unless noted otherwise)/A]	Min. Restr. Interv (days)	Restr. Entry Interv [day(s)]	Geographic Limitations Allowed	Disallowed
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USES ELIGIBLE FOR REREGISTRATION

[illegible]

Spray, Foliar, Sprayer	SC/L	NA		UC	*	NS	NS	NS	NS	NS	.5	C14, C46, C93, GB6
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Spray, December, Sprayer	SC/L	NA	UC	*	1	NS	NS	NS	NS	.5	C46, C93, H01(30)
--------------------------	------	----	----	---	---	----	----	----	----	----	-------------------

Spray, November, Spraver	SC/L	NA	UC	*	1	NS	NS	NS	NS	.5	C46, C93, H01(30)
--------------------------	------	----	----	---	---	----	----	----	----	----	-------------------

Spray, October, Spraver	SC/L	NA	UC	*	1	NS	NS	NS	NS	.5	C46, C93, H01(30)
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Dip treatment, Seed, Not on label	SC/L	NA		UC	*	NS	NS	NS	NS	NS	.5	C14, C46, C93
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Spray, Preharvest, Sprayer	SC/L	NA		UC	*	NS	NS	NS	NS	NS	.5	C46, C93
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Spray, Crown, Sprayer	SC/L	NA		UC	*	NS	NS	NS	NS	NS	.5	C46, C93
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Spray, Bloom, Sprayer	SC/L	NA	UC	*	NS	NS	NS	NS	NS	.5	C46, C93, H01(30)
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[illegible]

Spray, Foliar, Aerosol can	PRL	NA	UC	*	NS	NS	NS	NS	7	NS
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Spray, Foliar, Sprayer	SC/L	NA	UC	*	NS	NS	NS	NS	NS	NS
------------------------	------	----	----	---	----	----	----	----	----	----

Case 4110[Gibberellic acid,] Chemical 043802[Potassium gibberellate]

[illegible]

NON-FOOD/NON-FEED (con't)

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Use Group: INDOOR RESIDENTIAL

Spray, Foliar, Sprayer	SC/L	NA	UC	*	NS	NS	NS	NS	NS	NS
------------------------	------	----	----	---	----	----	----	----	----	----

Use Group: TERRESTRIAL NON-FOOD+OUTDOOR RESIDENTIAL

Spray, Foliar, Aerosol can	PRL	NA	UC	*	NS	NS	NS	NS	7	NS
----------------------------	-----	----	----	---	----	----	----	----	---	----

Spray, Foliar, Sprayer	SC/L	NA	UC	*	NS	NS	NS	NS	NS	NS
------------------------	------	----	----	---	----	----	----	----	----	----

Use Group: TERRESTRIAL NON-FOOD+OUTDOOR RESIDENTIAL

Spray, Foliar, Aerosol can	PRL	NA	UC	*	NS	NS	NS	NS	7	NS
----------------------------	-----	----	----	---	----	----	----	----	---	----

Use Group: TERRESTRIAL NON-FOOD+OUTDOOR RESIDENTIAL

Spray, Foliar, Aerosol can	PRL	NA	UC	*	NS	NS	NS	NS	7	NS
----------------------------	-----	----	----	---	----	----	----	----	---	----

Spray, Foliar, Sprayer	SC/L	NA	UC	*	NS	NS	NS	NS	NS	NS
------------------------	------	----	----	---	----	----	----	----	----	----

TOBACCO Use Group: TERRESTRIAL NON-FOOD CROP

Spray, Foliar, Aerosol can	PRL	NA	UC	*	NS	NS	NS	NS	7	NS
----------------------------	-----	----	----	---	----	----	----	----	---	----

Case 4110[Gibberellic acid,] Chemical 043802[Potassium gibberellate]

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HEADER ABBREVIATIONS

PRD Report Date : LUIS contains all products that were active or suspended (and that were available from OPP Document Center) as of this date. Some products registered after this date may have data included in this report, but LUIS does not guarantee that all products registered after this date have data that has been captured.

0 : Others

SC/L : SOLUBLE CONCENTRATE/LIQUID

UC : Unconverted due to lack of data (on label), or with one of following units: bag, bait, bait block, bait pack, bait station, bait station(s), block, briquet, briquets, bursts, cake, can, canister, capsule, cartridges, coil, collar, container, dispenser, drop, eartag, grains, lure, pack, packet, packets, pad, part, parts, pellets, piece, pieces, pill, pumps, sec, sec burst, sheet, spike, stake, stick, strip, tab, tablet, tablets, tag, tape, towlette, trav, unit, --

nnE-xx : nn times (10 power -xx); for instance, "1.234E-04" is equivalent to ".0001234"

LUIS 2.22 - Page: 5

Case 4110[Gibberellic acid,] Chemical 043802[Potassium gibberellate]

USE LIMITATIONS CODES

H01 : __ day(s) preharvest interval.
* NUMBER IN PARENTHESES REPRESENTS T

110

GUIDE TO APPENDIX B

Appendix B contains listings of data requirements which support the reregistration for active ingredients within the case Gibberellic Acid covered by this Reregistration Eligibility Decision Document. It contains generic data requirements that apply to Gibberellic Acid in all products, including data requirements for which a "typical formulation" is the test substance.

The data table is organized in the following format:

1. Data Requirement (Column 1). The data requirements are listed in the order in which they appear in 40 CFR Part 158. the reference numbers accompanying each test refer to the test protocols set in the Pesticide Assessment Guidelines, which are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161 (703) 487-4650.

2. Use Pattern (Column 2). This column indicates the use patterns for which the data requirements apply. The following letter designations are used for the given use patterns:

A	Terrestrial food
B	Terrestrial feed
C	Terrestrial non-food
D	Aquatic food
E	Aquatic non-food outdoor
F	Aquatic non-food industrial
G	Aquatic non-food residential
H	Greenhouse food
I	Greenhouse non-food
J	Forestry
K	Residential
L	Indoor food
M	Indoor non-food
N	Indoor medical
O	Indoor residential

3. Bibliographic citation (Column 3). If the Agency has acceptable data in its files, this column lists the identifying number of each study. This normally is the Master Record Identification (MRID) number, but may be a "GS" number if no MRID number has been assigned. Refer to the Bibliography appendix for a complete citation of the study.

APPENDIX B

Data Supporting Guideline Requirements for the Reregistration of Gibberellic Acid (GA₃)

REQUIREMENT		USE PATTERN	CITATION(S)
PRODUCT CHEMISTRY			
151B-10	Chemical Identity	All	40917601
151B-11	Start. Mat. & Mnfg. Process	All	40917601
151B-12	Formation of Impurities	All	40917601
151B-13	Preliminary Analysis	All	43401201, 40917602
151B-15	Certification of limits	All	40917602
151B-16	Analytical Method	All	40917602
151B-17	PHYSICAL AND CHEMICAL PROPERTIES:		
(a)	Color	All	40779301
(b)	Physical State	All	40779301
(c)	Odor	All	40779301
(d)	Melting Point	All	40779301
(e)	Boiling Point	All	40779301
(f)	Density	All	40779301
(g)	Solubility	All	40779301
(h)	Vapor Pressure	All	40779301
(i)	pH	All	40779301
(j)	Stability	All	40779301, 43376601
(k)	Flammability	All	40779301

Data Supporting Guideline Requirements for the Reregistration of Gibberellic Acid (GA₃)

REQUIREMENT		USE PATTERN	CITATION(S)
(l)	Storage stability	All	40779301
(m)	Viscosity	All	40779301
(n)	Miscibility	All	40779301
(o)	Corrosion characteristics	All	40779301
<u>TOXICOLOGY (Tier I)</u>			
152B-10	Acute Oral Toxicity - Rat	All	40873201, 42250901
152B-11	Acute Dermal Toxicity - Rabbit/Rat	All	40873202, 42250902
152B-12	Acute Inhalation Toxicity - Rat	All	40872801, 40873203
152B-13	Primary Eye Irritation - Rabbit	All	40872802, 40873204
152B-14	Primary Dermal Irritation- Rabbit	All	40872803, 40873205
152B-15	Dermal Sensitization - Guinea Pig	All	40873206
152B-16	Hypersensitivity	All	All incidents must be report to the Agency.
152B-17	Microbial mutagenicity	All	40873207, 40873208, 40873209, 40266101, 40261602, 40261603
152B-18	Immunotoxicity	WAIVED	
152B-20	90-Day Feeding	All	41616601, 41617501
152B-23	Teratogenicity	All	41143201, 40746801, 40155201
<u>ECOLOGICAL EFFECTS (Tier I)</u>			
154B-6	Avian Acute Oral	All	42084401
154B-7	Avian Acute Dietary	All	00121075
154B-8	Fish Toxicity - Rainbow Trout	All	42167401

Data Supporting Guideline Requirements for the Reregistration of Gibberellic Acid (GA₃)

REQUIREMENT		USE PATTERN	CITATION(S)
154B-9	Invertebrate Toxicity	All	42084402
154B-10	Nontarget Plants	Waived	
154B-11	Nontarget Insects	All	43370201

OCCUPATIONAL EXPOSURE:

All Occupational Exposure data requirements have been waived.

Environmental Fate:

All Environmental Fate data requirements have been waived.

GUIDE TO APPENDIX C

1. CONTENTS OF BIBLIOGRAPHY. This bibliography contains citations of all studies considered relevant by EPA in arriving at the positions and conclusions stated elsewhere in the Reregistration Eligibility Document. Primary sources for studies in this bibliography have been the body of data submitted to EPA and its predecessor agencies in support of past regulatory decisions. Selections from other sources including the published literature, in those instances where they have been considered, are included.
2. UNITS OF ENTRY. The unit of entry in this bibliography is called a "study". In the case of published materials, this corresponds closely to an article. In the case of unpublished materials submitted to the Agency, the Agency has sought to identify documents at a level parallel to the published article from within the typically larger volumes in which they were submitted. The resulting "studies" generally have a distinct title (or at least a single subject), can stand alone for purposes of review and can be described with a conventional bibliographic citation. The Agency has also attempted to unite basic documents and commentaries upon them, treating them as a single study.
3. IDENTIFICATION OF ENTRIES. The entries in this bibliography are sorted numerically by Master Record Identifier, or "MRID number". This number is unique to the citation, and should be used whenever a specific reference is required. It is not related to the six-digit "Accession Number" which has been used to identify volumes of submitted studies (see paragraph 4(d)(4) below for further explanation). In a few cases, entries added to the bibliography late in the review may be preceded by a nine character temporary identifier. These entries are listed after all MRID entries. This temporary identifying number is also to be used whenever specific reference is needed.
4. FORM OF ENTRY. In addition to the Master Record Identifier (MRID), each entry consists of a citation containing standard elements followed, in the case of material submitted to EPA, by a description of the earliest known submission. Bibliographic conventions used reflect the standard of the American National Standards Institute (ANSI), expanded to provide for certain special needs.
 - a. Author. Whenever the author could confidently be identified, the Agency has chosen to show a personal author. When no individual was identified, the Agency has shown an identifiable laboratory or testing facility as the author. When no author or laboratory could be identified, the Agency has shown the first submitter as the author.
 - b. Document date. The date of the study is taken directly from the document. When the date is followed by a question mark, the bibliographer has deduced the date from the evidence contained in the document. When the date appears as (19??), the Agency was unable to determine or estimate the date of the document.
 - c. Title. In some cases, it has been necessary for the Agency bibliographers to create or enhance a document title. Any such editorial insertions are contained

between square brackets.

- d. Trailing parentheses. For studies submitted to the Agency in the past, the trailing parentheses include (in addition to any self-explanatory text) the following elements describing the earliest known submission:
- (1) Submission date. The date of the earliest known submission appears immediately following the word "received."
 - (2) Administrative number. The next element immediately following the word "under" is the registration number, experimental use permit number, petition number, or other administrative number associated with the earliest known submission.
 - (3) Submitter. The third element is the submitter. When authorship is defaulted to the submitter, this element is omitted.
 - (4) Volume Identification (Accession Numbers). The final element in the trailing parentheses identifies the EPA accession number of the volume in which the original submission of the study appears. The six-digit accession number follows the symbol "CDL," which stands for "Company Data Library." This accession number is in turn followed by an alphabetic suffix which shows the relative position of the study within the volume.

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- 00121075 Fink, R.; Reno, F. (1973) Eight-day Dietary LC50--Bobwhite Quail: Gibberellic Acid: Project No. 375-126. Final rept. (Unpublished study received May 22, 1974 under 275-12; prepared by Hazleton Laboratories, Inc., submitted by Abbott Laboratories, North Chicago, IL; CDL:023029-A)
- 40155201 Lehrer, S. (1986) Evaluation of the Effects of Orally Administered Gibberellic Acid on the Embryonic and Fetal Development of the Rat (Segment II, TFR): Laboratory Project ID: TA86-014. Unpublished study prepared by Abbott Laboratories. 61 p.
- 40261601 Diehl, M. (1987) Salmonella/Mammalian Microsome Mutagenicity Test (Ames Test) of Gibberellic Acid: Lab Project ID: T87-109. Unpublished study prepared by Abbott Laboratories, Pharmaceutical Products R & D. 27 p.
- 40261603 Cifone, M. (1986) Evaluation of Gibberellic A3 (Acid Gibberellic) in the Rat Primary Hepatocyte Unscheduled DNA Synthesis Assay: Lab Project ID: 20991. Unpublished study prepared by Hazleton Biotechnologies Co. 27 p.
- 40746801 Lehrer, S. (1986) Evaluation of the Effects of Orally Administered Gibberellic Acid on the Embryonic and Fetal Development of the Rat: Supplemental Volume: Laboratory Project ID TA86-014. Unpublished study prepared by Abbott Laboratories. 96 p.
- 40779301 Kenney, D. (1988) Gibberellic Acid (GA3): Product Chemistry: Project ID. 8/88-03. Unpublished study prepared by Abbott Laboratories, Inc. 15 p.
- 40872801 Terrill, J. (1988) Acute Inhalation Toxicity Study with Gibberellic Acid (GA3) in the Rat: Project ID: HLA Study No. 375-140. Unpublished study prepared by Hazleton Laboratories America, Inc. 34 p.
- 40872802 Glaza, S. (1988) Primary Eye Irritation Study of Gibberellic Acid (GA3) in Rabbits: Project ID: HLA 80602321. Unpublished study prepared by Hazleton Laboratories America, Inc. 32 p.
- 40872803 Glaza, S. (1988) Primary Dermal Irritation Study of Gibberellic Acid (GA3) in Rabbits: Project ID: HLA 80602322. Unpublished study prepared by Hazleton Laboratories America, Inc. 23 p.

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 - 40873202 Glaza, S. (1988) Acute Dermal Toxicity Study of Gibberellins A4A7 (GA4A7) in Rabbits: Project No. HLA 80602324. Unpublished study prepared by Hazleton Laboratories America, Inc. 28 p.
 - 40873203 Terrill, J. (1988) Acute Inhalation Toxicity Study with Gibberellins A4A7 (GA4A7) in the Rat: Project No. HLA Study No. 375-141. Unpublished study prepared by Hazleton Laboratories America, Inc. 33 p.
 - 40873204 Glaza, S. (1988) Primary Eye Irritation Study of Gibberellins A4A7 (GA4A7) in Rabbits: Project ID: HLA 80602326. Unpublished study prepared by Hazleton Laboratories America, Inc. 32 p.
 - 40873205 Glaza, S. (1988) Primary Dermal Irritation Study of Gibberellins A4A7 (GA4A7) in Rabbits: Project ID: HLA 80602325. Unpublished study prepared by Hazleton Laboratories America, Inc. 23 p.
 - 40873206 Glaza, S. (1988) Dermal Sensitization Study of Gibberellins A4A7 (GA4A7) in Guinea Pigs (Maximization Test): Project ID: HLA 80602327. Unpublished study prepared by Hazleton Laboratories America, Inc. 38 p.
 - 40873207 Lawlor, T. (1988) Salmonella/Mammalian-Microsome Plate Incorporation Mutagenicity Assay (Ames Test) with Confirmatory Assay. Unpublished study prepared by Microbiological Associates, Inc. 62 p.
 - 40873208 Putman, D. (1988) Micronucleus Cytogenetic Assay in Mice: Gibberellins: Project No. T8201.122. Unpublished study prepared by Microbiological Associates, Inc. 28 p.
 - 40873209 Curren, R. (1988) Unscheduled DNA Synthesis Assay in Rat Primary Hepatocytes with a Confirmatory Assay: Project ID: T8201.380009. Unpublished study prepared by Microbiological Associates, Inc. 33 p.
 - 40917601 Kenney, D. (1988) Gibberellic Acid (GA3): Product Chemistry. Unpublished study prepared by Abbott Laboratories. 149 p.
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- 41143201 Henwood, S. (1989) Teratology Study with Gibberellins A4A7 (GA4 A7) in Rabbits: Project ID: HLA 6161-111. Unpublished study prepared by Hazleton Laboratories America, Inc. 172 p.
- 41560406 Kreuzmann, J. (1990) Delayed Contact Hypersensitivity Study in Guinea Pigs of: Pro-Gibb 10%: Lab Project Number: 90-4049-21. Unpublished study prepared by Hill Top Biolabs, Inc. 63 p.
- 41591103 Shults, S. (1990) Acute Oral Toxicity Study in Rats with ABG-3123: Lab Project Number: 90-0142. Unpublished study prepared by Ricerca, Inc. 29 p.
- 41591104 Shults, S. (1990) Acute Dermal Toxicity Study in Albino Rabbits with ABG-3123: Lab Project Number: 90-0143. Unpublished study prepared by Ricerca, Inc. 24 p.
- 41591105 Biesemeier, J. (1990) Acute Inhalation Toxicity Study of ABG-3123 in Sprague-Dawley Rats: Lab Project Number: 90.0002.006. Unpublished study prepared by Food and Drug Research Laboratories. 67 p.
- 41591106 Shults, S. (1990) Primary Eye Irritation Study in Albino Rabbits with ABG-3123: Lab Project Number: 90-0144. Unpublished study prepared by Ricerca, Inc. 29 p.
- 41591107 Shults, S. (1990) Primary Dermal Irritation Study in Albino Rabbits with ABG-3123: Lab Project Number: 90-0145. Unpublished study prepared by Ricerca, Inc. 21 p.
- 41605803 Glaza, S. (1989) Primary Eye Irritation Study of GIB Technical in Rabbits: Final Report: Lab Project Number: HLA 90305642. Unpublished study prepared by Hazleton Laboratories America, Inc. 30
- 41605804 Glaza, S. (1989) Primary Dermal Irritation Study of GIB Technical in Rabbits: Final Report: Lab Project Number: HLA 90305640. Unpublished study prepared by Hazleton Laboratories America, Inc. 22 p.
- 41616601 MacKenzie, K. (1990) 13-Week Dietary Toxicity Study with Gibberellins A4A7 in Rats: Lab Project Number: HLA 6161/114. Unpublished study prepared by Hazleton Laboratories America, Inc. 457 p.

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- 41617501 Auletta, C. (1990) A Subchronic (3 Month) Oral Toxicity Study in the at with Gibberellic Acid (GA 3) via Dietary Admixture: Lab Project Number: 89-3472. Unpublished study prepared by Bio/-dynamics Inc. 591 p.
- 42084401 Campbell, S. (1991) Gibberellic Acid Technical Material Code 33690 (Encapsulated) An Acute Oral Toxicity Study with the Northern Bobwhite: Lab Project Number: 161-121. Unpublished study prepared by Wildlife International, Ltd. 19 p.
- 42084402 Ward, T. (1991) Acute Toxicity of Gibberellic Acid to the Daphnid, *Daphnia magna*: Lab Project Number: 91139-A. Unpublished study prepared by EnviroSystems Division of Resource Analysts, Inc. and FLI Environmental Services. 37 p.
- 42167401 Boeri, R. (1991) Acute Toxicity of Gibberellic Acid to the Rainbow Trout, *Oncorhynchus mykiss*: Lab Project Number: 91138-A. Unpublished study prepared by Resource Analysts, Inc. 41 p.
- 42250901 Shults, S. (1991) Acute Oral Toxicity Study in Rats with Gibberellic Acid Technical Material: Lab Project Number: 90-0329: 3680-90-0329-TX-002. Unpublished study prepared by Ricerca, Inc. 39 p.
- 42250902 Shults, S. (1991) Acute Dermal Toxicity Study in Albino Rabbit with Gibberellic Acid Technical Material: Lab Project Number: 90-0330. Unpublished study prepared by Ricerca, Inc. 23 p.
- 43045601 Rosebery, G. (1993) Product Chemistry for Green Sol 48: Lab Project Number: GS48PC/1: GS48/PC/1. Unpublished study prepared by International Regulatory Consulting. 67 p.
- 43370201 Palmer, S.; Beavers, J. (1994) Gibberellic Acid: An Acute Contact Toxicity Study with the Honey Bee: Final Report: Lab Project Number: 393-101. Unpublished study prepared by Wildlife International Ltd. 14 p.
- 43376601 Rojas, F. (1994) Physical and Chemical Properties: Stability of Gibberellic Acid Technical Grade Active Ingredient and End-use Material: Addendum to Report 18-593-62: Lab Project Number: 87-2559-62. Unpublished study prepared by Abbott Labs. 17 p.

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- 43376602 Palmer, S.; Beavers, J. (1994) Gibberellin A3: An Acute Contact Toxicity Study with the Honey Bee: Lab Project Number: 161-127. Unpublished study prepared by Wildlife International, Ltd. 19 p.
- 43401201 Rojas, F. (1994) Analysis of Five Lots of Gibberellic Acid Technical Grade Active Ingredient and End-use Material: Lab Project Number: 92-2668-62: 18-593-62. Unpublished study prepared by Abbott Laboratories. 37 p.
- 94280022 Cozzi, E. (1990) Abbott Laboratories Phase 3 Summary of MRID 40261603. Genotoxicity Study (Unscheduled DNA Synthesis Assay) with Gibberellic Acid (GA3) Hazleton Project No. 20991. Prepared by Hazleton Biotechnologies, Inc. 9 p.
- 94280023 Cozzi, E. (1990) Abbott Laboratories Phase 3 Summary of MRID 40873207. Genotoxicity Study (Ames Salmonella Assay) with Gibberellins A4A7 (GA4A7): MBA Study No. T8201.501014. Prepared by Microbiological Associates, Inc. 8 p.
- 94280024 Cozzi, E. (1990) Abbott Laboratories Phase 3 Summary of MRID 40873208. Genotoxicity Study (Mouse Micronucleus Assay) with Gibberellins A4A7 (GA4A7): MBA Study No. T8201.122. Prepared by Microbiological Associates, Inc. 8 p.
- 94280025 Cozzi, E. (1990) Abbott Laboratories Phase 3 Summary of MRID 40873209. Genotoxicity Study (Unscheduled DNA Synthesis Assay) with Gibberellins A4A7 (GA4A7): MBA Study No. T8201.380009. Prepared by Microbiological Associates, Inc. 8 p.

The following is a list of available documents for Gibberellic Acid that may further assist you in responding to this Reregistration Eligibility Decision document. These documents may be obtained by the following methods:

Electronic

File format: Portable Document Format (.PDF) Requires Adobe® Acrobat or compatible reader. Electronic copies can be downloaded from the Pesticide Special Review and Reregistration Information System at 703-308-7224. They also are available on the Internet on EPA's gopher server, GOPHER.EPA.GOV, or using ftp on FTP.EPA.GOV, or using WWW (World Wide Web) on WWW.EPA.GOV., or contact at (703)-

1. PR Notice 86-5.
2. PR Notice 91-2 (pertains to the Label Ingredient Statement).
3. A full copy of this RED document.
4. A copy of the fact sheet for Gibberellic Acid.

The following documents are part of the Administrative Record for Gibberellic Acid and may be included in the EPA's Office of Pesticide Programs Public Docket. Copies of these documents are not available electronically, but may be obtained by contacting the person listed on the Chemical Status Sheet.

1. Health and Environmental Effects Science Chapters.
2. Detailed Label Usage Information System (LUIS) Report.

The following Agency reference documents are not available electronically, but may be obtained by contacting the person listed on the Chemical Status Sheet of this RED document.

1. The Label Review Manual.
2. EPA Acceptance Criteria

