



IQ ECA
TECHNOLOGIES (PTY) LTD

Horticultural Applications with IQ ECA Technologies

By nature, agricultural raw materials and plants are loaded with numerous microbes. From the growing stages to the cultivation process, a microbiological load occurs in the form of bacteria, yeasts and fungi. Many of these organisms play can have a major undesirable influence if left untreated to the plant itself or the agricultural product yield as well as the subsequent environment.

For instance, bacteria from the group of the *enterobacteriaceae*, to which the salmonella belongs, a potential danger to people and animals. Arbitrating from the prevalence of the growing number of salmonella infections in food. Certain groups of fungi are also potential sources of toxin producing organisms with very harmful consequences and toxicity with respect to human beings and animals.

The law provides for a ban on or a restriction of these organisms in order to reduce the risk whenever possible. As agricultural raw materials are constituting a possible risk of contamination in the various stages of cultivation, storing and processing, a suitable treatment is required which promotes quality plants and produce without the use of harmful treatments and toxic chemicals.

In order to face this problem, various methods and products have already been developed in the past on the basis of thermal or chemical destruction or reduction. These known solutions however, are often laborious, too expensive and do not always result in the effect aimed at.

IQ ECA Technologies can provide a system which will enables agricultural raw materials to be treated in a simple manner and at an acceptable price, without having any threatening consequences with respect to the nature of the agricultural raw materials to be treated and to the environment.

The aim is to provide a method to reduce the microbiological load on agricultural raw materials. Treatment by means of an aqueous electrolyzed saline solution, by which the number of micro-organisms can be reduced. With this method it becomes possible to disinfect agricultural raw materials in a simple manner and at acceptable expenses and to preserve them without baleful consequences for the agricultural raw materials concerned.

Although, up to now, agricultural raw materials were considered always to be kept dry during the various stages of their cultivation, among others when storing, in order to avoid fungoid growth and getting heated. It has observed that by treating raw materials with an aqueous electrolyzed saline solution, a distinct reduction of the micro-biological organisms present may be realized. Consequently, the risk of a further development of micro-biological organisms (among those, pathogenic germs) is strongly reduced.

Activated Electro-Saline Solutions generated by **IQ ECA Technologies** aids farmers to have higher yield of produce when treated compared to conventional farming practices. Ano-Lyte® has properties of being non-toxic, bactericidal, sporicidal, fungicidal, virucidal and completely safe during production and operation.

The beauty of Ano-Lyte® from **IQ ECA Technologies** abide by the raw materials used in production. Salt, water and Electricity is all that is required in the manufacturing process and when applied in various applications.

Ano-Lyte® can be used at cold, ambient and elevated temperatures without it being affected. It can also be dosed, sprayed or fogged depending on the desired application. Spraying of Ano-Lyte® on fruit trees and vegetable foliage ultimately reduces the incidence of diseases. Reducing the use of harmful chemicals is our main focus and electrochemically activated solutions are an environmentally friendly alternative to current disinfectants, with added benefits.

IQ ECA Technologies can potentially offer the agricultural and horticultural industries many benefits such as:

- ✓ Increasing crop yield
- ✓ Washing and disinfecting equipment used on farm, removing biofilm
- ✓ Purifying irrigation water, removing biofilm collected in pipes
- ✓ Washing and disinfecting upon harvesting fruits, vegetables, meats
- ✓ Disinfecting seeds, grain and bulbs
- ✓ Promoting growth of plants
- ✓ Promoting photosynthesis by carbon enrichment, thus increasing yield of produce



Contact us today for a tailored customized installation to meet your needs.



Head office:

Unit 12, Urban Growth Park

15 Jan van Riebeeck Drive

Paarl

Phone +27 (0)21-3000 530

www.iq-greensolutions.com

