



BIOSTIMULANTS

Specialists in Plant Health

Proplex

The Ultimate Biostimulant



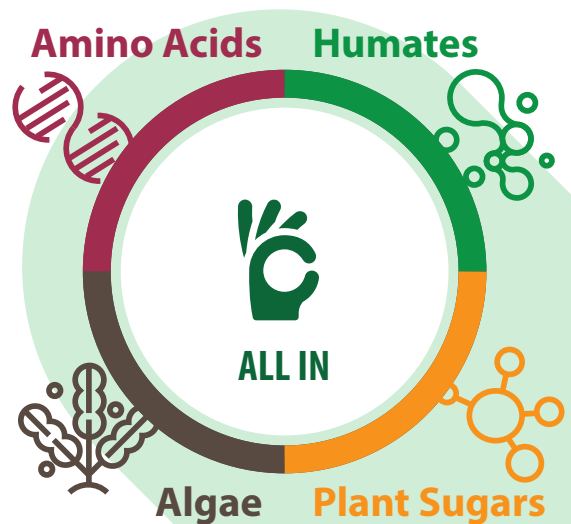
Proplex

The Ultimate Biostimulant

Proplex is a unique combination of synergistic biostimulant raw materials formulated with Micromix’s proprietary AMIX Active Uptake Complex delivery system with the purpose of encouraging crop health, earliness, yield and quality and with an unrivalled ability to de-stress crops.

Features:

- Effective growth and yield enhancer can be used in any crop
- Reduces stress levels in all forms of crops, reduces winter-kill
- Helps stressed or damaged crops recover
- Stimulation of healthy roots and shoot development
- Stronger cell walls and accelerated cell growth, early harvest.
- Visible effect on photosynthesis and greening
- Stronger plants - Slows disease ingress and progression
- As a tank-mix partner it can improve herbicide activity.
- Rate for rate more powerful than any alternative Biostimulant tested to date
- Rapid acting: Immediately see the benefits in a matter of days
- Elicitation effect: causing increases in growth hormone production
- Low application rates when used as part of a programme





Typical analysis:

Nitrate Nitrogen	2.00%
Magnesium	0.30 %
ThioSulphur	5.00 %
Copper	0.05 %
Boron	0.15 %
Iron	0.20 %
Manganese	0.10 %
Zinc	0.50 %
Carbon	1.25 %
Ascophyllum (algae)	5.0 %
L-Amino acids	Trace
Betaines	Trace
Vitamin B1	Trace
Giberellins & Auxins	Trace



Amino Acids



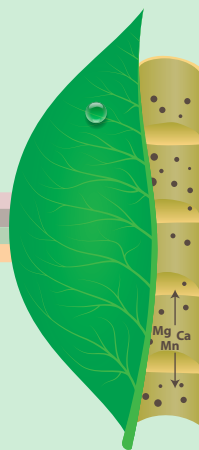
Algae



Humates



Plant Sugars



AMIX
TECHNOLOGY



Reduces abiotic stress levels



Yield enhancer



Accelerated growth & Stronger cell walls



Helps stressed or damaged crops recover



Stimulation of healthy roots and shoot development



Visible effect on photosynthesis and greening

What does Proplex do to the crop?

1 Increases yield quality and quantity in any crop

Proplex works within the plant in several areas, but mainly it enhances plant health and strength by providing intermediates for growth, so the plant doesn't need to make itself:

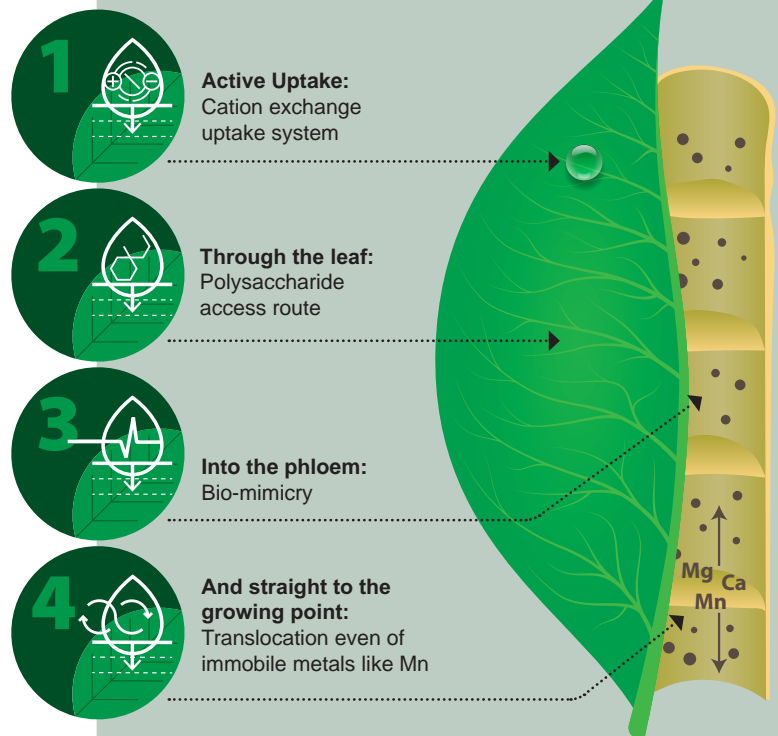
- Providing and saving extra energy
- Reinforcing the plants own natural growing processes
- Pushing root metabolism development at both high and low temperatures



Crop: Winter feed barley
 Location: UK East Midlands
 Growing conditions: Poor depth of soil coupled to drought
 • 2L/ha Proplex applied in spring
 • Only 12mm rainfall between February and May
 • Dramatic response

What is the AMIX Active Uptake Complex?

Micromix's proprietary AMIX Active Uptake Complex is based on Humic and Fulvic acids with lignin salts uniquely formulated to produce a low pH formulation that does not compromise the solubility of the Humic content. The AMIX Complex works with all divalent metallic cations to generate active uptake at the leaf surface (as opposed to passive) and has proven to consistently generate yield responses even in the absence of any measurable deficiency.



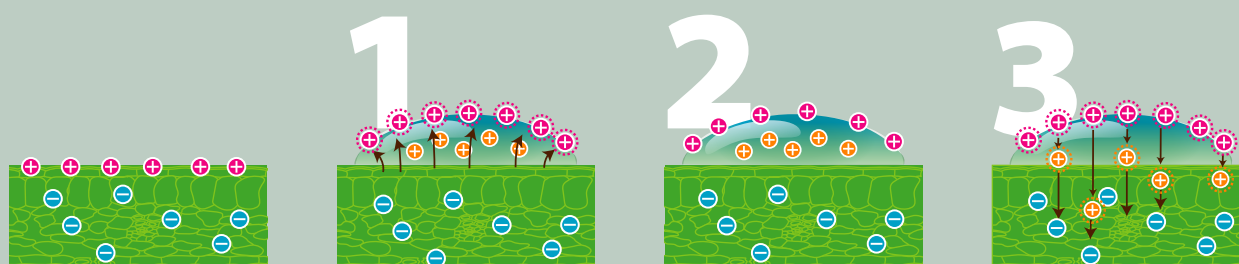
2 Has an elicitor effect for Stronger cells and accelerated growth

Proplex provides building blocks for carbohydrate and protein generation in the shape of Amino acids and sugars but also contains some compounds that are precursors of natural hormones so that the plant can make its own growth hormones faster and more efficiently especially under extreme conditions.

The natural growth hormones, added to the effect on photosynthesis and chlorophyll content lead to an accelerated production of stronger cells.

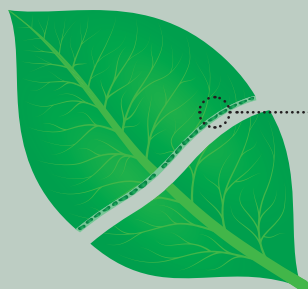
1. An active cation uptake system

The AMIX Complex creates an electrical gradient that moves the positive charge on the leaf surface to the top of the droplet, increasing the electrical potential difference. The positively charged metal ions in the product are repelled by the stronger ones at the top of the droplet and strongly attracted by the negative ones into the leaf.



2. A polysaccharide access route to the heart of the leaf

The AMIX Complex utilises the polysaccharide route into the leaf. This polysaccharide is found both in the beds which anchor the trichomes sited to protect areas where the phloem is loading and in striations in the leaf wax running through the surface into the epidermis.

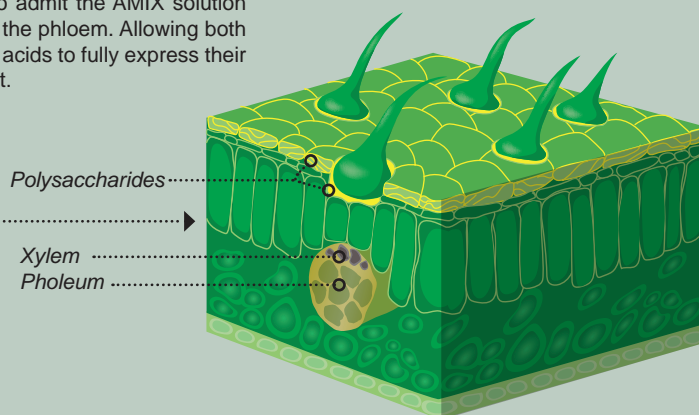


3. Using bio-mimicry to fool the plant

The AMIX Complex is formulated with natural Leonardite-derived Humic and Fulvic biostimulants, complexed with lignin salts in a unique way that does not compromise the solubility of the Humic content at lower pH's. The humic content therefore stays soluble coercing it to admit the AMIX solution of metal ions into the phloem. Allowing both Humic and Fulvic acids to fully express their biostimulant effect.

4. Active translocation and mobility

With the AMIX Complex, we obtain an optimal molecular weight, that optimises an efficient movement of the product into the phloem taking the elements to wherever the growth is taking place, even immobile elements like Manganese.



3 Reduces stress levels as well as recovery from stress

Proplex addresses the metabolic issues generated by stress to alleviate the effects of stress. It contains a range of macro and micronutrients which contribute to the overall plant health keep crops growing even in extreme heat and drought.

Crop: Winter Wheat

Location: Poland

Application: 0.5 L/ha of Proplex applied at 3 leaf stage in October
Growing conditions: Winter temperatures of down to -20 and thick snow coverage.

Picture was taken in February after the snow melted.





How to use Proplex?

Proplex liquid can be used on all crops and at all growth stages.

Autumn application is recommended to improve over-wintering and increase resistance to winter-kill, at 0.5L/ha Proplex

Application rate should always be proportional to crop biomass:

Seedling to young plant:	0.25 to 0.5 L/ha
Late vegetative stage:	1.0 - 1.25 L/ha
From stem elongation/reproductive stage:	1.0 to 2.0 L/ha
Mature High-biomass crops and root crops	2.0 L/ha
Tree crops (programme of 3 to 4 applications)	1.0 to 2.0 L/ha

A programme of repeated lower-dose treatments is always more effective than a single higher dose.

