



ENGAGE
The Power of Nutrition

**Innovation for
field-grown
Brassicas**

Bio-Chel Ca

Cypher

Fortify Cu

Sentinel

Active Grow

In a competitive market achieving optimal quality of field-grown brassicas is the key to success. Whether it is to maximise weight and uniformity or to support the important processes which underpin crop health, or limit the damage from harmful, growth restricting stresses.

Timing nutrients and ensuring there is optimal supply through key growth processes will ensure brassica crops are supported through periods of peak demand and during periods of elevated stress, whether it be abiotic pressure through adverse growing conditions or biotic pressure from pests or pathogens.

Engage has over a decade of experience in brassica nutrition across the world and has developed a number of innovative products aimed at targeting key periods to keep crops healthy, so growth is of the highest quality.

This brochure highlights products that will aid growers in growing quality brassicas, maximising a plants genetic potential and circumventing loss through stress to ultimately assist in uniform growth, optimising quality and minimising wastage.



THE ULTIMATE SOURCE OF CALCIUM

Calcium has long been known as the essential element for brassicas in both the production of increased numbers of strong and healthy growth and for maximising dry matter to ensure optimal shelf life/storage.

The mobility of calcium is always an issue and many supplementary calcium fertiliser products contain nutrients that make them difficult to use when calcium demand is at its highest. Bio-Chel Ca allows maximum flexibility in application and timing to ensure crops get maximum effect whenever it is required.

Bio-Chel Ca is the strongest liquid calcium chelate in the world with over 10% available calcium. An important distinction for Bio-Chel Ca is that it is pure calcium so its uptake by plants both by roots and leaves, is unrivalled. All other calcium nutrients are attached to another such as nitrate, sulphate, phosphate, chloride or other, which the plant must deal with.

Being fully chelated ensures Bio-Chel Ca's availability over a wide range of pH's (4-9). This compares to other calciums which are only available at 6.5-8.5pH.

Having both superb uptake values and availability mean applications are lower allowing its continued use in all brassica species.

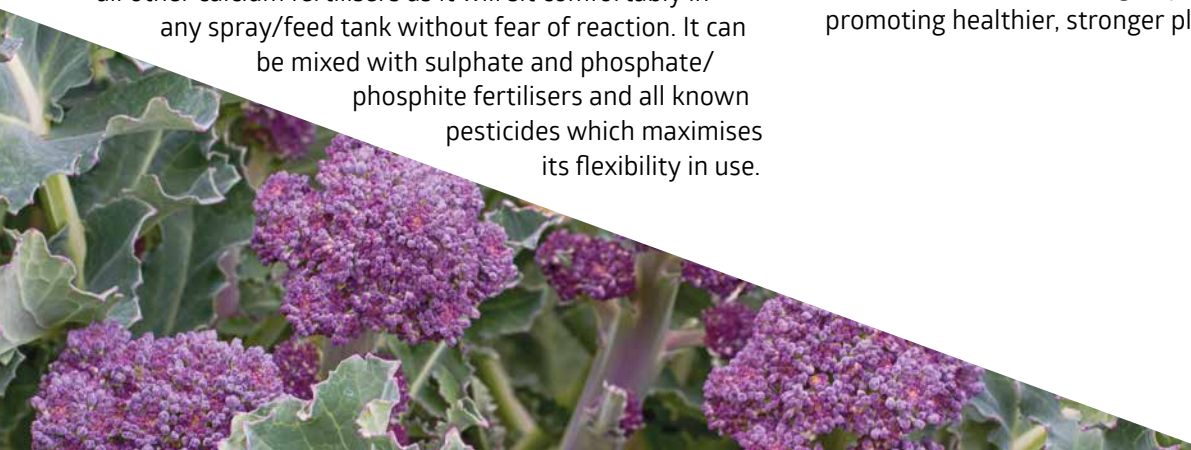
Also, the chelation in Bio-Chel Ca is extremely strong which prevents the calcium from actively reacting with other elements and salts. This sets Bio-Chel Ca apart from all other calcium fertilisers as it will sit comfortably in any spray/feed tank without fear of reaction. It can be mixed with sulphate and phosphate/phosphite fertilisers and all known pesticides which maximises its flexibility in use.

UNLOCK NUTRIENT POTENTIAL FOR INCREASED CROP GROWTH AND YIELD

Cypher is a modified organic acid blend derived from plant active portions of lignin and leonardite ore. It is designed to condition soils and substrates which have lost momentum become compacted or overloaded in bonded salts.

Cypher enhances nutrient uptake by combining nutrients with humic substances to aid well-balanced nutrition. Cypher improves the structure of soil by promoting fungi to create a crumb structure for better water and oxygen intake and improved root penetration. This increases the buffering power of the soil, and optimises N. P. K absorption by plants.

Cypher can neutralise both acid and alkaline soils and substrates by regulating the PH value and will reduce nitrate leaching into groundwater. This effect dramatically extends the performance of urea in the soil by up to 60-80 days. The buffering effects of Cypher helps to reduce the build-up of excessive elements (particularly sodium), toxic chemicals and heavy metals. All, these effects will long term enhance the resilience of crops, to stress factors such as cold, drought, pest, disease and toppling, promoting healthier, stronger plants.





BIO-FORTIFICATION FOR BRASSICAS

Fortify Cu is a unique formulation of proprietary halide ion technology and copper which complement each other to support plant bio-fortification, correct deficiency and aid vascular mobility within the plant with the aim of preventing yield loss associated with biotic and abiotic stress.

Copper is a trace element that is involved in several enzyme systems and also in photosynthesis. It has poor mobility within the plant particularly in deficient crops and deficiency can have a serious effect on crop growth and quality. Copper is held strongly by soil organic matter and this can determine whether adequate copper is available for crop growth, therefore foliar copper in an active form can have a positive effect on growth for all plants.

Fortify Cu contains nitrogen, copper and Engages' unique halide ion technology. The nutrients within Fortify Cu are provided in a form that is both mobile and that the crops can utilise quickly. This robust formula stimulates vascular flow and root activity to mobilise the copper in crops to maintain vigour and growth which in turn results in the maintenance of appearance and quality. The effective formula reinforces cellular processes to strengthen cell integrity to limit susceptibility to damage from abiotic and biotic stresses.



LIMITING STRESS TO PROTECT AND AID THE RECOVERY OF BRASSICA CROPS

Sentinel is an advanced combination of silicon and salicylic acid, proven to maximise the strength and health of crops.

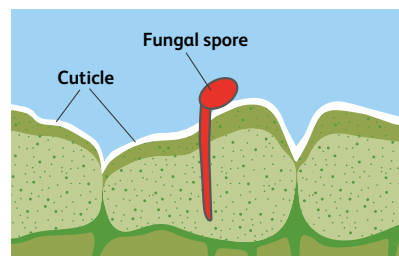
Sentinel reinforces the strength of cells during cellular production and increases the speed at which growth can be created so increasing overall growth potential.

The components of Sentinel are found naturally in plants and play an active role in plant growth and development, photosynthesis, transpiration, nutrient uptake and transport.

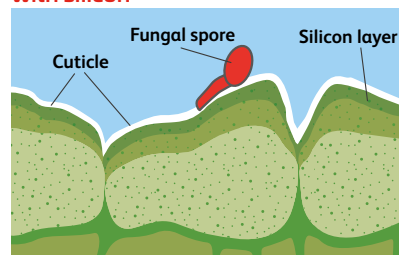
The form of silicon in Sentinel is important as it can all be used by the plant. Applied foliarly, Sentinel has the ability to support the formation of a thicker, stronger plant cuticle. It also significantly increases



without silicon



with silicon



leaf hair production so when used regularly can limit susceptibility to damage from both fungal spore ingress and from sucking and biting pests.

Contact us and see why we are leading the way in future crop nutrition and enhancement.



POWERING GROWTH, REDUCING STRESS!

MAS-Power Active Grow is a generous package of major and micronutrients together with a Bio Pack which supports plant health, increases nutrient efficiency and aids crops during periods of stress no matter what the cause.

Applications of Active Grow will give improved nutrient management and growth and is the perfect accompaniment to agrochemical applications especially those in a multi-product mix or for use as a quality enhancer on its own. The formulation of Active Grow is unique in the fact that it reduces oxidative stress factors and inhibits the production of ethylene under stress conditions to allow crops to recover more quickly.

MAS Bio Pack positively affects stress hormones which regulate a crops response to stress.

The balanced 12-12-12 analysis of Active Grow make it ideal for use in brassicas across the season from early transplants right up to harvest.



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