



## **AGGRAND Natural Kelp and Sulfate of Potash 0-0-8**

AGGRAND Natural Kelp and Sulfate of Potash is a very important part of any soil fertility and plant nutrition program. It contains 8% readily available Potash ( $K_2O$ ), which is reflected by the grade of 0-0-8 (N-P-K). Potassium is considered the "universal helper" and is a major contributor to plant health because it regulates so many important processes in the plant. AGGRAND Natural Kelp and Sulfate of Potash also contains 2% Sulfur (S) in the sulfate ( $SO_4^{2-}$ ) form which is readily available to plants. Sulfur, called the "fourth major nutrient,"<sup>1</sup> has many important functions in plant growth and metabolism; S must be present in sufficient amounts in the soil and plant tissue to realize the benefits of N and K,

AGGRAND Kelp and Sulfate of Potash utilizes kelp concentrate from the icy waters of the North Atlantic Ocean. When used as fertilizer kelp makes plants more robust and healthy by enhancing their heat, drought, and cold tolerance. It also reduces the susceptibility to insect and disease attack because leaf cuticles become thicker and tissue sugar solute levels (Brix%) are higher.

AGGRAND Natural Kelp and Sulfate of Potash contains minimally processed Sulfate of Potash from Great Salt Lake in Utah. Unlike other sources of K this source does not contain chloride (Cl) which can be damaging to soil life and plant roots. Sulfate of Potash ( $K_2SO_4$ ) forms an ionically balanced source of K and S because of the combination of a cation ( $K^+$ ) with an anion ( $SO_4^{2-}$ ). Plant use efficiency of ionically balanced fertilizer is much higher for root and foliar applications. K and S work together, particularly in the synthesis of plant proteins and the control of metabolic reactions, through the activation of numerous plant enzymes systems.

Potassium must be present in large quantities in plants because it is a component of the fluids which flood the plant tissue. K deficient plants are susceptible to insect attack, have weak stalks, and underdeveloped root systems. Sufficient K produces high quality vegetables and tree fruits. Dark green leaves ( high chlorophyll content), high nutritional quality (high sugar and starch content, and protein levels), firm stalks, fewer blemishes (increased disease and insect resistance), prolific root growth (effective use of plant moisture), greater plant vigor, improved nutrient uptake, higher yields, and increased fruit shelf-life are trademarks of crops grown with AGGRAND Natural Kelp and Sulfate of Potash.

Sulfur, which is often present in plants in equal or sometimes greater amounts than phosphorus, is used in the formation of amino acids, proteins and oil, N fixation,