GROWFORCE® Nutriscreen

NUTRITION

Bud to fruit - your nutrition and sun-protection solution

14% Ca, 3% Zn, 3% Mg, 3% N, 0.09% B

Benefits of Growforce® Nutriscreen

- Pre-bud nutrition that improves fruit set
- Safe to use formulation that can be used during flowering
- Calcium is required for synthesis of cells in the growing pollen tube and determines direction of growth of the pollen tube; it also plays a fundamental role in plant adaptation to environmental stress
- Added magnesium to improve chlorophyll production, especially in new leaf
- Provides essential zinc that improves pollination as well as levels of growth hormones
- Boron assists pollen tube development as well as the whole pollination process and enhances calcium absorption
- Premixed in carefully controlled ratios so the crop receives the essential nutrients specific to its growth stage
- Can be applied with a wide range of other agricultural chemicals, reducing the number of spray applications needed

SSRD™ Selective Spectral Reflection & Diffusion TECHNOLOGY

SUN-PROTECTION

Vivid Life Sciences Selective Spectral Reflection and Diffusion (SSRD) technology is carefully engineered to form a sunprotective crystalline matrix with a magnesium base. The Zinc and Calcium components of SSRD Technology combine to block the majority of harmful ultra-violet and infra-red radiation. The magnesium actively boosts chlorophyll production increasing the plants natural resistance to sunburn damage, and improving the photosynthetic efficiency of the treated plant. Growforce® Nutriscreen has proven to be highly effective in significantly reducing sunburn damage in a wide range of crops. Application rates of Growforce® Nutriscreen required for sun-protection are higher than normal fertilizer rates.

THE ROLE OF CALCIUM

Calcium is critical for the strength and integrity of cell walls. It plays an important role in cell division and growth development, including pollen tube growth. In fruit crops it is required in high quantities, in some cases in amounts equal to that of nitrogen. Calcium is also shown to participate in the complex responses of plant cells to environmental stress. Trials show that the foliar application of calcium can enhance plant drought resistance and heat stress by protecting the structure of the cellular plasma membranes whilst still maintaining photosynthesis.

THE ROLE OF ZINC

Pollen tubes and shoot tips have a high requirement for zinc at the sites of protein synthesis. Zinc is involved in DNA replication in protein molecules as well as in gene expression within plants. It is not mobile and thus may require re-application in crops with a high zinc requirement. Deficiency shows up in new growth.

THE ROLE OF MAGNESIUM

Magnesium forms part of the cell walls and is also an essential part of the chlorophyll molecule. This is essential for photosynthesis and therefore most other plant functions. Magnesium is very mobile in the plant and deficiencies are seen in the old leaves with inconsistent chlorosis.

THE ROLE OF BORON

Boron is needed for sugar movement within the plant, as well as formation of new cells at growing points. Boron also affects pollination and seed development.

VIVID LIFE SCIENCES®

Product Characteristics

Specific Gravity: 1.58 **Color:** Off white to light brown suspension

Analysis	International (w/w%)
Calcium (Ca)	14.1
Magnesium (Mg)	3.0
Zinc (Zn)	3.0
Nitrogen (N)	3.0
Boron (B)	0.09

Directions for Use

Agitate contents well before dilution. Suitable for application by:

	Foliar Spray	Aerial Spray	Sun Protection

CROP	Rate/A	COMMENTS	Rate/A
AVOCADOS, MANGOES - Foliar	1.5 - 2 qts.	Apply at bud break and spring flush with follow-up applications through fruit fill as required	3 - 4 qts.
CITRUS - Foliar	1 - 3 qts.	Apply 3 weeks prior to blossom with further applications 2 - 3 weekly petal fall in oranges and monthly in other citrus fruits up to 3 weeks prior to harvest	2.5 - 4 qts.
KIWI FRUIT - Foliar	1.5 - 2 qts.	Apply 2 weeks prior to bud formation with follow up applications as required during fruit fill	3 - 4 qts.
ORNAMENTALS - Foliar	.5 - 1 qts.	Apply at 4 - 5 leaf stage	1 - 2 qts.
OLIVES - Foliar	1.5 - 2 qts.	Apply first application 3 weeks prior to bud formation and then from fruit set onwards at monthly intervals	3 - 4 qts.
POME & STONE FRUIT - Foliar	1.5 - 3 qts.	Apply at early spur burst, complete petal fall and post blossom as required. DO NOT apply as foliar on high chill stone fruit varieties.	3 - 4 qts.
STRAWBERRIES - Foliar	.5 - 2 qts.	Apply 2 weeks prior to bud formation with further applications fertigated as new flushes appear	1.5 - 3 qts.
TOMATOES - Foliar	1 - 2 qts.	Apply every 14- 21 days from leaf stage onwards	2.5 - 4 qts.
TROPICAL FRUIT - Foliar	1 - 2 qts.	Spray before bud formation. Further applications with compatible spray programs as required	2.5 - 4 qts.
VEGETABLES (with fruit) - Foliar	1 - 3 qts.	First application 2 weeks prior to budding with follow-up applications as required	1 - 3 qts.
VINES	.5 - 2 qts.	Apply 1st application one week prior to bud formation with further applications at regular intervals up to veraison. Do not exceed 4x label rate.	1.5 - 3 qts.

SUN-PROTECTION: For optimal sun-protection Growforce® Nutriscreen should be applied every 10 - 14 days with a 1 : 100 dilution. Rates for sun-protection are intended as a guide only. The higher application rates should be used for high risk crops and lower application rates with higher dilution rates should be used for lower risk crops. Growforce® Nutriscreen is a suspension product and will leave a white film on plant surfaces and therefore should not be applied within 7-10 days of harvest unless a washing program is to be followed. Higher dilution or lower application rates should be used if concerned about residue on fruit, however it should be noted that this will lessen the effectiveness of sunburn protection provided by Growforce Nutriscreen®.