



Companion™ Gold

A bio-fungicide for prevention, control and suppression of powdery mildew, sour rot and botrytis on grapes and ornamentals.

A microbial innoculant for horticulture, agriculture and specialty use (N-P-K 2-3-2)

B I O - F U N G I C I D E
M I C R O B I A L I N N O C U L A N T

NET CONTENTS: 10 LITRES

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ACTIVE INGREDIENT: Contains 0.3g/l Dried *Bacillus subtilis* (GB03 Strain) and contains not less than 1.5×10^7 cfu/ml in a suspension concentrate.

WARNING: Prolonged or frequent skin contact may cause allergic reactions in some individuals.

FIRST AID: If swallowed **DO NOT** induce vomiting. For advice contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Do not scrub the skin. If splashed in eyes, wash out immediately with water for at least 15 minutes. If inhaled move the victim to fresh air immediately. Begin artificial respiration if breathing has stopped.

PERSONAL PROTECTION: When mixing or applying wear eye protection, chemical resistant gloves, boots and cotton overalls. Ensure adequate ventilation when handling concentrate. Do not eat, drink or smoke while using. Remove protective clothing and wash hands and face thoroughly before meals and after work. Wash protective clothing daily after work.

STORAGE: Store in original container, tightly closed, away from foodstuffs.

SHELF LIFE: When stored appropriately, this product should show no significant degradation for 18 months from the date of manufacture. Contact your supplier for further information about the use of any product that is older than this.

DISPOSAL: For containers of 20 litres or less, rinse container until wash water is clear. Dispose of container at an approved landfill or AgRecovery Depot. Avoid contamination of any water supply or stream with product or empty container.

MATERIAL SAFETY DATA SHEET: Additional information is listed in the Material Safety Data Sheet available from Zelum Ltd or www.zelum.com

ERMA NEW ZEALAND: Additional information is available from the ERMA NZ website - www.ermanz.govt.nz. Approval Code:HSR000971

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PLEASE READ ENTIRE LABEL CAREFULLY BEFORE USE. SHAKE WELL BEFORE USE

FOR USE AS A BIO FUNGICIDE:

Companion Gold contains a naturally occurring GBO3 strain of *Bacillus subtilis* bacteria that acts as a broad spectrum preventative fungicide recommended for the control of powdery mildew, botrytis and sour rot in grapes and powdery mildew and botrytis in ornamentals during periods of low disease infection pressure. **Companion Gold** has multiple modes of action. It produces a broad spectrum antibiotic that disrupts pathogen cell wall formation. Beneficial colonies of GB03 are established on the leaves preventing the growth of foliar pathogens. GB03 is known to stimulate phytohormones which trigger the plants systemic resistance to disease. **Companion Gold** can be integrated into an overall disease and pest management strategy wherever fungicide use is necessary in an IPM programme. Thorough coverage is essential for optimum disease control. **Companion Gold** is also an important tool in resistance management strategies. **Companion Gold** should be applied prior to or in the early stages of disease development.

CROP	DISEASE	RATE	COMMENTS
Grapes	Powdery Mildew	200-400 ml/100 litres of water	Make applications at 7-10 day intervals as a bunch line spray when disease pressure is low. Where disease conditions are high, or during periods of high risk (e.g. wet, humid weather), use a specific botrytis fungicide. Apply in sufficient water to ensure thorough coverage. Apply before or at first sign of disease and repeat at 7-10 day intervals.
	Botrytis, Sour Rot	200-400 ml/100 litres of water	Make applications at 7-10 day intervals early season when disease pressure is low. Where disease conditions are high, or during periods of high risk (e.g. wet, humid weather), use a specific botrytis fungicide. Apply in sufficient water to ensure thorough coverage.
Ornamentals	Powdery mildew, Botrytis	200-400 ml/100 litres of water	Apply before or at first sign of disease and repeat at 7-10 day intervals.

NOTE: For the control of either disease, use alternative fungicides when disease pressure is high and during the rest of the season prior to harvest.

BATCH NO: _____

D.O.M: _____



FOR USE AS A MICROBIAL INNOCULANT:

The naturally occurring GBO3 strain of *Bacillus subtilis* bacteria can improve rooting, growth and plant vigour. GB03 is a gram positive bacterium that quickly colonizes the plants root hairs. This product can be used as a drench at the time of seeding, as a plug drench at transplanting, and during the growing season as a broadcast application.

Use on all types of bedding plants, perennials, cut flowers, all types of plugs, woody ornamentals, nursery crops, fruit trees, vines, foliage plants, vegetables and container plants.

APPLICATION	RATE	COMMENTS
Soil drench	100-200 ml/100 litres	Begin applications from seeding, sticking of cuttings or after transplanting. Thoroughly soak the growing media through the root zone. Repeat at 14-28 day intervals
Field application	2-4 litres/ha	Early season applications should be band applied ensuring good coverage of the soil. As the crop develops later sprays can be broadcast applications. Apply in 400l/ha water and repeat at 7-14 day intervals
Hydroponics Closed re-circulating systems (NFT)	Charging rate 250 ml/1000 litres Recharge rate 150 ml/1000 litres	The water is usually changed weekly. Clean mix tank at each change. Pre-soak transplants in same solution mix.
Hydroponics Open System	1250 ml/1000 litres	Apply the solution at the end of the watering cycle. Repeat every 14-28 days or by checking the quality of the roots.

WITHHOLDING PERIOD: **Companion Gold** can be applied up to, and including day of harvest.

APPLICATION PROCEDURE: Thorough coverage is essential for optimum disease control. To achieve good coverage, use the correct spray pressure, water volume nozzle-size and spacing with the correct ground speed are critical. Sprayers should be calibrated before use. To do this, consult spray nozzle catalogues and other industry references for specific information on sprayer calibration or contact a registered sprayer calibration consultant. **Companion Gold** is intended for use as a dilute spray in water for application through conventional ground spray equipment.

MIXING DIRECTIONS: Partially fill the spray tank with clean water and start agitation. Add the specified amount for the area to be treated of **Companion Gold** to the spray tank. Complete filling the tank to the required volume for the area to be treated. Maintain agitation until spraying is complete. Do not allow the spray mixture to stand overnight or for any prolonged periods.

COMPATIBILITY: **Companion Gold** is compatible with most fungicides, herbicides, insecticides surfactants and fertilizers. Do not mix with copper based fungicides or bactericides. Observe the most restrictive labelling limitations of the mixture product. Spray pH must be not less than pH 4 and not greater pH 9.

NOTICE TO BUYER: The manufacturer and vendors of **Companion Gold** warrant the formulation to contain the specified active ingredient within accepted tolerance but make no warranty of any kind on the uses of material and accept no responsibility, whether the material is used in accordance with the label directions or not.