

SUMMARY OF EA VALUE PROPOSITIONS FOR AGRICULTURE

“Helping Plants use Water more Effectively and Efficiently”

Brief explanation of EA technology applied through irrigation and foliar (spraying) application at any scale and how it helps plants use water more effectively and efficiently resulting in the following value propositions: (Support docs: <https://electroaeration.com/studies>)



Solar or DC powered reactor with optional brine injector for in-situ chlorine (hypochlorite) production.

- Improves yields by at least 30% in hydroponics and greenhouses and 14% in rice fields with solar or low DC power and no chemical additives.
- Decreases time to harvest by up to seven days as measured by comparable BRIX (sugar levels), weight, and grade standards thus lowering the amount of water and energy required for a crop cycle.
- As part of its process, EA generates hydrogen peroxide and ozone rich water which lowers the need of pesticides and herbicides through foliar (spraying) application on mold, aphids, and other pests.
- By producing micron-bubbles EA increases the surface area contact of water to plants lowering the amount of required amendment or fertilizer by up to 30%.
- Increases water-soil percolation by 120% due to the inherent characteristics of the micron-sized water penetration over conventional water molecules. Drought solution.
- Improve oxygen levels for beneficial biologicals in the soil/growing media, back of tractor delivery. Permaculture "tea" aeration.
- Improve beneficial biological colonies activity by breaking down deposits of urea and ammonia in soil. (lowering organic nitrogen TKN content)
- Strengthen root for more efficient water transport (xylem) and protection from root pests such as phylloxera, root maggots, fungus gnat larvae, root aphids, root mealybugs, and root weevils .
- Lowers organic nitrogen levels (nitrites) in re-use circular irrigation systems.
- Reduces iron and mineral (scale) build up in pipes and irrigation systems.
- Lowering transit time of wastewater in breweries, olive plants and wineries through lowering BOD (up to 100%) and COD (50%)
- With the addition of brine water injection: in-situ CLO- (hypochlorite) generation for livestock stall decontamination (hoof and mouth, avian flu and other viruses)
- Spraying solar powered generated chlorine from table salt on lagoons for smell abatement (continuous spraying with off the shelf lawn sprinklers: free chlorination)
- Pond eutrophication remediation algae and mosquito abatement. Increases DO >2PPM
- Enhanced DO delivery systems for water applications.