

Why Seaweed in AGGRAND® Products?



Coastal people have been using *Ascophyllum nodosum*, a brown seaweed commonly known as Norwegian kelp, for centuries as a source of organic matter for improving sandy soils. Kelp is a source of essential trace minerals and cytokinins, a family of natural plant growth regulators that enhance plant development, color and vigor.

The kelp used in AGGRAND products comes from the Atlantic coast of Canada. It contains more than 60 naturally occurring major and minor nutrients and amino acids. Active ingredients include the trace minerals boron, molybdenum, copper, iron, zinc, manganese, silicon and cobalt.

Commercial seaweed extracts first appeared on the market in 1950. By the early 1960s they were accepted for feeding of numerous crops because the application of kelp extracts increased the level of dissolved sugars (Brix) in fruit, and demonstrated increased root and bud development over crops to which no kelp was applied.

Kelp is integral to the effectiveness of two of the most popular AGGRAND products: the 4-3-3 Natural Fertilizer with Kelp and 0-0-8 Natural Kelp and Sulfate of Potash.

One of the recognized benefits of kelp applications has been increased tolerance to disease. The use of kelp in a foliar program has been shown to strengthen cell walls and to facilitate the absorption of nutrients by plant roots. Specifically, the benefits of kelp are even more apparent when it is applied at particular stages in the growth cycle.

Ascophyllum extracts are effective in disease suppression through increased activity of protective enzymes (antioxidants) that target oxidizing ‘toxins’ produced by the disease pathogen. This increase in the plant’s ability to ward off disease is called systemic acquired response (SAR). Kelp is also high in potassium (K), which regulates osmosis and cell pressure and reduces the susceptibility to insect and disease attack. It also stimulates rooting, photosynthesis, chlorophyll formation, starch formation and the movement of sugars through the plant tissues, which means better tasting fruit and vegetables.

AGGRAND HORTFACT

The Poinsettia (*euphorbia pulcherrima*), is also known as flor de nochebuena (flower of Christmas eve) in its native Central America. It was introduced to the U.S. by J.R. Poinsett, the first U.S. Ambassador to Mexico, in the 1820s.

In its native habitat, the Poinsettia can grow a dozen feet tall. The milky sap has been used to control fevers, and the Aztecs used the brilliant leaves (called bracts) for a bright red dye. It was Montezuma’s favorite ornamental plant. Last year’s U.S. crop had a wholesale value of more than \$200 million.

AGGRAND Feeds Soil Microbes or Antioxidants Aren’t Just for Humans

Studies have shown that the introduction of microbes into plant growth cycles generates an anti-oxidative environment in the soil. This in turn can lead to an increased accumulation of antioxidants in the plant tissues, contributing to the general state of health.

– Juergen Reckin