





# **Bioplex Granules**

- Designed to combine NPK nutrition with synergistic biostimulant components
- \* Includes amino acids to aid plant energy conservation and to reduce plant stress
- \* Phosphorus component includes 5% Potassium Phosphite to enhance root development and plant metabolic processes
- \* Magnesium and Iron enhance green up effects
- \* Contains garlic extract with biological benefits
- ★ Bioplex Liquid product also available







In addition to N, P and K, the **Bioplex Range** of high quality, mini-granular, compound fertilizers also contain components that provide synergistic biostimulant effects that help to reduce plant stress, enhance root development and ensure greater metabolic protection.

#### **Amino Acids**

The structural units of all proteins. 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). They 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 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 are susceptible to growth suppression, less tolerant to low temperatures, use water less efficiently, take longer to root and are less disease resistant.

Phosphorus is relatively insoluble in water, resulting in very restricted availability to the plant. Phosphite is also a form of Phosphorus but has one less Oxygen molecule in its structure making it more soluble in water, and is consequently 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  ${\bf Bioplex}$   ${\bf Granules}$  5% of the total Phosphorus in the formulation is present as Potassium Phosphite.

#### **Garlic Extract**

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 and 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 important nutrients are present in the **Bioplex Granules** range.

Bioplex Granules Pack size: 20kg box. Pack coverage: 1,000 sq.m

## **Bioplex Liquid**



This complimentary formulation contains amino acids, 5% phosphite, garlic extract and trace elements to improve overall turf health. It is applied every 4-6 weeks during the growing season at the rate of 20 litres per hectare in 700 litres of water.

Bioplex Liquid Pack size: 5 litres. Pack coverage: 2,500 sq.m