Nanogreen and Mag-Water, Inc.

Revolutionizing Agriculture Through MagWater

MagWater is an agricultural technology that naturally produces oxygen AND hydrogen compounds, including Hydrogen Peroxide (H_2O_2-(+)400 PPB) directly in irrigation systems or via foliar application. This eliminates the need for petrochemical H_2O_2-, offering continuous, on-demand pest control and growth enhancement without hazardous chemical handling. It helps regenerative farms reduce costs, improve yields, and enhance sustainability. The technology is ultra-low DC power and can be deployed with used solar panels, no inverter or battery required.

Value proposition of H_2O_2- and Oxygen production on site:

- Eliminates storage and handling of chemicals
- Continuous production matches real-time demand, continuous production eliminates need for injection
- Integrates seamlessly with existing irrigation or made in a container for foliar spraying. Just as efficient!
- Creates optimal dissolved oxygen levels naturally, No pumps!
- Operates at solar panel energy levels.
- The system incorporates magnetic fields during application to produce negative ORP (Oxidation-Reduction Potential) or ionized water, which enhances nutrient absorption and promotes beneficial microbial activity in soil.
- Magnetized water reduces mineral scale buildup in water lines
- Generates additional hydrogen gases for injection into tractors and motors=Lower fuel costs.

Proven Growth Enhancement Results

30%

Increased Yields

Greenhouse and hydroponic operations see consistent yield improvements

65%

Combined Gains

Total improvement when early harvest benefits are included in greenhouses yields

14%

Field Performance

Outdoor rice study results over 3-year supervised trial. Increased field crop results

7-14

Days Faster

Reduction in time to harvest with maintained quality

These results come from real-world applications across diverse growing environments, from controlled greenhouses to open-field agriculture. The technology enhances plant growth at the cellular level by improving nutrient uptake efficiency and optimizing the root zone environment. Faster growth cycles mean more harvests per year, while increased yields per harvest compound the economic benefits for farm operations of all sizes.

3 year rice study at Memphis Ag center

From 2022 through 2024, we conducted a supervised study on enhancing rice growth with solar panels and the technology both as injected nano-water, sprinkler systems and field bubblers.

Notes

- Paddy (1) (3) used 1 Reactor with pumps powered by a DC power supply
- Paddy (5) used four Aerators only powered by 100-Watt Solar Panels.
- Paddy (2,4,6) are control.

Results

- 11.2 additional bushels per acre (bu/A)
- 13.6% total rice production increase

Market Value

- 11.2 (bu/A) x $16.94 = $186.34 per Acre increase

Global Value

- 507.9 m tons X 13.6% = 69.07 m tons increase
- 69.07 m tons x 35.7 (bu)=2.465 billion (bu)

2.465 billion (bu) x $16.94 = $41.73 billion






Sod Study

- Total projected acreage of U.S. golf facilities: **2,131,838 acres**. Sod, grass in golf courses, estates, highway medians, homes and sod growers globally are big users of water.
- On average, a typical 18-hole course uses between 100,000 and 1,000,000 gallons of water per day, varying widely with location and climate. Courses in arid regions like the Southwest, including Southern California, may consume up to 6 acre-feet per irrigated acre per year.
- We noticed a dramatic improvement in root strength, which lowers water usage, as thicker roots hold water better.
- There are 5000 Sod growers in the United States, we plan on presenting this simple medication to them

Pest and Disease Management

Foliar Application

Direct spray eliminates mold, mildew, and surface pests without toxic residues. Safe for beneficial insects and pollinators.

Vimeo

early fruit.mp4

Irrigation Delivery

Continuous low-level H_2O_2- in irrigation water controls soil pathogens and root diseases while promoting healthy microbial balance.

YouTube

Aerator in rice field

Wastewater Treatment

Reduces pathogens in greenhouses, hydroponics, and any recirculating systems without chemical additives. Lowers fertilizer use

YouTube

Nano-Aeration for hemp

Set up for continual aeration in a grow room tank. The publication report can...

Resource Conservation

Water and Fertilizer Optimization

Water percolation or nano-water penetration

Documented perc test Memphis Ag

Formal study on percolation

Fertilizer and plant-food Savings

Testimonial from greenhouse grower

Hemp study

MagWater water improves soil structure and retention, reducing irrigation needs. Enhanced oxygen and negative ORP optimize nutrient uptake, cutting fertilizer use by up to 30% while maintaining crop performance. These savings reduce costs and support regenerative agriculture principles.

Chemical free enhancements: Faster to market, lowered costs: Making organics affordable!

Enhanced BRIX Levels

Fruit develops higher sugar content more rapidly, improving taste, shelf life, and market value.

Higher BRIX readings mean faster to harvest, saving time and energy.

Superior Germination

Seeds treated with MagWater show improved germination rates across all varieties. Stronger, more uniform seedlings establish faster and show increased vigor throughout the growing cycle.

Improved Root Architecture

Enhanced oxygen delivery and pathogen control promote robust, extensive root systems. Better roots mean improved nutrient uptake, drought resistance, and overall plant health.

Environmental Benefits and Sustainability

Reduced Methane Emissions

HHO water increases aerobic content and dissolved oxygen in fields, significantly lowering methane production from anaerobic soil conditions. This addresses one of agriculture's major greenhouse gas challenges.

Chemical-Free Pest Control

Eliminates dependence on synthetic pesticides and fungicides, protecting beneficial organisms and preventing chemical runoff into watersheds while maintaining effective pest management.

Circular Water Systems

Natural pathogen control enables safe water recirculation in hydroponic and vertical farming operations, dramatically reducing water consumption and wastewater discharge.

Extended Equipment Life

Magnetized water reduces mineral scale buildup in irrigation lines, pumps, and emitters, lowering maintenance costs and extending the operational life of expensive farm infrastructure.

Oxygen Enhancement Without Expensive Equipment

Natural Dissolved Oxygen Generation and nanobubbles

Traditional methods of increasing dissolved oxygen (DO) in irrigation water require expensive nano-bubble generators, injection systems, and ongoing maintenance. MagWater produces optimal DO levels as a natural byproduct of the process, eliminating capital equipment costs. Magnetrolosys also generates H_2O_2-

Low cost compared to other nanobubble generators

- Low maintenance: *Depending on the hardness of your water:*
- Just dip in citric or acetic acid weekly
- No moving parts or injection equipment
- Great for off grid or remote farms.

Generation of Hydrogen peroxide

Higher dissolved oxygen levels and H_2O_2-in the root zone create ideal conditions for beneficial aerobic bacteria, while suppressing harmful anaerobic pathogens. Plants respond with improved nutrient uptake, faster growth rates, and enhanced stress tolerance. The increased DO also prevent the formation of anaerobic zones that produce methane and other harmful compounds.

Agricultural Applications: Case study in Greenhouse

Ryan, from Country Fresh Herbs, had been successfully testing the 5 plate aerator in a bucket with a sprayer for a couple of years, so we rewarded him with the reactor system to increase the reach of the technology.

Real-World Performance

An organic tomato grower in Somis, Ca has demonstrated for 3 years the transformative potential of MagWater as a foliar (spraying) treated water just twice-weekly, the operation has achieved remarkable outcomes: complete elimination of aphids and mold, zero pest pressure, and significantly increased yields—all without pesticides or chemical amendments. This isn't anecdotal success. It's a fundamental shift in agricultural methodology. The ionized water, combined with naturally-produced peroxides, create an environment hostile to pathogens while optimizing plant nutrient absorption and cellular function.

Foliar Spray Application

Twice-weekly applications deliver consistent results. The treated water penetrates plant tissues more effectively due to negative ionic charge, enhancing cellular hydration and nutrient uptake. No plumbing required (if desired). Integration with existing spray equipment requires zero modification.

Natural Pest & Disease Control

Hydrogen peroxide generation provides gentle, continuous antimicrobial action without chemical residues. Eliminates aphids, mold, and fungal pathogens while remaining completely safe for beneficial insects and soil microbiomes. No resistance development, no environmental accumulation.

Enhanced Yields & Quality

Growers report 20-40% yield increases with improved fruit quality, coloration, and shelf life. Reduced chemical inputs lower production costs while meeting organic and sustainable certification requirements. Plants demonstrate increased drought resilience and stress tolerance.

Mobile Integration

Mount units on tractors for real-time production during foliar field applications. Capture H H & O gases to inject into tractor air intake, achieving 30% reductions in diesel consumption and emissions while foliar application of water to crops or setting soil for integrative or regenerative farming

Caveats and Maintenance

- The water is harmless to animals and humans alike while producing the nano-bubbles.
- Care, however, should be taken while operating the units; one should ensure proper ventilation or a closed vessel and restrict off-gassing such as chlorines and hydrogen and oxygen.
- The plates get coated with Calcium from the water. This coating will slow the process down and depending on the hardness of the water, one needs to clean the plates with an acid such as vinegar, HCl or citric acid. This is done by infusing the plates in 35% vinegar or citric acid, and cleans right up. This is usually done bi-weekly and up to monthly depending on hardness.
- We are working on a system to automate this acid rinse, and, is the first item on use of funds.

Beyond Irrigation: Reducing Equipment Emissions

Gas Generation

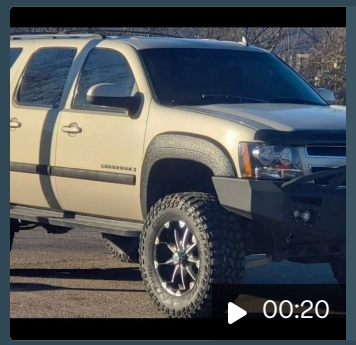
The system produces hydrogen gases as byproduct. Injected directly into intake manifold.

Simple Integration

The water and gas aerator is connected to the alternator. Delivering gas and HHO water.

Dual Benefits

Lower fuel consumption and dramatically reduced emissions while foliar spraying the fields.



YouTube

Thurbocharge Gas injector

Tested over 1000s of miles, this simple add-on to your intake manifold saves..

Inject the gases into your exhaust manifold!

The same MagWater system that treats your irrigation water generates valuable hydrogen gases that can enhance the efficiency of internal combustion engines. This represents an additional cost savings beyond the agricultural benefits, improving the total return on investment.

The Complete Solution for Regenerative Agriculture

Enhanced Growth

30-65% yield increases with faster harvest cycles in

Natural Protection

Chemical-free pest and disease management

Reduced Costs

Lower inputs for water, fertilizer, and chemicals

Environmental Stewardship

Reduced emissions and eliminated chemical runoff

Premium Quality

Higher BRIX earlier means to harvest earlier: typically 7–14 days depending on crop.

Aerobic booster

Increase microbial activity with field/solar generation of Dissolved Oxygen.

MagWater addresses every major challenge in modern agriculture—reducing costs, improving environmental outcomes, enhancing crop quality, and accelerating growth. For those committed to regenerative practices and sustainability, this technology represents a fundamental transformation in how we grow food and steward our lands.