

### **Advantages**

Turf King contains all 11 essential elements that are normally absorbed from the soil but are now applied effectively through the leaf. The broad-spectrum nature of the Turf King ultra-foliar complements issues of soil variability to balance turf nutrient composition.

Major nutrients are supplied in balance as Turf King supplies major nutrients with consideration given to nutrient removal by turf and the general availability or reserve of nutrients typically found in the soil.

This product has a pH similar to the pH of leaf sap making it safe for foliar applications at high concentrations.

Trace metals in Turf King are EDTA-chelated to achieve a sustainable response and to meet the plant requirement under soil conditions that limits trace element availability.

The balanced nature of Turf King allows for Urea and UAN tank mixing in circumstances where more nitrogen input is required.

Phosphorus in the product stimulates photosynthesis and moves more sugars via phloem to reach to growing points and roots.

Phosphorus levels move from leaves to roots increasing the growth of lateral and fine roots. Root exudation is increased as a result of stimulated photosynthesis resulting in an increase in rhizosphere bacterial activity.

Stimulated exudation of citric acid by the roots unlocks phosphorus and trace elements contained in the soil. Increased rhizosphere deposition improves soil organic matter and soil friability.

#### **Analysis**



# Growth Fertiliser for Turf

Turf King Foliar Fertiliser is a highly engineered Foliar fertiliser that applies nutrient delivery technology to deliver its nutrient package through the leaf. It has been formulated especially for turf playing surfaces and turf farming enterprises. It is highly concentrated and contains the optimum amount and balance of nutrients in one single application. Because of this Turf King Foliar Fertiliser endows the plant with the ability to guard against soil nutrient variability and deficiency and ensures greater plant protection, increased growth and improved yield qualities.

#### **Especially for Turf Crops**

**Turf King Foliar** is designed specifically for turf crops. This means that it will work better and provide greater results for this particular crop. By using plant science RLF has engineered a special range of Foliar products that are the latest in crop-focused nutrition. **Turf King Foliar** is one of these products and ensures the delivery of a specially formulated nutrient package that gives maximum benefit to turf crops.

# Gives the Plant the Resources to Grow Strong

**Turf King Foliar** ensures that the NPK inputs (nitrogen, phosphorus and potassium) together with other chemical practices such as herbicide and fungicide use achieve maximum gain. **Turf King Foliar** gives the plant the resources it needs to grow strong. The complete, specially formulated multi-spectrum nutrient package it delivers directly to the plant, supports the crop's growth and strength by ensuring that NPK fertilisers and other herbicides and fungicides are buffered during uptake.

#### **Nutrient Delivery System**

**Turf King Foliar** overcomes the nutrient deficiency problems associated with soil variability. It is contained in an advanced nutrient delivery system (NDS) developed specifically for this purpose. This technology enables the safe transfer of nutrients through the leaf and into the plant cell walls. This increases nutrient delivery significantly. It's formulation gives stability and maintains the integrity of the plant without any risk of element antagonism.

#### **Application Rates** 3 to 6 Litres/ha\*\*

Crop Type	Dilution in Water* Minimum Maximum
Turf and Lawns	1 to 10 1 to 50
Dairy Pasture	1 to 20 1 to 50
Irrigated Pasture	1 to 20 1 to 50
Irrigated Lucerne/Hay	1 to 20 1 to 50
Dry Land Pasture	1 to 20 1 to 50
Crop Type	Number of Applications
Turf and Lawns	Every 2 to 3 weeks
Dairy Pasture	After every cut
Irrigated Pasture	After every cut
Irrigated Lucerne/Hay	After every cut
Dry Land Pasture	One to two times

\*Use minimum dilution in dewy condition or when leaf surface is wettish \*\*Usual Application Rate

#### **How to Mix**







Mix with Water



Mix with other Chemicals



#### **Product Compatibility + Jar Testing**

DO NOT mix with alkaline copper fungicides or inoculants. If you are unsure, we recommend a simple jar test of products. Mix together and check if reaction occurs.

#### **Precautions**



Non-toxic product. Avoid unneeded contact. Keep out of the reach of children. If contact is made with eyes, immediately rinse with plenty of water. If swallowed, seek medical attention.

## Structural and Functional Role in the Plant of Essential Elements contained in Turf King

Essential element	Structural Role	Physiological Role
Nitrogen	Amino acids, proteins, cofactors, Vitamins, hormones, chlorophyll, hereditary structures.	Enzymes, vitamins, light energy capture and chemical energy transfer
Phosphorus	Ribonucleic acids, hereditary structure, cell nucleus, ATP, phospholipids and cell metabolites.	Energy capture, transfer & utilization in Respiration, photosynthesis, protein syntesis, cell division, induce disease resistance.
Potassium	Has no structural role but is the major counter ion (cation) to balance organic acids and anions.	Osmotic balance, stomata function, phloem transport, enzyme activator, increase disease resistance.
Sulphur	Sulphur-containing aminon acids, tertiary protein structure, enzymes, cofactors, coenzymes, Fe-S proteins, ferridoxins.	Cellular metabolism, protein synthesis, Respiration, lipid synthesis
Magnesium	Chlorophyll structure, stability of Ribosomal subunits	Photosynthesis, activators of many enzymes involved in phosphate transfer
Iron	Heme proteins (cytochromes & leghemoglobolin), Catalase, peroxidase and Fe-S proteins, Ferridoxin.	Oxidoreduction reactions, chlorophyll synthesis, electron transfer & nitrogen fixation.
Manganese	Chloroplast water-splitting system	Electron transport in photsystem II, Nitrate reductase, activators of many enzymes
Zinc	In coenzyme of carbonic anhydrase, dehydrogenases (alchohol dehydrogenase)	IAA synthesis, protein synthesis, CO2 supply to Photosynthesis, enzyme activator
Copper	Polyphenol oxidases, Oxidase enzymes (ascorbic acid, tyrosinase)	Cytolchrome oxidase , photosynthetic electron transpor by plastocyanin, nitrogen fixation
Molybdenum	Nitrate reductase, aldehyde oxidase, Sulphite oxidase (detox), Xanthine dehydrogenase	Nitrogen fixation, purine metabolism, IAA synthesis, detoxifying excess sulphite.

# **Turf Care guide:**

- One deep watering is better than several light watering.
- Water to a depth of 10cm or 4 inches.
- Water early morning or late afternoon to reduce evaporation.
- When fertilising soil, add fertiliser when soil is dampish with little watering to increase nutrient uptake efficiency by roots.
- Add compost or peat moss to clay soil and sandy soil to increase water and nutrient holding capacity.
- Leave grass clipping once or twice per year to breakdown and increase surface organic matter.



