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US ENVIRONMENTAL PROTECTION AGENCY OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (75-767) WASHINGTON, DC 20460	EPA REGISTRATION NO. 55146-62	DATE OF REGISTRATION MAR 28 1990
	TERM OF ISSUANCE	
NOTICE OF PESTICIDE: <input type="checkbox"/> REGISTRATION <input type="checkbox"/> REREGISTRATION (Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended)		
NAME OF PESTICIDE PRODUCT GibGro 4LS		

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

Agrol Chemical Products
7322 Northwest Freeway, Suite 1400
Houston, Texas 77074

NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 2(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration/ reregistration of your product under FIFRA sec. 2(c)(5) when the Agency requires all registrants of similar products to submit such data.
2. Add the phrase, "EPA Registration No. "55146-62" to your label before you release the product for shipment.
3. Revise the Statements of practical treatment to read as follows:
 - IF IN EYES: Flush with plenty of water. Call a physician.
 - IF SWALLOWED: Drink promptly a large quantity of milk, egg whites, gelatin solution, or, if these are not available, drink large quantities of water. Avoid alcohol.
 - IF ON SKIN: Wash with plenty of soap and water. Get medical attention.

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL: *Robert J. Taylor* DATE: **3/27/90**

4. Submit five (5) copies of your final printed labeling before you release the product for shipment.

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

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

Sincerely yours,

Robert J. Taylor
Product Manager (25)
Fungicide-Herbicide Branch
Registration Division (E7505C)

GibGro 4LS

KEEP OUT OF REACH OF CHILDREN

WARNING

FLAMMABLE

HARMFUL IF SWALLOWED

ACTIVE INGREDIENT

*Gibberellic Acid	4.0% W/W
INERT INGREDIENTS	96.0%

TOTAL	100.0%
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* Equivalent to 121.6 g. Gibberellic Acid per gallon.
EPA Reg. No. 55146-

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Causes substantial but temporary eye injury. Harmful if swallowed, inhaled or absorbed through skin. Do not get in eyes, on skin or on clothing. Do not breathe vapors or spray mist. Wear face shield. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

STATEMENT OF PRACTICAL TREATMENT

IF IN EYES: In case of contact with eyes, flush thoroughly with water. Get medical attention if irritation persists.

IF SWALLOWED: Contact a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an uncon-

DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. **STORAGE:** Keep containers tightly closed when not in use. Keep away from heat and open flame. **PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Do not reuse empty containers. Triple rinse (or equivalent). Puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

RE-ENTRY STATEMENT

Do not enter treated area without protective clothing until sprays have dried.

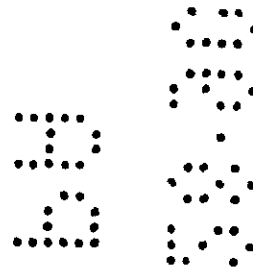
Because certain states may require more restrictive re-entry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Oral warnings must include the following information: Inform workers of areas or fields that must not be entered without appropriate protective clothing until sprays have dried. In case of accidental exposure, wash with plenty of water. If there is any irritation in eyes after washing, get medical atten-

ACCEPTED

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Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide reg. number
EPA Reg. No. 55146-62



GibGro 4LS

KEEP OUT OF REACH OF CHILDREN

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INERT INGREDIENTS 96.0%

TOTAL 100.0%

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IF ON SKIN: Immediately flush skin with plenty of water. Get medical attention if irritation persists.

IF INHALED: Remove victim to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. Get medical attention.

PHYSICAL AND CHEMICAL HAZARDS

FLAMMABLE! Keep away from heat and open flame. Keep container tightly closed when not in use.

ENVIRONMENTAL HAZARDS

Avoid direct applications to any body of water. Keep out of lakes, ponds or streams. Do not contaminate water when disposing of equipment washwaters.

DIRECTIONS FOR USE:

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

Before application, read accompanying GibGro 4LS Spray Guide carefully and use only as directed.

DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM

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RE-ENTRY STATEMENT

Do not enter treated area without protective clothing until sprays have dried.

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Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Oral warnings must include the following information: Inform workers of areas or fields that must not be entered without appropriate protective clothing until sprays have dried. In case of accidental exposure, wash with plenty of water. If there is any irritation in eyes after washing, get medical attention. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information: **WARNING:** Area treated with GibGro 4LS on (Date of application). Do not enter without appropriate protective clothing until spray has dried. In case of accidental exposure wash with plenty of water. If there is any irritation in eyes after washing, get medical attention.

NOTE: Gibberellic Acid is an extremely potent plant growth regulator. For best results, read all directions for use thoroughly. Consult your local experiment station specialist, distributor, or the Agtrol agricultural specialist in your area for the spray schedule best suited to your conditions.

WARRANTY STATEMENT

AGTROL CHEMICAL PRODUCTS warrants that the product conforms to the chemical description on the label and is reasonably fit for the purposes set forth on the label when used according to directions under normal use conditions. THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. This warranty does not extend to the handling or use of this product contrary to label instructions or under abnormal conditions or under conditions not reasonably foreseeable to seller and buyer assumes all risk of any such use.

GibGro 2LS and GibGro 4LS

(Gibberellic Acid)

SPRAY GUIDE

KEEP OUT OF REACH OF CHILDREN WARNING

PRECAUTIONARY STATEMENTS

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DIRECTIONS FOR USE

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STORAGE AND DISPOSAL

See container label.

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NOTE: Gibberellic Acid is an extremely potent plant growth regulator. For best results, read all directions for use thoroughly. Consult your local experiment station specialist, distributor, or the Agrol agricultural specialist in your area for the spray schedule best suited to your conditions.

GENERAL DIRECTIONS FOR USE

Discard any unused spray material at the end of each day. Prepare solution concentrations by mixing the required amount of product with water only in a clean, empty spray tank.

Use only as directed. The label should be read thoroughly and understood before making applications. Effectiveness requires that all parts of plant or crop must receive spray or desired result will not occur, so spray

thoroughly. When a range of rates is indicated, use the concentration and spray volume recommended locally.

Data concerning the compatibility of GibGro with other agricultural compounds is not available.

SPRAY GUIDELINES FOR GRAPES 5/8

For all grapes, application is recommended by ground sprayer. Use 100 to 500 gallons as a dilute spray according to foliage density, or 30 to 80 gallons as a concentrate spray, unless specified otherwise. Do not exceed maximum rates. It is important to wet all berries thoroughly.

THOMPSON SEEDLESS GRAPES

For cluster elongation ("Stretch"), looser cluster forms, and reducing cost of thinning, when used in conjunction with established girdling and thinning practices: apply 8 to 16 grams*/A before bloom when flower clusters are 3 to 5 inches long.

For decreased berry set ("Thinning"), reducing hand-thinning costs, and hastened maturity: apply 8 to 16 grams*/A per application during bloom as one application or as two applications of equal amounts when the bloom period is extended with the second application made 3 to 7 days after the first application.

For larger berries ("Sizing") and larger clusters when used in conjunction with established girdling and thinning practices: apply 32 to 80 grams*/A per application in 1 to 3 applications beginning when average berry size is 4-5 millimeters in diameter. Applications should be applied within a 14 day period. Timing of the second and third spray will be dictated by experience in the vineyard to be sprayed and temperatures occurring during the interim between sprays. Potential effect will be reduced if the second and/or third spray occurs more than two weeks after the first application.

NOTE: Do not apply more than 208 grams*/A per growing season for all uses.

THOMPSON SEEDLESS GRAPES FOR RAISINS

For cluster elongation ("Stretch") and looser cluster forms, allowing better air circulation to aid in the control of bunch rot and increase light penetration aiding in sugar development: Apply 8 to 16 grams*/A before bloom when flower clusters are 3 to 5 inches long.

For decreasing berry set, ("Thinning") with increased raisin quality, and hastened maturity: apply 0.75 to 6 grams*/A when most bunches are in 60% to 80% bloom.

FLAME SEEDLESS GRAPES

For decreased berry set ("Thinning") and reducing hand-thinning costs: apply 3 to 7.5 grams*/A during bloom. Higher amounts may cause an excess of shot berries or overthinning.

For larger berries ("Sizing") and larger clusters when used in conjunction with established girdling and thinning practices: apply 20 to 48 grams*/A per application in 1 to 3 applications beginning when average berry size reaches 6 to 8 millimeters in diameter. Applications should be applied within a 14 day period. Timing of the second and third spray will be dictated by experience in the vineyard to be sprayed and temperatures occurring during the interim between sprays. Potential effect will be reduced if the second and/or third spray occurs more than two weeks after the first application.

NOTE: Do not apply more than 103.5 grams*/A per growing season for all uses.

PERLETTE GRAPES

For larger berries ("Sizing") and larger clusters when used in conjunction with established girdling and thinning practices: Apply 32 to 80 grams*/A per application in 1 to 3 applications beginning when average berry size is 4 to 5 millimeters in diameter. Applications should be applied within a 14 day period. Timing of the second and third spray will be dictated by experience in the vineyard to be sprayed and temperatures occurring during the interim between sprays. Potential effect will be reduced if the second and/or third spray occurs more than two weeks after the first application.

NOTE: Do not apply more than 160 grams*/A per growing season for all uses.

OTHER SEEDLESS VARIETIES SUCH AS SEEDLESS TOKAY, INTER-LOCKEN SERIES AND RELATED HYBRIDS

For larger berries and larger clusters when used in conjunction with established girdling and thinning practices: apply 6 to 48 grams*/A as one application at or just after shatter (usually 2 to 3 days later) or as two applications of equal amounts not to exceed a total of 48 grams*/A, with the first made at or just after shatter, followed during the next two weeks by the second application. Timing of the second spray with split application will be dictated by experience in the vineyard to be sprayed and temperatures occurring during the interim between sprays. Potential effect will be reduced if the second spray occurs more than two weeks after the first application.

EMPEROR GRAPES

For reducing berry shrivel. This can also increase berry size: apply 20 grams*/A as one application in 200 to 250 gallons/A approximately two weeks after completion of shatter following bloom. This timing should correspond to a period when the predominant berry diameter ranges from 10 to 15 millimeters.

BLACK CORINTH (ZANTE CURRANT) GRAPES

For improving berry size: apply spray containing 1 to 8 grams*/A 3 to 5 days after full bloom, but before shatter begins.

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SPRAY GUIDELINES FOR CITRUS

NAVEL ORANGES

(California) To delay aging of the rind and reduce rind disorders (e.g. rind staining, water spotting, sticky or tacky surface, puffy rind and rupture under pressure) and to produce a more orderly harvesting pattern: **EARLY SPRAY** (before color change). The delay in rind aging is greatest when the early spray is applied before a color change. This spray timing produces the firmest rind possible. Apply one spray two weeks prior to color break which normally occurs August to November. Apply 10 to 40 grams/A as a concentrate or dilute spray in sufficient gallonage to insure thorough wetting.

NOTE: Do not apply to groves that may be harvested early as a reduction in grade may result due to the delayed coloring. Do not apply in white wash sprays in which lime or other caustic material has produced a high pH in the spray tank.

LATE SPRAY: (after color break) Apply one spray just after marketable color has developed which is normally from October through December. Apply 16 to 48 grams/A as a concentrate or dilute spray in sufficient gallonage to insure thorough wetting.

NOTE: Do not spray Navel orange trees from January through July. Sprays applied in January/February may cause reduced production the following year. Do not apply within 10 days of harvest.

NOTE: A slight increase in mature leaf drop may occur in trees under stress.

VALENCIA ORANGES

(California) To reduce rind creasing and to delay aging and softening of the rind: apply a single spray in August or September to trees with a target crop of young fruit. Apply 40 to 80 grams/A as a concentrate or dilute spray in sufficient gallonage to insure thorough wetting.

NOTE: Slower color development should be expected in the target crop. Increased greening of mature fruit, if present, may occur. After marketable color is achieved, treatment effects may be reduced the longer treated fruit remain on the tree.

LEMONS

(California except desert valleys) To decrease the amount of small tree ripe fruit and to produce a more desirable production pattern in relation to market demand: apply one spray when target crop is 1/2 to 3/4 full size but still green. Use 10-20 grams/A as a concentrate or dilute spray in sufficient gallonage to insure thorough wetting.

When applied two years in a row, an even larger difference in harvest pattern and maturity occurs.

NOTE: Do not apply within one month of harvest. Do not apply in spring or summer.

TANGERINE HYBRIDS

(Florida) To increase fruit set and yields on tangerine hybrids with pollination problems such as the Orlando, Robinson, Minneola and Sunburst: apply spray during full bloom. Be sure to wet the leaves sufficiently.

Fruits are generally seedless. Use 8 to 30 grams* in 400 to 500 gallons/A on large mature trees.

NOTE: A slight increase in mature leaf drop occurs at concentrations above 25 ppm. Fruit sizes may be reduced and color development slightly retarded.

(Florida) To delay disorders associated with rind aging of the Minneola tangelo; e.g., puffiness and softening and to increase peel strength: apply 20 to 40 grams/A as a dilute spray in sufficient gallonage to insure thorough wetting.

NOTE: Do not apply if early harvest is planned. Do not apply after coloring as pre-harvest rind staining may occur. Application during coloring may cause variation in rind color development.

GRAPEFRUIT

(Florida and Texas) To delay disorders associated with rind aging; e.g., puffiness, softening and orange coloration, to prevent preharvest drop of mature fruit and to increase peel strength and reduce water loss during storage: apply a single spray to fully colored fruit during the November through January period. Use 20 to 56 grams* in 500 to 700 gallons/A containing a suitable non-ionic surfactant at the manufacturer's recommended rate. It is advisable to not pick heavy crops to aid early marketing and to avoid reduction of yields which generally follow late held crops.

NOTE: Applications made after January or when trees begin to break dormancy may adversely affect new crop. Do not use concentrate sprays. Results may vary season to season depending on environmental conditions.

GRAPEFRUIT, STAR RUBY VARIETY

(Texas) To reduce early-season drop of small fruit of the Ruby Variety thereby increasing yields: apply a single spray during the bloom period. Use GibGro 4LS (25 fluid ounces) or GibGro 2LS (50 fluid ounces) (25 grams*) in 250 gallons water final spray mixture plus a suitable non-ionic surfactant may be used to enhance efficacy.

NOTE: Do not tank-mix with other chemicals. Do not apply to stressed trees. Results may vary season to season depending on environmental conditions. Maintain a well-balanced fertilization and watering program.

SPRAY GUIDELINES FOR FRUIT CROPS

BLUEBERRIES

For improving fruit set. For set problems due to insufficient natural hon-

eyee pollination on varieties such as Coville, Jersey, Stanley, Earleblue, Weymouth and others: make a single foliage spray application at full bloom (when over 75 percent of all flowers are fully open). For Weymouth, application can be delayed up to two weeks after full bloom to affect sizing of shot berries. Use GibGro 4LS (50 fluid ounces) or GibGro 2LS (100 fluid ounces) in 100 gallons of water. Use of a spreader-sticker is recommended. Apply to the point of run-off, thoroughly wetting all parts of the plant. Total gallonage will depend on size and density of the plants.

NOTE: Do not exceed 30G gallons/A. Although some varieties bloom closer to harvest than others—in no case should application be made closer than 40 days before harvest. Do not apply to plants in a low state of vigor.

SWEET CHERRIES

To delay harvesting, to produce a brighter colored, firmer fruit and to increase size: apply spray when the fruit is light green to straw colored. Apply spray to thoroughly wet the entire tree. Use 16 to 48 grams* in 400 to 600 gallons/A on large mature trees.

NOTE: Do not apply within one week of harvest.

RED TART CHERRIES

(All states except California) To maintain and extend high fruiting capacity of bearing tart cherry trees and reduce occurrence of "blind" nodes by stimulating lateral vegetative buds to develop a more productive balance of lateral shoots and spurs. GibGro must be applied annually to insure vegetative development and subsequent yield improvement year after year.

Timing: Apply a single foliar spray between 14 to 28 days after bloom. Research and commercial experience has determined 21 days after full bloom to be optimum. Best timing is further defined as that stage when 3-5 terminal leaves have fully expanded, or, at least 1-3 inches of terminal shoot extension has occurred.

Concentration: 10 to 25 ppm. The most commonly used rate is 15 ppm. However, higher or lower rates may be used, depending upon the response you desire.

Method of Application: Best results have been achieved with high volume sprays of 100 gallons or more of finished spray per acre. However, lower volume sprays can be equally effective, but extreme care must be exercised to avoid an overdose as spray volume is decreased.

HIGH VOLUME SPRAY GUIDE (100 or more gallons per acre)

NOTE: Each ounce of GibGro 2LS contains approximately 1/2 gram of the active ingredient, gibberellic acid and each ounce of GibGro 4LS contains approximately 1 gram of the active ingredient, gibberellic acid.

TREE AGE	6-10 YRS.	10-15 YRS.	16-20 YRS.	20+ YRS.
CONCENTRATION (PPM)	10 PPM	15 PPM	20 PPM	25 PPM
GRAMS ACTIVE INGREDIENT PER 100 GALLONS	4 GRAMS	6 GRAMS	8 GRAMS	10 GRAMS
RECOMMENDED WATER VOLUME (GALLONS/ACRE)	150	150	150	150
GRAMS ACTIVE INGREDIENT PER ACRE	8 GRAMS	9 GRAMS	12 GRAMS	15 GRAMS

LOW VOLUME SPRAY GUIDE (50-100 gallons per acre)

APPROXIMATE TREE AGE	GRAMS OF ACTIVE INGREDIENT PER ACRE	
	NORMAL VIGOR	LOW VIGOR
6-10 YEARS	4	6
10-15 YEARS	8	10
15-20 YEARS	10	14
20+ YEARS	14	18

NOTE: Use a minimum of 50 gallons/acre for a low volume spray application and obtain uniform coverage of the whole tree. Rates of GibGro in the above chart are based on expected tree vigor at various ages in a normal orchard. Each orchard presents a different situation. Adjust GibGro rate to complement vigor of trees. If trees are vigorous, use lowest recommended rates. Use higher rate for trees low in vigor and weak in shoot and spur production. Excessive application rates on any tree will increase vegetative growth at the expense of fruit production the following year.

NOTE: Lowest rates of GibGro should be used on trees that have been heavily pruned or hedged. The use of additional wetting or spreading agents is not recommended.

GibGro will not improve growth of trees under stress (nutritional, moisture, winter injury) or other factors inhibiting normal growth and development resulting from physical damage or unsound orchard practices. Best results from GibGro will be obtained when combined with good cultural practices.

SPRAY GUIDELINES FOR NON-BEARING FRUIT TREES

YOUNG TART AND SWEET CHERRY TREES

(All states except California) To reduce flowering and fruiting in young tart and sweet cherry trees to minimize the competitive effect of early fruiting on tree development: apply GibGro liquid two to four weeks after bloom. Mix 20 to 40 ounces of GibGro 4LS or 40 to 80 ounces of GibGro 2LS in 100 gallons of water. Apply a foliar spray of 25 to 50 gallons per acre assuming a tree density of 100 trees per acre equivalent, or apply about one quart of spray volume per tree. Under conditions of low vigor, two applications are recommended. If two spray applications are made, allow at least a seven-day interval between sprays.

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NOTE: DO NOT SPRAY TREES IN THE FIRST YEAR. Treat in the second season for reduction of flowering in the third season and again in the third season if reduction of flowering and fruiting is desired in the fourth season.

NON-BEARING PEACHES

(North Carolina, South Carolina, Georgia, Florida, Alabama, Tennessee, Mississippi) To reduce flowering and fruiting in young non-bearing peaches to minimize the competitive effect of early fruiting on tree development: Apply a single spray in the fall after flower buds have been initiated. This corresponds to the period immediately before and at the onset of early leaf drop, typically late September to early October. Apply GibGro at the rate of 200-400 PPM in 10-50 gallons of water per acre. Best results are obtained when applied with a handgun and tree canopy is wetted thoroughly to the point of run-off. The addition of a non-ionic surfactant will improve efficacy. Refer to the table for mixing instructions.

QUINCES OF GIBGRO 2LS IN:	200 PPM	400 PPM
	10 Gallons of Water	16
50 Gallons of Water	80	160

QUINCES OF GIBGRO 4LS IN:	8	16
	10 Gallons of Water	8
50 Gallons of Water	40	80

Treat only trees that are in good physiological condition. Trees should have completed their first leaf before commencing treatments. Discontinue treatment the year before desired harvest.

SPRAY GUIDELINES FOR OTHER FRUIT

OLYMPUS STRAWBERRIES

(N.W. US Only; propagation stock) To increase runner production of mother plants of the Olympus cultivar: apply a single spray to mother plants 10 to 30 days after planting. At the time of spraying, plants should have 1 to 6 leaves. Apply 100 gallons/A to thoroughly wet new foliage to the point of run-off. Use 20 grams*/A.

NOTE: Not for use on fruiting plants. Treatments may not be effective on plantings set out after mid-May.

FORCING RHUBARB

To increase yield of marketable forced rhubarb and to break dormancy on plants receiving insufficient chilling: apply 2 fluid ounces (60 ml) of a solution containing 20 grams* in 10 gallons to each cleaned crown, when the rest period is not completely broken. When the rest period is broken by cold weather, apply 2 fluid ounces (60 ml) of a solution containing 10 grams* in 10 gallons.

NOTE: Keep forcing house temperatures at 40° to 50°F for 24 hours after application. If house is warmer than 50°F, the crowns should be covered with plastic. Temperatures in the forcing house above 50°F will result in lower yields and poor stalk color.

SPRAY GUIDELINES FOR VEGETABLE CROPS

ARTICHOKES

(California) To accelerate maturity of artichokes and to shift the harvest to an earlier date: apply spray at bud initiation time, normally six weeks prior to anticipated harvest. Be sure the entire plant (leaves, stems and buds) are covered to point of run-off. Use 10 grams* in 100 to 125 gallons/A.

NOTE: Do not apply within seven days of harvest.

CARROTS

To aid in mechanical harvesting of carrots by increasing top growth damaged by disease or environmental stress: apply spray of 1-2 grams*/A in a minimum of 5 gallons per acre by air or 10 gallons per acre by ground sprayer. A second application in 10-20 days may be required to obtain the desired amount of top growth required for harvesting. A spreader-sticker, used as per the manufacturer's recommendation, is desired for thorough wetting of the leaf foliage.

NOTE: Applications should be made soon after carrot tops have been damaged by disease or environmental stress. Do not exceed the recommended rate or apply more than two applications per season since an undesirable amount of top growth may be obtained at the expense of root development. Do not apply within 7 days of harvest.

CELERY

To increase plant height and yield, and overcome stress due to cold weather conditions, or saline soils and to obtain earlier maturity: apply spray one to four weeks prior to harvest. Lower concentrations are applied at the three to four-week interval. Higher concentrations at the one to two-week interval. Use 2.5 to 10 grams* in 25 to 50 gallons/A.

NOTE: Do not apply earlier than four weeks before harvest as Gibberellic Acid may induce bolting (seed stalk formation).

Applications made less than one week preharvest may result in residues. Celery plants must be harvested when mature to ensure quality.

LETTUCE FOR SEED

To obtain uniform bolting and increase seed production: apply the following spray schedule:

Growth Stage	ppm*	g./A	Gallons/Acre
4 leaf stage	10	0.4	10
8 leaf stage	10	1.8	40
12 leaf stage	10	4	100

NOTE: Do not feed crop wastes to livestock

SEED POTATOES

To stimulate uniform sprouting—for maximum production, more uniform development, fewer late maturing plants, and to break dormancy of newly harvested potatoes that have not had a full rest period: Dip freshly dug seed pieces in a solution containing 0.2 to 0.4 gram* in 100 gallons prior to planting.

NOTE: If soil temperature is very high, avoid treating rested seed and use the minimum concentration for dormant seed.

SPINACH

(All States except California) To facilitate harvest, increase yield and improve quality of fall and over-winter spinach: apply a single spray 10 to 14 days before each anticipated harvest on fall or over-winter spinach, ideally when daytime temperatures are 40° to 70°F and during early morning hours when dew is present on crop.

Use GibGro 4LS (6 to 8 fluid ounces) or GibGro 2LS (12 to 16 fluid ounces)—6 to 8 grams*/A in 10 to 50 gallons/A by ground sprayer or in a minimum of 5 to 10 gallons/A by air.

Maximum benefit from GibGro is obtained when below normal temperatures predominate following application and growth would be otherwise slowed in untreated spinach.

NOTE: Since Gibberellic Acid can promote bolting, do not apply to spinach after the mid-winter period or if temperatures may be expected to exceed 75°F within several days of application. Do not apply on spring-planted spinach.

SPRAY GUIDELINES FOR FLORICULTURE CROPS

POMPOM CHRYSANTHEMUMS

(Florida) For elongating peduncles on pompom chrysanthemums: apply a single spray 4 to 5 weeks after initiation of short day conditions.

Use GibGro 4LS (1/2 to 1 fluid ounce) or GibGro 2LS (1 to 2 fluid ounces)—(1/2 to 1 gram*) in 12 gallons for application to 1,000 sq. ft. of bed (20 to 40 fluid ounces GibGro 4LS or 40 to 80 fluid ounces GibGro 2LS equivalent to 20 to 40 grams* in 500 gallons/A).

Apply with overhead nozzles directing the spray to the flower buds.

NOTE: Overuse or incorrect timing may cause long, spindly and weak stems.

STATIC

(Florida) To promote earlier flowering and to increase flower yield: apply a single drench spray when plants are more than 10 inches in diameter (approximately 90 to 110 days after normal seeding time). Use 40 to 50 grams* in 25 gallons to provide 10 ml (5mg*) solution per plant.

NOTE: Do not exceed specified rates. Do not apply repeated sprays. Accelerated flowering is influenced by extended photoperiod, adequate nutrition and reduced night temperature. Treatment with gibberellins lessens the requirement for the cold requirement and/or the long photoperiod.

SPRAY GUIDELINES FOR ADDITIONAL CROPS

BERMUDAGRASS GOLF TURF

(Florida) To initiate or maintain growth and prevent color change during periods of cold stress and light frosts on golf course Bermudagrass (e.g., Tifdwarf, Tifgreen, etc.): apply 10 grams* weekly or 25 grams* biweekly in 25 to 100 gallons/A.

Use GibGro 4LS (1/4 to 2/3 fluid ounces) or GibGro 2LS (1/2 to 1 1/3 fluid ounces)—(1/4 to 2/3 gram*) in approximately 6 gallons appropriate for the spray equipment for application to 1,000 sq. ft. (10 1/2 to 26 1/2 fluid ounces/A GibGro 4LS or 21 to 53 fluid ounces/A GibGro 2LS equivalent to 10 to 25 grams*/A in 25 to 100 gallons/A).

NOTE: Do not exceed specified rates.

Do not apply during extended warm periods where night temperatures exceed 65°F.

Maintain adequate moisture and proper fertilization programs recommended in local area.

Discontinue treatments if thinning is observed.

Do not apply the high rate more frequently than every two weeks. More frequent mowing may be necessary.

Do not use on dormant turf.

HOPS

(For seeded and seedless Fuggle hops and similar varieties adapted to Oregon and the Northwest) To increase yield and pickability: apply spray when vine growth is five to eight feet in length. Use 4 to 6 grams* in 100 to 150 gallons/A.

NOTE: Do not apply within three weeks of harvest.

Two concentrations of GibGro Liquid Gibberellic Acid are now available to better serve the needs of individual growers.

GibGro 2LS (128 fl. oz./box)

Active ingredient
 Gibberellic Acid* 2.0% w/w
 Equivalent to approximately 0.5 gram* of Gibberellic Acid per fluid ounce of product.
 EPA Reg. No. 55146-

Active Ingredient
 Gibberellic Acid* 4.0% w/w
 Equivalent to approximately 1.0 gram* of Gibberellic Acid per fluid
 ounce of product.
 EPA Reg. No. 55146-

NOTICE TO USER

Seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning use of this product other than as indicated on the label. User assumes all risks of use, storage or handling not in strict accordance with accompanying directions.

AGTROL CHEMICAL PRODUCTS
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* Refers to actual Gibberellic Acid. See Conversion Table to convert to amount of formulated GibGro needed.

CONVERSION TABLE

GRAMS OF ACTUAL GIBBERELIC ACID PER ACRE TO AMOUNT OF GIBGRO LIQUID FORMULATION PER ACRE

Desired Actual Gibberellic Acid Concentration (Grams*) in Finished Spray (Per Acre)	GibGro 2LS Liquid Contains (0.5 Grams* Fluid Ounce of Formulated Product)	GibGro 4LS Liquid Contains (1.0 Grams* Fluid Ounce of Formulated Product)
0.5	1 oz	0.5 oz
1.0	2 oz	1 oz
2.0	4 oz	2 oz
4.0	8 oz	4 oz
5.0	10 oz	5 oz
8.0	16 oz	8 oz
10.0	20 oz	10 oz
12.0	24 oz	12 oz
16.0	32 oz	16 oz
20.0	40 oz	20 oz
25.0	50 oz	25 oz
32.0	64 oz	32 oz
40.0	80 oz	40 oz
48.0	96 oz	48 oz
50.0	100 oz	50 oz

* Refers to actual Gibberellic Acid.

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