


bionatureuk Ltd.

Product Guide



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Delivering Crop Nutrition



Our Commitment to agriculture

Bionature is a UK based fertiliser company specialising in providing cutting edge, smart liquid fertiliser for growers of all crops across the UK.

Here at Bionature we believe that providing smart nutrition to a crop in a “little and often” approach is the best way to maintain the health and help to realise all crops full potential.

We also strongly believe that by applying the principals of sustainable production we can meet the requirements of the plant and the needs of the food industry.

NH Delta

Delta K: 15% Nitrogen (13,5% ureic, 1,5% nitric), 8,5% K₂O w/w
Delta Ca: 15% Nitrogen (10% ureic, 5% nitric), 9% CaO, 0,2% Boron w/w

- Available in two forms **NHK Delta** and **NHCa Delta**
- Highly efficient form of amine nitrogen (NH₂).
- Can be taken up by roots and foliage (scorch safe formula).
- Biologically stable - 100% plant available.
- Stronger more balanced plant growth (cytokinin type).
- Greater photosynthetic ability, better root function.
- Low environmental impact - low use rates, high soil retention.
- An NH₂ liquid nitrogen fertiliser stabilised with either the element potassium or calcium.

- NH Delta being in the NH₂ (amino) form is rapidly absorbed into the plant through roots or leaves without the need for plant energy and without needing to be converted into a different form prior to protein production. This low energy assimilation creates a more natural plant growth habit (cytokinin type), instead of the 'leggy' auxin type growth often associated from bagged nitrate (NO₃). Cytokinin growth in a plant produces a much larger fibrous root mass with shorter and thicker stems and more tillers.
- Using NH Delta nitrogen to create this growth habit allows the plant to absorb and access more water and available nutrients. This in turn produces greater biomass and in turn greater yield compared to nitrate fertilisers.

Summary:

NH Delta K and NH Delta Ca produces cytokinin growth in the plant. This in turn creates a much larger fibrous root mass with shorter thicker stems, leading to greater potential yield.

1-4-All

Copper (Cu) 0.5%; Iron (Fe) 1.5%; Manganese (Mn) 1.5%; Zinc (Zn) 2%; w/w. Includes Nitrogen (N) 2%; Magnesium (Mg) 0.5%; w/w

- Primarily designed for foliar uptake, scorch safe formula.
- Targets nutrients to high demand areas in foliage.
- Rapid resolution of micro-element deficiencies, no limitation to growth.
- Strong anti-stress effect in plants.

1-4-All is a liquid foliar fertiliser designed for use on all crops.

1-4-All gives a balanced range of micro-elements to ensure optimised plant growth, as and when demanded by the metabolic processes of the plant.

1-4-All can be used either as a standalone product to resolve micro-nutrient deficiencies, or as part of a fertiliser programme to support optimal growth of plants.

1-4-All has the additional benefit of reducing the effects of day to day (circadian) plant stresses, allowing more even growth.

Advantages of 1-4-All

- Corrects deficiencies quickly.
- 1-4-All effectively reduces physiological problems during vigorous growth and the development of flowers and fruits, with which the plant can optimise its productive potential.

CalFlux

5% Calcium (Ca); 3% Zinc (Zn); w/w

- An extremely high technology liquid Calcium and Zinc formulation that allows plants to absorb and maintain Calcium in the new growth areas of the plant that are notoriously difficult for the plant's transport system to deliver to (most other forms come in a liquid Calcium nitrate which can exacerbate instead of cure Calcium issues).
- CalFlux effectively allows plants to use Calcium while under stress caused by poor environmental conditions. This allows the plant to form better cell wall structure by supplying Calcium to the plant it can use to help fight its own Calcium resources from the new growth area.
- If a plant comes under stress without the use of CalFlux it will stop the supply to the new growth areas of the plant creating weaker cell walls, pod and seed abortion and uneven sized seed.

Summary: Unique plant absorbable formulation of Calcium and Zinc helping the plant fight physiological disorders in periods of environmental stress.

XStress and CalFlux Combined: The most powerful stress busting combination on the market currently. Using XStress to combat the extreme environmental stresses, while supplying a plant an absorbable form of Calcium and Zinc to help combat extreme environmental disorders as well as any physiological disorders that may be occurring.



0.5% Copper (Cu); 2% Iron (Fe); 1% Manganese (Mn);
2% Zinc (Zn; w/w. Formulated with glycine.

- A liquid foliar nutritional product designed to supply the plant with a balanced range of micro-elements specifically formulated for combating abiotic stress and to improve crop growth in extreme conditions such as high or low temperatures, floods or droughts and maintain productive growth in non-ideal conditions such as cloudy, cool days.
- XStress strengthens cell walls and enhances the plant's natural processes that neutralises the toxins that stress situations produce in the tissues of the plant. This in turn allows the leaf stomata to continue working, allowing the plant in stress situations to continue absorbing more sunlight (energy) in times when leaf roll happens for protection and energy absorption would not normally happen because the plants natural protection system has shut down the energy absorption process to try and protect itself from whichever extreme environmental stress it is under pressure from.

- Relieving extreme environmental stresses in a plant naturally increases a plant's natural immune systems ability to fight diseases. It has been extremely noticeable the lower levels of disease seen in plants treated with an XStress programme creating a much greener canopy.

Summary: Extremely powerful stress negating product containing micro-elements. Best used in periods of high biomass production to help the plant maintain this process without suffering from environmental stresses.

TipTop

Nitrogen (N) 20%, phosphorus (as P₂O₅) 20% potassium (as K₂O), 20% magnesium (Mg) 0.9%. Boron (B) 0.0315, cobalt (Co) 0.0012, copper (Cu) 0.0750, iron (Fe) 0.2420, manganese (Mn) 0.0750, molybdenum (Mo) 0.0012, zinc (Zn) 0.0750% w/v

- A liquid 20:20:20 NPK formulation also containing Magnesium, Boron, Cobalt, Copper, Iron, Manganese, Molybdenum and Zinc in a trace form.
- A fast response liquid fertiliser product for producing very quick biomass increases after applications.
- Product performance is based on the quality of the formulation that the nutrients are suspended in, allowing rapid uptake of the fertiliser through the leaves of the plant, removing any potential block on yield potential.

Advantages of TipTop

- TipTop has been specially formulated to ensure it is fully stable in the bottle and fully water soluble, ensuring consistent rates of application and dosing.
- The TipTop formulation has been designed to give an optimal spray pattern, ensuring thorough coverage of the plant giving a more even spread of nutrients.
- TipTop can be used as a starter fertiliser providing all the crop needs to establish quickly.
- The full compliment of macro and micro-elements ensure that TipTop can be used as a foliar feed without the necessity for base dressings.
- Containing nutrients which are rapidly taken up by the plant addressing deficiencies quickly and effectively with minimal losses.

RAINBOW WAVE

9% Boron (B); 0.1% Molybdenum (Mo); w/w

Rainbow Wave contains Boron and Molybdenum which are two of the seven essential micronutrients necessary for healthy crop growth in many crops including OSR, potatoes, vegetables, fruit etc.

Rainbow Wave is a product that pushes the crop to translocate the important elements being manufactured in mature leaves,

Rainbow Wave helps the crop to invest the energy and resources produced into the parts of the plant that are going to be harvested, especially fruits, roots and tubers rather than into shoot development. This improves yield and quality, and also gets more value out of other inputs as they are used to produce different parts of the plant that are also valuable.

Rainbow Wave has quicker activity than conventional fertilisers improving colour

Advantages of Rainbow Wave

- In top fruit and citrus, bigger and more uniform fruits, reducing flower and fruit thinning. Improves colour and quality. Increases °Brix, reducing acidity in a moderated manner.
- In vineyards increases production. size, colour, homogeneity and °Brix.
- In potatoes increases production and tuber size. Also increases distribution, size, quantity and quality.
- In strawberries improves colour, °Brix, homogeneity and production.
- In vegetables improves yield, colour and uniformity. Reduces fruit losses at fruit setting and improved flowering.
- Boron is particularly important for OSR, aiding stem elongation and flowering.

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Our achievements so far:

- 2017 W Wheat YEN
 - 2017 W Wheat 15.3 T/Ha Milling Wheat
- 2017 Pea World Record
- 2018 OSR World Record 7.01 T/Ha
- 2018 W Wheat YEN
- 2018 OSR YEN
- YEN Gold Award for highest grain yield in 2020, 2021 and 2022
- YEN Gold Award for highest barley yield 2020, 2021 and 2022
- World winter barley record 14.23 t/ha in 2021
- YEN Gold Award for highest oilseed rape yield in 2020 and 2022
 - YEN Bronze Best % of potential OSR yield
 - Guinness World Record 2022 wheat and barley yield