ELANCO

ID 5085

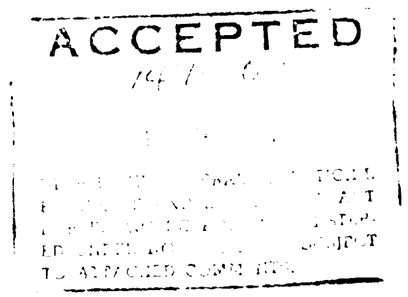
Gib-Sol

Growth Regulator

Complete Directions For Use,
Use W nings and Cautions,
Crop Recommendations

ELANCO PRODUCTS COMPANY
A Division of Eli Lilly and Company
Indianapolis, IN 46206

INDEX



The manufacturer makes no warranties, express or implied, concerning this product or its use, which extend beyond the description on the label or in literature published by Elanco Products Company, and all statements made concerning this product apply only when used as directed. Elanco Products Company expressly disclaims all warranties, express or implied, in relation to any use of the product in combination or sequential use with any other product not specifically recommended in writing by Elanco Products Company. If used in a combination or sequential use recommended by Elanco Products Company, the liability of Elanco shall in no manner extend to any damage, loss or injury not directly caused by the inclusion of the Elanco product in such combination or sequential use.

WARNING—FLAMMABLE:

Keep away from heat and open flame. Keep container closed.

CAUTIONS

Human

Keep out of reach of children.
Use with adequate ventilation. Avoid prolonged breathing of vapor. Harmful if swallowed.

Storage

Keep away from heat and open flame. Keep container closed. Flash point is 60° F.

Container Disposal Directions

Destroy container when empty. Do not reuse.

Special Precautions

Avoid spray drift to susceptible plants and other food crops. Thoroughly clean spray equipment before using for any other purpose.

CROPS CLEARED

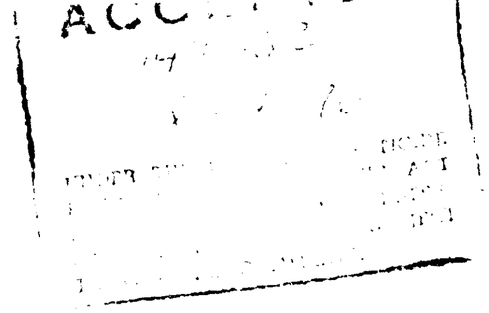
DIRECTIONS FOR USE

General—

GIB-SOL is a convenient gibberellic acid liquid concentrate which can be added to the spray tank anytime during the filling operation. Eight fl. oz. (½ pt.) of GIB-SOL in 100 gallons of water gives a 10 ppm. solution. Consult your local farm advisor for the best practices in your area.

Wetting Agent—

Add 2 to 4 fl. oz. of a non-ionic wetting agent per 100 gallons of water.



Gram Equivalents—
To apply in grams per acre, 2 fl. oz. of GIB-SOL contain 1 gram of gibberellic acid.

CROP RECOMMENDATIONS

GRAPES:

SEEDLESS TABLE GRAPES - All Areas:

Purpose -To elongate clusters.
Timing -Apply before bloom when flower clusters are 3" to 5" long.
Mixing -Add 8 fl. oz. to 12 fl. oz. of GIB-SOL per 100 gallons of water for the recommended concentration of 10 to 15 ppm. solution.
Spraying -Apply one spray. Wet each cluster thoroughly. The maximum recommended concentration of gibberellic acid is 9 grams per acre.

SEEDLESS TABLE GRAPES - San Joaquin Valley:

Purpose -For thinning.
Timing -Apply at bloom.
Mixing -Add 4 fl. oz. to 16 fl. oz. of GIB-SOL per 100 gallons of water for the recommended concentration of 5 to 20 ppm solution.
Spraying -Apply one spray. The maximum recommended concentration of gibberellic acid is 12 grams per acre.
CAUTION -Amounts greater than 12 grams per acre may cause an excess in shot berries or over-thinning.

SEEDLESS TABLE GRAPES - San Joaquin Valley:

Purpose -To increase berry size.
Timing -Apply 1 or 2 applications from shatter to 2 weeks later OR apply from 1 to 3 weeks after full bloom.
Mixing -Add 16 fl. oz. to 32 fl. oz. of GIB-SOL per 100 gallons of water for the recommended concentration of 20 to 40 ppm solution.

Spraying -Wet each cluster thoroughly. The maximum recommended concentration of gibberellic acid is 48 grams per acre.

SEEDLESS TABLE GRAPES - California and Arizona Desert Areas:

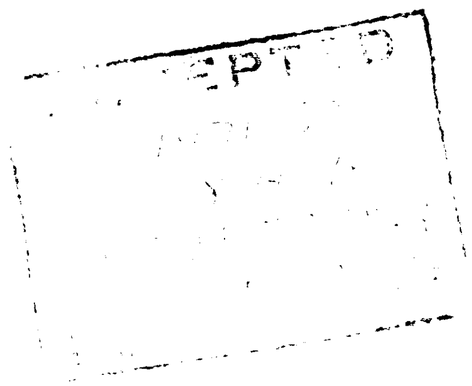
Purpose -To elongate clusters.
Timing -Apply before bloom when flower clusters are 3" to 5" long.
Mixing -Add 8 fl. oz. to 12 fl. oz. of GIB-SOL per 100 gallons of water for the recommended concentration of 10 to 15 ppm. solution.
Spraying -Apply one spray. Wet each cluster thoroughly. The maximum recommended concentration of gibberellic acid is 9 grams per acre.

SEEDLESS TABLE GRAPES - California and Arizona Desert Areas:

Purpose -To increase berry size.
Timing -Make 2 applications. Apply the first application at 95% bloom and the second application 7 days later.
Mixing -For each application, add 16 fl. oz. to 40 fl. oz. of GIB-SOL per 100 gallons of water for the recommended concentration of 20 to 50 ppm solution.
Spraying -For each application, wet each cluster thoroughly. The maximum recommended concentration of gibberellic acid is 48 grams per acre for each application.

SEEDLESS RAISIN GRAPES - All Areas

Purpose -For thinning.
Timing -Apply during bloom.
Mixing -Add 2 fl. oz. to 8 fl. oz. of GIB-SOL per 100 gallons of water for the recommended concentration of 2½ to 10 ppm solution.



Spraying -Apply one spray. Wet each cluster thoroughly. The maximum recommended concentration of gibberellic acid is 6 grams per acre.

SEEDED GRAPES - Palomino and Tinta Madeira Varieties:

Purpose -To loosen clusters.
Timing -Clusters should average 3" to 4" in length. They may range from 2" to 5" in length. Shoots should be 15" to 20" long.
Mixing -Add 3/4 fl. oz. to 2 fl. oz. of GIB-SOL per 100 gallons of water for the recommended concentration of 1 to 2½ ppm. solution.
Spraying -Apply one spray. The maximum recommended concentration of gibberellic acid is 1½ grams per acre.

SEEDED GRAPES - Aleatico, Carignane and Valdepenas Varieties:

Purpose -To loosen clusters.
Timing -Clusters should average 3" to 4" in length. They may range from 2" to 5" in length. Shoots should be 15" to 20" long.
Mixing -Add 2 fl. oz. to 4 fl. oz. of GIB-SOL per 100 gallons of water for the recommended concentration of 2½ to 5 ppm. solution.
Spraying -Apply one spray. The maximum recommended concentration of gibberellic acid is 3 grams per acre.

SEEDED GRAPES - Black Corinth Varieties:

Purpose -To increase berry set and size.
Timing -Apply 3 to 5 days after full bloom, but before shatter.
Mixing -Add 2 fl. oz. to 16 fl. oz. of GIB-SOL per 100 gallons of water for the recommended concentration of 2½ to 20 ppm. solution.

Spraying -Apply one spray. The maximum recommended concentration of gibberellic acid is 8 grams per acre.

SEEDED GRAPES - Petite Sirah, Zinfandel and Chenin Blanc Varieties:

Purpose -To loosen clusters.
Timing -Clusters should average 3" to 4" in length. They may range from 2" to 5" in length. Shoots should be 15" to 20" long.
Mixing -Add 4 fl. oz. to 8 fl. oz. of GIB-SOL per 100 gallons of water for the recommended concentration of 5 to 10 ppm. solution.
Spraying -Apply one spray. The maximum recommended concentration of gibberellic acid is 6 grams per acre.

SEEDED GRAPES - Green Hungarian Varieties:

Purpose -To loosen clusters.
Timing -Clusters should average 3" to 4" in length. They may range from 2" to 5" in length. Shoots should be 15" to 20" long.
Mixing -Add 8 fl. oz. to 16 fl. oz. of GIB-SOL per 100 gallons of water for the recommended concentration of 10 to 20 ppm. solution.
Spraying -Apply one spray. The maximum recommended concentration of gibberellic acid is 12 grams per acre.

SEEDED GRAPES - Alicant and Grenache Varieties

Purpose -To loosen clusters.
Timing -Clusters should average 3" to 4" in length. They may range from 2" to 5" in length. Shoots should be 15" to 20" long.
Mixing -Add 16 fl. oz. of GIB-SOL per 100 gallons of water for the recommended concentration of 20 ppm. solution.

Spraying -Apply one spray. The maximum recommended concentration of gibberellic acid is 12 grams per acre.

SEEDED GRAPES - Salvador Varieties

Purpose -To loosen clusters.

Timing -Clusters should average 3" to 4" in length. They may range from 2" to 5" in length. Shoots should be 15" to 20" long.

Mixing -Add 16 fl. oz. to 32 fl. oz. of GIB-SOL per 100 gallons of water for the recommended concentration of 20 to 40 ppm solution.

Spraying -Apply one spray. The maximum recommended concentration of gibberellic acid is 24 grams per acre.

ARTICHOKES:

Purpose -To accelerate maturity.

Timing -In Fall before November 1. *Do not* apply within 7 days before harvest.

Mixing -Add 10 fl. oz. of GIB-SOL per 50 gallons of water per acre for the recommended concentration of 25 ppm solution.

Spraying -Apply one spray. Apply thoroughly to the point of run-off. Be certain the entire plant (leaves, stem and buds) is covered.

CELERY:

Purpose -To increase plant height and yields, to overcome stress conditions of weather and alkaline soils or to obtain earlier maturity.

Timing -During the period between 1 to 4 weeks before harvest. *Do not* apply earlier than 4 weeks or later than 1 week before harvest.

Mixing -Add 10 fl. oz. of GIB-SOL per 50 gallons of water per acre for the recommended concentration of 25 ppm solution or add 20 fl. oz. of GIB-SOL per 50 gallons of water per acre for the

recommended concentration of 50 ppm solution.

Spraying -Apply one spray. Apply spray at a rate of 25 to 50 gallons of solution per acre. The recommended concentration of gibberellic acid is from 5 to 10 grams per acre.

NOTE -Gibberellic acid applied earlier than 4 weeks before harvest may induce bolting. Applications made later than 1 week before harvest may result in residues. Celery plants must be harvested at maturity to ensure quality.

SOUR CHERRIES:

Purpose -To counteract the effect of cherry yellow virus by stimulating the development of lateral vegetative buds which will produce leaves, spurs and lateral shoots, thus increasing the yield of infected orchards.

Timing -From 10 to 14 days after bloom, at about the shuck-split stage. *Do not* spray within 1 month before harvest.

Mixing -Add 8 fl. oz. to 20 fl. oz. of GIB-SOL per 100 gallons of water for the recommended concentration of 10 to 25 ppm solution.

Spraying -Apply one thorough outside coverage spray on mature orchards at a rate of 200 to 300 gallons of solution per acre. The recommended concentration of gibberellic acid is from 8 to 30 grams per acre. Be certain that lower limbs are well covered.

NOTE -See your local farm advisor for current recommendations issued each year.

Annual treatment is necessary to maintain satisfactory fruit spur production and yields from each successive season's growth.

The use of too high a concentration will increase leafy growth at the expense of fruit production.

the following year and excessive fruit production the year after that.

SWEET CHERRIES:

Purpose -To produce brighter color, firmer fruit and increased fruit size.

Timing When the fruit is a light green to straw color. This normally occurs from 14 to 21 days before harvest.

Mixing -Add 6 fl. oz. to 8 fl. oz. of GIB-SOL per 100 gallons of water for the recommended concentration of 7½ to 10 ppm. solution.

Spraying -Apply one outside coverage spray at a rate of 500 to 600 gallons of solution per acre. The recommended concentration of gibberellic acid is from 15 to 24 grams per acre.

NOTE -This treatment will delay harvest time from 3 to 5 days to allow a longer period for harvest.

HOPS -*Seeded and Seedless "Fuggle" Hops and Similar Varieties*

Purpose -To increase yields and pickability

Timing When the vine growth is 5 to 8 feet in length, at least 3 weeks before the flowering stage

Mixing Add 4 fl. oz. to 8 fl. oz. of GIB-SOL per 100 gallons of water for the recommended concentration of 5 to 10 ppm. solution.

Spraying Apply at a rate of 100 to 150 gallons of solution per acre. The recommended concentration of gibberellic acid is 4 grams per acre.

ITALIAN PRUNES:

Purpose -To reduce internal browning

Timing From 3 to 4 weeks before harvest. This is normally about 10 days after pit hardening.

Mixing Add 40 fl. oz. of GIB SOL per 100 gallons of water for the recommended concentration of 50 ppm. solution.

Spraying -Apply at a rate of 200 gallons of solution per acre. The recommended concentration of gibberellic acid is 40 grams per acre.

NOTE -The addition of 6½ lbs. of urea per 100 gallons of spray solution will further improve the quality of the fruit.

LEMONS:

Purpose -To control fruit maturity by delaying development of yellowing and reduce the percentage of small tree-ripe fruit, permitting more flexibility in harvesting and marketing.

Timing -In November or December, before any appreciable loss of green rind color. *Do not* apply within 1 month before harvest. *Do not* apply in spring or summer.

Mixing -Add 8 fl. oz. of GIB-SOL per 100 gallons of water for the recommended concentration of 10 ppm. solution.

Spraying -Apply one outside coverage spray at a rate of 500 gallons of solution per acre. The recommended concentration of gibberellic acid is 20 grams per acre.

NOTE -When applications are made two years in succession, an even larger difference will occur in harvest pattern and maturity.

NAVEL ORANGES - *Depending upon the desired results, one of two programs may be followed:*

PROGRAM I

Purpose -To delay the following late season physiological disorders: rind staining, water spot, sticky surface and rind rupture associated with the aging of the rind. This program is intended for use only in groves where late season harvest is anticipated.

Timing -In October or November while the rind is firm

and green. This provides a greater delay in aging than when a minimum effect on rind color is desired. *Do not* apply just before, during or just after flowering. *Do not* apply within 10 days before harvest.

Mixing -Add 4 fl. oz. to 16 fl. oz. of GIB-SOL per 100 gallons of water for the recommended concentration of 5 to 20 ppm. solution. *Do not* add GIB-SOL to whitewash spray mixtures.

Spraying -Apply one outside coverage spray at a rate up to 500 gallons of solution per acre. The recommended concentration of gibberellic acid is 10 to 40 grams per acre.

NOTE -In situations where color development is late, early sprays may reduce the grade of fruit harvested before mid-March due to the persistence of green color.

PROGRAM II -

Purpose -To reduce susceptibility to certain late-season physiological disorders such as rind staining, water spot, tacky rind and rind rupture associated with aging of the rind.

Timing -In December or January just after marketable color appears. *Do not* apply just before, during or just after flowering. *Do not* apply within 10 days before harvest.

Mixing -Add 4 fl. oz. to 16 fl. oz. of GIB-SOL per 100 gallons of water for the recommended concentration of 5 to 20 ppm. solution.

Spraying -Apply one outside coverage spray at a rate up to 500 gallons of solution per acre. The recommended concentration of gibberellic acid is 10 to 40 grams per acre.

NOTE Applications in late January or February may cause reduced production the following year. 2,4-D (2,4-dichlorophenoxyacetic acid), to

produce a final concentration of 8 ppm., may be added to the spray tank along with the GIB-SOL.

ORLANDO TANGELO:

Purpose -To increase fruit set and yields.

Timing -During full bloom.

Mixing -Add 4 fl. oz. to 12 fl. oz. of GIB-SOL per 100 gallons of water for the recommended concentration of 5 to 15 ppm. solution.

Spraying -Apply at a rate of 500 gallons of solution per acre. Ensure thorough wetting of the leaves. The recommended concentration of gibberellic acid is 30 grams per acre on mature trees.

NOTE -A slight increase in the dropping of mature leaves may occur at concentrations of 10 to 15 ppm. Severe leaf drop occurs at concentrations above 25 ppm.
Fruit sizes may be reduced and the color development slightly retarded.
Fruits are generally seedless.

RHUBARB:

Purpose -To increase yields of marketable forced rhubarb.

Timing -Within 24 hours after crowns are brought into the forcing house.

Mixing -Determine the volume of water required and prepare either a 250 ppm. or 500 ppm. solution (See section on Spraying to determine volume of spray solution required) NOTE: 20 fl. oz. of GIB SOL in 10 gallons of water equals a 250 ppm. solution. 40 fl. oz. of GIB SOL in 10 gallons of water equals a 500 ppm. solution.

Spraying -REMOVE ANY SOIL AND/OR DEAD PLANT MATERIAL THAT IS COVERING THE CROWN BUDS BY WASHING BEFORE SPRAYING. When the rest period *has not been* completely broken by cold weather, apply

60 ml. of a 500 ppm. solution of gibberellic acid to each crown or 30 liters per 1,000 square feet when crowns are planted at the rate of 2 square feet per crown. When the rest period has been broken by cold weather, apply 60 ml. of a 250 ppm. solution of gibberellic acid to each crown or 30 liters per 1,000 square feet when crowns are planted at the rate of 2 square feet per crown.

NOTE: -Before treatment, see your local farm advisor for current recommendations on forcing house temperatures and additional information.

STRAWBERRIES (Olympus):

Purpose -To increase runner production of mother plants.

Timing -During the period between 10 to 30 days after planting. Mother plants should have 1 to 6 leaves at the time of spraying.

Mixing -Add 20 fl. oz. of GIB-SOL per 50 gallons of water for the recommended concentration of 50 ppm. solution.

Spraying -Apply one spray. Apply spray at a rate of 100 gallons of solution per acre. The recommended concentration of gibberellic acid is 18.9 grams acre.

NOTE: Apply only to Olympus strawberry cultivar. Apply only to mother plants from which no fruit are harvested and which are grown solely to produce runner plants.

Literature revised July 8, 1976
PI 1990, AMP