



MANTISSA
SMARTER NUTRITION

Early Season Program for Grapes

Greentip



Apply AminoQuelant-K at 4ltrs per hectare. This may be combined with Sulphur applications. The combination of Potassium and Active Amino Acids will help keep vines more active during cold conditions reduce the water loss from cells during frost and increase plant solutes to produce a type of “antifreeze” effect.

At the same time apply VitaZyme, bio-stimulant to maximise flower and fruit development.

3 Leaves Unfolded



Apply a further 2ltrs per hectare of AminoQuelant-K while there is potential for frost.

Inflorescence Visible



Apply AminoQuelant-Boron at 1-2ltrs per hectare. This will ensure good Boron availability during flowering and continue to boost energy with the active amino acid availability within the plants. Mantissa Molybdenum may be included at 500mls per hectare on Molybdenum responsive varieties, improving fruit set.

Frost



At any time if frost is expected, apply TerraSorb at 3ltrs per hectare, as close to the expected frost event as possible. This application mitigates physical damage caused by the frost.

TerraSorb contains free active amino acids that rapidly increases the concentration of solutes and so the solution in the cells and the vascular systems is less dilute (greater concentration of amino acids, carbohydrates and ions.) and freezing will be delayed. This reduces cavitation, reducing foliar desiccation, in turn keeping the plant functioning, and photosynthesising.

Terra Sorb should also be applied after frost events, to help faster recovery by restoring energy through the application of active amino acids, so that the plant does not have to rely on producing its own amino acids to overcome this stress during the recovery period. Particularly close to flowering the use of Terra Sorb before and after frost is of great benefit as the crop is already using a significant proportion of its own energy (amino acids) to overcome phenology flowering and fruit set stress.

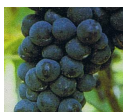
End of Flowering - Berries Size 3mm



Immediately post flowering, apply AminoQuelant-Ca (Calcium) at 3ltrs per hectare. This will help maximise fruit quality and quantity via good cell strength and integrity.

Apply the second application of the VitaZyme bio-stimulant programme, at 1 litre per ha, to maximise chlorophyll content in the leaves and develop even fruit and strong fruit skins leading into pre-bunch closure.

Note



Always read and understand the labels of all products, before proceeding with any mixing or spraying. If applying TerraSorb Foliar with Copper, Sulphur or Oils apply at 1.5ltrs per hectare twice, 7-10 days apart. Do not exceed 150mls per 100ltrs of water.

Leaf samples should be taken 7 to 10 days after the AQ-Ca / Vitazyme application to establish any requirements from this point on.

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