



Bioplex Granules

A range of fertilizers combined with biostimulant components including potassium phosphite, amino acids, trace elements and garlic extract



Designed to combine NPK nutrition with synergistic biostimulant components

Includes amino acids to aid plant energy conservation and to reduce plant stress

The phosphorus component includes 5% potassium phosphite to enhance root development and plant metabolic processes

Contains magnesium and iron to enhance green up effects

Contains garlic extract with biological benefits

A complimentary Bioplex Liquid product is also available



Bioplex Granules

A range of mini-granular fertilizers for use on amenity turf combining traditional NPK nutrients with added biostimulatory components

The Bioplex range of high quality, mini-granular, compound fertilizers is specially formulated to provide the traditional elements of nitrogen, phosphorus and potassium. In addition, the formulations also contain components that provide synergistic biostimulant effects that help to reduce plant stress, enhance root development and ensure greater metabolic protection. All of these benefits are provided within homogeneous mini-granules to give uniform distribution of the components as well as providing ease of application.

Amino Acids

Amino acids are the structural units of all proteins, and are natural organic molecules that take part in all physiological processes. Under normal growing conditions plants synthesize their own amino acids for these processes but at a significant expense in terms of energy.

When stress situations occur however, the demand for amino acids becomes greater than the plant is able to meet. The addition of supplementary amino acids during stress periods allows considerable energy savings to be made, allowing them to be channelled into the essential plant physiological processes such as photosynthesis and protein formation (new growth).

Amino acids also have a natural chelating effect so enable better uptake of nutrients by the plant. The biologically active L-form amino acids found in Bioplex Granules provide this chelating effect as well as being a ready source of amino acids.

Phosphorus

Phosphorus is a very important element and is essential for plant metabolic activities, included in the function of enzymes, formation of proteins and as a structural component of phosphoproteins, phospholipids and nucleic acids. Plants suffering from deficiency amongst other effects are susceptible to growth suppression, less tolerant to low temperatures, use water less efficiently, take longer to root and are less disease resistant.

Although Phosphorus can be found in reasonable quantities in rootzones, it first has to be dissolved in the soil water in order to be taken up by the plant. However the element is relatively insoluble in water, resulting in availability to the plant being very restricted.

Phosphite is also a form of phosphorus but has one less oxygen molecule in its structure making it more soluble in water, consequently it is not tied up in the soil. The phosphite ions can stay in the soil solution and are easily absorbed by the plant root system and leaves and results in true systemic movement within the xylem and phloem.

Phosphite has also been shown to have a biostimulant effect, leading to increased metabolic function and root growth, as well as helping to boost the plant's natural defence mechanisms and favouring colonisation by mycorrhizae.

In Bioplex Granules 5% of the total phosphorus in the formulations is present as potassium phosphite.

Garlic Extract

Bioplex Granules also contains garlic extract as it has been shown that garlic (*Allium sativum*) has various biological benefits that include helping to build up the plant's natural disease defences against common fungal diseases, helping to discourage soil pests and aiding recovery from damage caused by soil nematodes.

Trace Elements

Iron is important in the production of chlorophyll which gives plants their green colour. Iron also plays an important role in many biochemical reactions involving photosynthesis, nitrogen utilisation and root growth. Magnesium is important for the maintenance of green colour and growth in the plant and is involved in vital plant activities including phosphorus translocation mechanisms, enzyme reactions and it is also a component of chlorophyll.

Both these macronutrients are present in the Bioplex Granules range.

Pack details of Bioplex Granules

Pack size: 20kg box

Pack coverage: 1,000m²

The Bioplex Granules Range

Apply at 20g/m² when conditions are favourable using conventional rotary fertilizer spreaders. Do not apply under drought conditions.

12-1-9 + 1%Mg + 1%Fe + Rooting biostimulants + Garlic extract

Ideally applied during the Spring and Summer months

At 20g/m² one treatment provides **N 24.0 P 2.0 K 18.0** kg/ha



6-1-12 + 2%Mg + 2%Fe + Rooting biostimulants + Garlic extract

Apply during the season when high potassium is required

At 20g/m² one treatment provides **N 12.0 P 2.0 K 24.0** kg/ha



3-1-3 + 2%Mg + 4%Fe + Rooting biostimulants + Garlic extract

Ideally applied during the autumn and winter months

At 20g/m² one treatment provides **N 6.0 P 2.0 K 6.0** kg/ha



Bioplex Liquid



This complimentary Bioplex liquid formulation is also available and contains amino acids, 5% phosphite, garlic extract and trace elements to improve overall turf health.

Application rate: Apply at 20l/ha every 4-6 weeks during the growing season.

Pack size: 5 litres.

Pack coverage : 2,500 sq.m