

Main Event Root Profusion Fertilizer

6-0-1

with Uptake Enhancement Technology (UTE)



Root Profusion with **UTE** provides nitrogen and potassium and balance of chelated micro nutrients. This root energizing fertilizer, with nutrient enhancing uptake and phosphorous assimilating technologies make **Root Profusion** the ideal product to grow strong healthy turfgrass roots.

Root profusion was specifically formulated to assist in the promotion, generation, and formation of turfgrass root structure.



Root Profusion's nitrogen is derived from 3 forms of nitrogen: urea nitrogen, potassium nitrate, and ammonium nitrate. The nitrate nitrogen, being immediately available to the plant through the water phase of absorption to both foliar and root structure, assures that it will be rapidly converted into more complex forms of nitrogen compounds within the plant. It is then used immediately for growth development enzymatic production. The potassium nitrate is concurrently used both as nitrogen source and as a potassium source for immediate root development. This form is both negatively and positively bonded and when dissolved into the soil solution it is not absorbed by soil cations and anions and is much more available for plant uptake and assimilation. The urea form of nitrogen is slower to become available and must be broken down by nitrobacteria processes then assimilated by the plant. This three-way nitrogen management approach insures complete uptake feeding and utilization of the nitrogen compounds within the plant by foliage and by the roots.

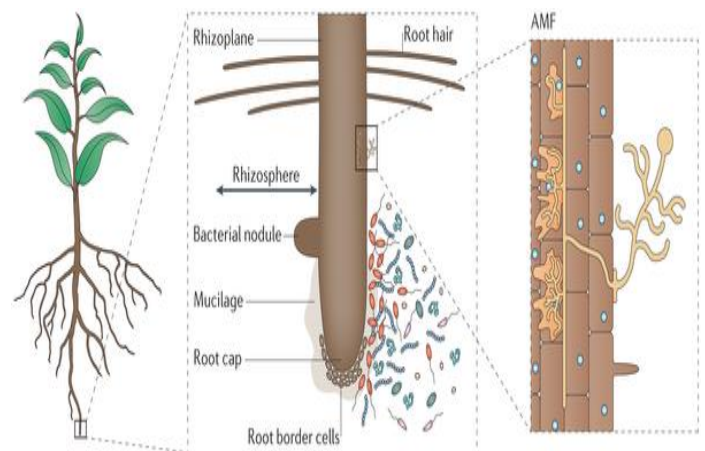
Root Profusion potassium is in the form of potassium nitrate as mentioned above, and in the form of potassium sulfate. Potassium sulfate has very low burn

potential and a very high plant absorption rate through both leaf and root tissue for maximum utilization.

Root Profusion micronutrient chelates are derived from strongly bonded EDTA forms of iron, copper, manganese and zinc. These high level chelate technologies strongly bond with the metal ions and prevent rapid conversion in the soil into unavailable forms. These high level chelates must be first broken down by soil biota and then are assimilated by the plant roots yielding a longer sustained release. Complexed sulfate forms are also contained within the product to address the need for quickly available metal ions.

Uptake Enhancement Technology -UTE

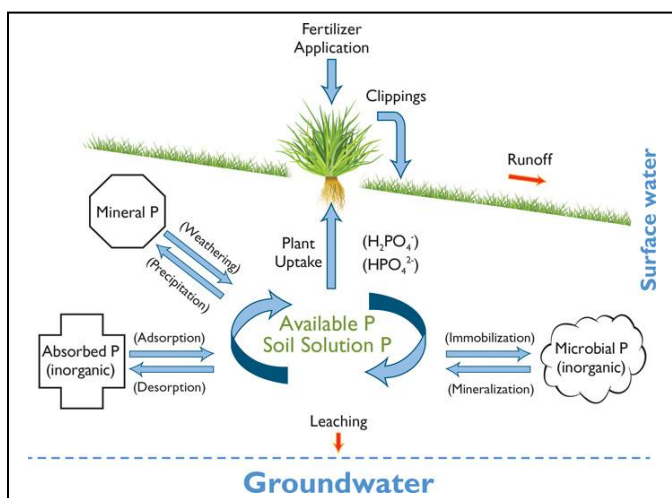
UTE is proprietary technology developed by Quest through years of testing with hundreds of trials on various plant species determining how to achieve better foliar and soil uptake of plant nutrients. This technology has been proven to release available soil nutrients and increase plant uptake, metabolism and assimilation of nutrients in both foliar and soil application methods. UTE increases biological activity in and around the root hair(s) and has been found to increase beneficial bacteria and Vesicular Arbuscular Mycorrhiza in the rhizosphere.



Nature Reviews | Microbiology

Root Profusion also contains a very unique soil enabling phosphorous releasing technology compound.

This technology helps release “locked up and unavailable soil phosphorous” that would normally be unavailable to the plant, through positive and negative enzymatic soil bonding processes. This technology has been well proven and validated in agricultural row crops but has not been widely used in turf and horticulture until now.



Root Profusion also contains a high rate of Eckilona maxima seaweed extract from the Southern Hemisphere of South Africa. This South African seaweed extract has been proven to contain high rates of auxin compounds that directly precipitate root initiation, elongation and root growth in plants, while not causing excessive foliage development.

Use **Root Profusion** for maximum benefit in early spring for best rooting results or in late fall if starting a root grow in program. **Root Profusion** can be used anytime for maximum root growth and regeneration. during stress periods on turfgrass experiencing stressful conditions or enduring high traffic conditions or where nutrient demand is high. Initiate applications in spring when first green-up appears and repeat as needed during the growing season. Apply in 2-4 gallons per 1000 sq/ft per application when first green-up appears and repeat every 10 to 14 days as needed during the active growing season depending desired growth requirements.

Root Profusion is physically compatible with most crop protection chemicals. However, Quest recommends testing for compatibility in all spray combinations by a simple jar test with appropriate concentrations.

USE RATES

4 oz. to 8oz per 1000/sq/ft every 14 days in 2 gal. per 1000/sq/ft

Dependent upon turfgrass nutrient requirement and growing demand a desired speed of recovery or grow in requirements.

KEEP OUT OF REACH OF CHILDREN **CAUTION - MAY CAUSE IRRITATION**

PRECAUTIONARY STATEMENTS: Avoid prolonged or repeated contact with eyes, skin and clothing. Chemical goggles or a full-face shield should be worn. To protect skin, wear appropriate protective equipment, such as rubber or plastic aprons, rubber gloves and boots. Avoid breathing mist or vapor. Keep containers closed. Wash thoroughly after handling. May cause gastrointestinal distress, if swallowed.

HANDLING AND STORAGE: Minimize skin exposure. Store mini-bulks and smaller containers out of sun in an area of moderate temperature. Do not re-use containers. Avoid containers, piping or fittings made of copper-containing alloys or galvanized metal. Dispose of containers in accordance with local regulations and requirements.

FIRST AID: In case of contact with eyes, immediately flush eyes with water for at least 15 minutes. Seek immediate medical attention if irritation occurs. In case of skin contact, flush skin with water. If irritation occurs, seek immediate medical attention. Remove and wash contaminated clothing before reuse. If swallowed, give large amounts of water and induce vomiting by touching the back of the throat with finger unless unconscious. Seek immediate medical attention.

IN CASE OF SPILL: Contain spill and maximize recovery. Keep spill out of water sources. Exercise caution in area of spill for slippery conditions. Dispose of spilled material in accordance with regulatory requirements.

Root Profusion 6-0-1 **TECHNICAL DATA INFORMATION**

<u>PLANT NUTRIENT CONTENT</u>	<u>% by Wt.</u>
Total Nitrogen (N).....	6.0%
3.10% Ammoniacal Nitrogen	
0.20% Nitrate Nitrogen	
2.7% Urea Nitrogen	
Potash (K2O).....	1.0%
Boron (B).....	0.02%
Copper (Cu).....	0.25%
0.25% Chelated Copper (Cu)	
Iron (Fe)	0.25%
0.25% Chelated Iron (Fe)	
Manganese (Mn).....	0.25%
0.25% Chelated (Mn)	
Molybdate (Mo).....	0.001%
Zinc (Zn).....	0.50%
0.25% Chelated Zinc (Zn)	

CONDITIONS OF SALE: This product conforms to the chemical description on the label thereof and is reasonably fit for the purposes stated on such label only when used in accordance with directions under normal use conditions. Follow directions carefully. Timing and method of application, weather and crop conditions, mixture with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the seller. Buyer assumes all risks given herewith. In no case shall the seller be liable for consequential, special or indirect damages such as loss of profits or values resulting from the use or handling of this product.

Manufactured by:



11712 230th Street
Linwood, Kansas 66052
Phone 785-542-2577 Fax 785-542-2531
www.questproducts.us

