

ROS effective against Xylella Fastidiosa



May 25, 2021 In a recent study conducted jointly with GreenAgri Solutions, LLC (FL) a new mineral oxychloride disinfectant was tested on flying vectors that impacted fruit trees in Florida. For the past 4 years, Mr. Keith Warren with GreenAgri Solutions has been field testing an experimental disinfectant to control huanglongbing (HLB). During the first 90 days, Mr. Warren, had the citrus orchard

flood irrigate the root system three times per week with a +750mV solution (25 mg/l of JC 9465). They fogged the trees in the evening twice week (3oz to 1 gal of water). By the end of the three weeks, the trees in the controlled study were starting to develop new leaves and fruit was starting to develop on the once stricken trees.

Xylella Fastidiosa and Huanglongbing attack the xylem of the host plant by creating a biofilm that limit the movement of water and nutrients in the host. To treat both bacterium, you must first destroy the biofilm and second inactivate the bacteria. JC 9465 generates the hydroxyl radical ion that attacks the extra-polymeric (EPS) substance which forms a sticky substance that acts as protective film around the bacteria. Once the EPS is destroyed, other oxidative species quickly attack the DNA of bacteria's nucleus to inactive it and prevent reproduction or mutation. JC 9465 is not an insecticide but a very water-soluble oxidant that is easily transported from the root system to stems, leaves, and branches with enough energy to oxidize Xylella Fastidiosa.

JC 9465 is a mineral oxychloride oxidant that generates a high concentration of reactive oxygen species (ROS) like ozone, hydrogen peroxide, hydroxyl radical ions and singlet oxygen ions. JC 9465 specifically generates a high concentration of hydroxyl radical ions. The oxidative energy of a hydroxyl radical ion is 2 time more potent than chlorine (hypo & hyper). This means hydroxyl radical ions work faster than chlorine and ozone to oxidize organic and inorganic contaminants. Studies conducted at UC Davis Post Harvest, indicated that using JC 9465 at an ORP above +700mV inactivated e.coli and salmonella in less than 10 seconds.

If you would like a copy of the Florida Study, please contact us at charles@jenfitch.com, or

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