# Effects of Weather King

## On increased resistance of crops against ultraviolet radiation, heat and drought

WeatherKing, is designed on the simultaneous activation of nutrition elements, vitamins and natural plant growth substances. An application of WeatherKing leads to a remarkable increased resistance of crops to ultraviolet radiation, heat and drought, as well as to increase the crop growth and productive capacity.

**1. Enhancement of plant detoxifying systems.**

The application of WeatherKing also prevents membrane lipids, proteins and nucleic acids from being denaturated due to hydrolysis of ROS by the increased detoxifying systems. This allows the crop to maintain higher rates of photosynthesis and growth.

**2. Induction of certain genes expression against stresses.**

**3. Increase of accumulation of sugars and other osmolytes in response to stress**.

The application of WeatherKing can increase biosynthesis. And therefore function to provide resistance against cellular dehydration under ultraviolet radiation, heat and drought stress. This helps to maintain the structural integrity of the membranes, and keeps the normal photosynthetic and metabolic processes functioning properly.

**4. Promotion of abscisic acid (ABA) biosynthesis in stress.** ABA is an important phytohormone and plays a critical role in response to various stress signals. ABA actually helps crops to surpass the stress conditions and re-grow when the stress is eliminated. ABA also induces stomatal closure and maintains the plant water balance under drought conditions and prevents the intracellular water loss. Application of WeatherKing can trigger activation of ABA biosynthesis and the inhibition of its degradation that results in ABA accumulation. This enhances the resistance of crops against ultraviolet radiation, heat and drought, as well as increases crop growth and productive capacity.