READ SAFETY DIRECTIONS BEFORE OPENING OR USING

GENFARM

GIBBERELLIC ACID 100

GROWTH REGULATOR

ACTIVE CONSTITUENT: 100 g/L GIBBERELLIC ACID

For foliar spray application to certain varieties of Grapes,
Citrus and Prunes to promote desirable harvest effects and
to stimulate production of winter dormant grass-dominant
pastures for high intensity grazing such as dairy pasture or
sheep lambing paddocks.

IMPORTANT: READ THIS BOOKLET BEFORE USE

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DIRECTIONS FOR USE

RESTRAINTS: Use with a non-ionic wetter. **Note:** 10 mL product per 100 L = 10 ppm. DO NOT apply to plants under pest, nutritional or water stress.

CROP	RATE/100L	CRITICAL COMMENTS
CITRUS		Apply in a minimum volume of 5,000 L/ha to ensure thorough coverage of fruit.
		DO NOT use where blemish is a problem.
		For optimum results adjust the spray tank solution to pH 4.0-4.5 (see mixing instructions).
Navel and Valencia Oranges	10-20 mL	For reduction in Creasing: Prior to applying GIBBERELLIC ACID 100, remove all previous season Valencia oranges. Apply GIBBERELLIC ACID 100 when Navel/Valencia oranges are between 30-50 mm fruit size or golf-ball stage (generally January-February).
		Rates lower than 20mL: • should be used when it is anticipated that fruit will be harvested for early markets • may be used on applications to late navel selections
Navel Oranges	10 mL	To delay rind ageing for late marketing (or those which will be stored for more than 2 weeks prior to sale) and reduce rind blemish and for longer storage life, apply when oranges turn from green to silver (colourbreak).
		If fruit drop is a problem then apply a stop-drop spray. GIBBERELLIC ACID 100 is compatible with stop-drop sprays containing 2,4-D sodium salt. Use the 2,4-D at 10 ppm.
Mandarins	10 mL	To delay rind ageing for late marketing and reducing rind blemish apply at threequarters to full colour.
Grapefruit		To delay rind ageing, apply the spray when grapefruit turn from green to silver (colour-break) for grapefruit to be harvested up to mid-November; or apply the spray in mid-June for grapefruit to be harvested in December or January.
Lemons		To delay rind ageing, apply 4 to 6 weeks ahead of maturity of fruit.

CROP	RATE/100L	CRITICAL COMMENTS
GRAPES		
Currants – dried fruit	1 mL + 100ppm Cycocel	To achieve berry thinning: Apply a single, combined application (commonly used in NSW and SA) at 100% capfall. Ensure thorough coverage of bunches.
	100ppm Cycocel followed by 1 mL GIBBERELLIC ACID 100	To achieve berry thinning: Split Application (commonly used in Vic): (a) Apply Cycocel 7 days after bunch droop. (b) Apply GIBBERELLIC ACID 100 at 80-100% capfall. Use the 200ppm rate of Cycocel on vigorous vines. Use the 300ppm rate of Cycocel on excessively
	200ppm Cycocel followed by 1 mL GIBBERELLIC ACID 100	
	300ppm Cycocel followed by 1 mL GIBBERELLIC ACID 100	vigorous Carina vines only. Ensure thorough coverage of bunches.
Sultanas – dried fruit	10 mL	To achieve berry thinning: Apply when bloom or blossom is at 100% capfall stage (full flowering).
Sultanas – fresh fruit		Prune according to vigour of the vine - avoid exceeding 8 canes (except in special circumstances). Commence thinning late October. Thin bunches to leave one bunch per shoot (the largest). Do not exceed 30 bunches per vine. Bunch trimming should be carried out before fruit set to reduce the incidence of tight bunches. For adequate coverage of table grapes apply product in a minimum volume of 2250 L/ha directed at the bunch area.
	10 mL	To achieve bunch elongation (stretch): Apply when bunches are half to two-thirds of their final length (when bunches are between 10-15cm in length). This application is usually applied 10-14 days before the first sign of bloom.
	10 mL	To achieve thinning, two separate applications of 10 mL within the same season are required: Apply first application of 10 mL at 40% cap fall.
	10 mL	Apply second application of 10 mL at 80% cap fall (usually 2-3 days later).

CROP	RATE/100L	CRITICAL COMMENTS
Sultanas – fresh fruit – continued	30 mL	To achieve increase in berry size, two separate applications of 30 mL within the same season are required: Apply first application of 30 mL when smallest berry size is 4mm and larger berries up to 6mm (berry shatter may be incomplete at this size).
	30 m L	Apply second application of 30 mL 5 to 7 days later.
		Trim bunches within two weeks of shatter to leave 3 to 4 shoulder sprigs.
		All spray timing stages should be judged on the top part of the bunch, as the bottom is removed at trimming.
Early Madeleine	20 mL	To achieve increase in berry size: Apply when berries reach 4mm in diameter. Excessively vigorous vines should be cinctured 3-5 days before treatment with this product.
Perlette	12 mL	To achieve thinning: Apply at 70% capfall.
	20 mL	To achieve increase in berry size: Following the 12 mL application for thinning, apply the 20 mL application, when berries reach 4-5mm in diameter. Trim bunches as required.
Flame Seedless	10 mL	To achieve thinning: Apply at 70% capfall.
	30 mL	To achieve increase in berry size, two separate applications of 30 mL within the same season are required: Apply first application of 30 mL when berries have reached 7-9mm in diameter.
	30 mL	Apply second application of 30 mL when berries have reached 9-10mm in diameter.
PRUNES	10 mL	Apply 3 to 4 weeks before normal harvest date (when fruit shows approximately 14% soluble solids) to delay harvest 14 to 17 days. This delayed maturity will result in increased sugar content and thus a higher dry-out ratio.

CROP	RATE/100L	CRITICAL COMMENTS
PASTURE (Winter Dormant grass-dominant, high intensity usage)	10 to 80 mL	To stimulate production of winter dormant grass- dominant pastures for high intensity grazing such as dairy pasture or sheep lambing paddocks: Apply in a minimum volume of 100 L/ha.
		Stimulation of winter pastures is dose dependent with higher dose rates giving greater stimulation of growth however the balance between increased Dry Matter and total nutritional value may be lost if the rates used are higher than optimal. As a starting point, lower rates of 10 to 40mL/100L may be used on pastures dominant in phalaris as this grass is highly responsive to GIBBERELLIC ACID 100. Higher rates of 40 to 80mL/100L may be needed on pastures dominant in perennial ryegrass, annual ryegrass or cocksfoot. A single application can be made at any time from the beginning of June to the middle of August. Multiple applications, applied as an adjunct to rotational grazing strategy, can be made every 3 to 4 weeks with the final application no later than the middle of August. Growth stimulation is usually seen within 7 days of
		application and ceases around 3 to 4 weeks after application. Animals should be returned to the pasture no later than 4 weeks after application to ensure pasture does not become rank.
		Pastures should be at least 1 year old prior to a GIBBERELLIC ACID 100 application. Applications in late Winter or early Spring may lead to a suppression of Spring growth. Don't apply when there is insufficient soil moisture to support rapid plant growth. Soil fertilizer levels have to be sufficient to allow for the increase in pasture production. The addition of nitrogen-based fertilizer such as urea may give added pasture growth.

NOT TO BE USED FOR ANY PURPOSE OR IN ANY MANNER CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

WITHHOLDING PERIOD: NOT REQUIRED WHEN USED AS DIRECTED.

GENERAL INSTRUCTIONS:

FRUIT QUALITY (GRAPES)

Bunch Elongation (Stretch): This product sprayed onto bunch stems when bunches are half to two-thirds of their final length (usually 10 to 15cm), causes them to grow longer than normal and may prevent overtightness of bunches. This application is usually applied 10 to 14 days before the first sign of bloom.

Thinning: If sprayed on flowers as they are beginning to open, this product reduces the number of berries on the bunch, ie it has a thinning effect.

Berry size: This product increases berry size when applied after the commencement of flowering. The effect is greatest when applied at shatter.

MIXING

Prepare a concentrate solution in 1 to 5 L of water with sufficient product for the required vat volume and strength of spray, add solution to water in the spray vat and agitate.

Citrus only: Ensure the spray mix is in the pH range of 4.0 to 6.0, however optimum results occur when the spray mix is in the pH range of 4.0 to 4.5. Use a portable pH meter or calibrated pH strips to determine the spray mix pH. Sample 2 or 3 times and average the reading. Adjust high pH's with a suitable acidifying solution and recheck the pH after 5 minutes agitation.

Wetting agent: Add a non-ionic spreader at 10 mL per 100 L solution.

Citrus only: If using an adjuvant which includes a spreader, do not add additional spreader.

PRECAUTIONS

Use all solutions on the day of preparation.

CROP MANAGEMENT

Fresh Sultanas: Prune according to the vigour of the vine. Avoid exceeding 8 canes except in special circumstances. Commence thinning in late October.

Thin bunches to leave one bunch per shoot (the largest). DO NOT exceed 30 bunches per vine. Bunch trimming should be carried out after fruit set to reduce the incidence of tight bunches.

Citrus: To maximize product effectiveness and fruit quality, ensure good penetration of spray by skirting and pruning the inside of trees. Hand thinning of fruit may also be of benefit. Even trees with a history of little creasing may require treatment in "heavy crop" years or with age. Use of GIBBERELLIC ACID 100., particularly at higher rates(20 ppm) can delay colouring by 1 to 2 weeks, early in the season.

GRAZING MANAGEMENT

Application of GIBBERELLIC ACID 100should be made when pastures are ready to be rested following removal of animals. Rank pasture should be grazed prior to application of GIBBERELLIC ACID 100.

Growth stimulation is usually seen within 7 days of application and ceases around 3 to 4 weeks after application. Stock should be kept off that treated pasture for 3 to 4 weeks in order to maximize the pasture production/growth.

GIBBERELLIC ACID 100 will have little effect on the growth of broad leaf pasture components such as white or subterranean clover or on broad-leaf weed species.

Note: GIBBERELLIC ACID 100 stimulated pastures grow rapidly and the colour of the pasture typically changes from dark green to greeny-yellow. Colour and nutrient levels are typically restored after 3 to 4 weeks growth. The use of excessive rates of GIBBERELLIC ACID 100 can make the new growth of some grass species initially appear yellowish-white and are not recommended.

APPLICATION

Fresh Sultanas: Make sure vines are watered prior to application of this product. Apply in cool conditions or at night. Where this product is used for dried fruit production, drivepast overall spraying is adequate. For fresh fruit production good results depend on the thorough wetting of bunches and spraying at the correct stage.

If the bunches are missed they will not react to gibberellic acid.

FOR RECOMMENDATIONS FOR OTHER GRAPE VARIETIES CONSULT YOUR LOCAL DEPARTMENT OF AGRICULTURE.

Citrus: Spray in the cool of the morning or after an irrigation in the afternoon. Avoid product application within 4 weeks of any oil spray as the oil restricts GA uptake.

Typical water volumes are 5,000 L for small trees, 7,500 L for medium trees and 10,000 L for large trees.

For creasing-reduction sprays to be effective, trees must be sprayed to point of runoff.

Pastures: Apply a single application using ground-rig sprayer. The application can be made at any time from the beginning of June to the middle of August.

Multiple applications of GIBBERELLIC ACID 100 can be applied as an adjunct to rotational grazing strategy with applications every 3 to 4 weeks with the final application no later than the middle of August.

Lower rates of 10 to 40mL/100L may be used on pastures dominant in phalaris as this grass is very responsive to gibberellic acid.

Higher rate of 40 to 80mL/100L may be required on pastures dominant in perennial ryegrass, annual ryegrass or cocksfoot.

COMPATIBILITY

GIBBERELLIC ACID 100 can be combined in the spray vat with 2,4-D as a cling spray, as well as with products containing Cycocel, certain insecticide, fungicide or nutritional sprays. Always carry out a small test mix to check compatibility before spraying larger areas.

Always check the label instructions for all products used.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

DO NOT apply under weather conditions, or from spraying equipment, that may cause spray to drift onto nearby susceptible plants/crops.

PROTECTION OF LIVESTOCK, WILDLIFE, FISH, CRUSTACEA AND ENVIRONMENT

DO NOT contaminate streams, rivers or watercourses with the chemical or used containers.

STORAGE AND DISPOSAL

Store in the closed, original container in a well-ventilated area, as cool as possible. DO NOT store for prolonged periods in direct sunlight.

This container can be recycled if it is clean, dry, free of visible residues and has the drumMUSTER logo visible. Triple-rinse container for disposal. Dispose of rinsate by adding it to the spray tank. DO NOT dispose of undiluted chemical on-site. Wash outside of the container and the cap. Store cleaned container in a sheltered place with cap removed. It will then be acceptable for recycling at any drumMUSTER collection or similar container management program site. The cap should not be replaced, but may be taken separately.

If not recycling, break, crush, or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant local, state or territory government regulations. DO NOT burn empty containers or product.

SAFETY DIRECTIONS

Wash hands after use.

FIRST AID

First aid is not generally required. If in doubt, contact a Poisons Information Centre. Phone Australia 13 11 26: New Zealand 0800 764 766 or a doctor.

SAFETY DATA SHEET

For further information refer to the Safety Data Sheet (SDS), which can be obtained from the supplier.

CONDITIONS OF SALE

The use of this product is beyond the control of Nutrien Ag Solutions Limited. Any provisions or rights under the Australian Consumer Law which cannot be excluded by law are not intended to be excluded by these conditions of sale. Subject to the foregoing, all warranties, conditions, rights and remedies expressed or implied under common law, statute or otherwise, in relation to the sale, supply, storage, use or application of this product are excluded. Nutrien Ag Solutions Limited does not accept any liability (including consequential loss and/or negligence) for any loss or damage connected with the sale, supply, storage, use or application of this product except for liability which cannot be excluded by statute.



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