



KAIROSPACE
TECHNOLOGIES

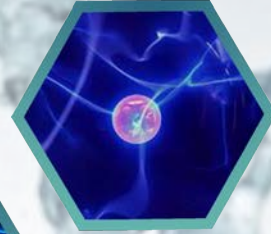
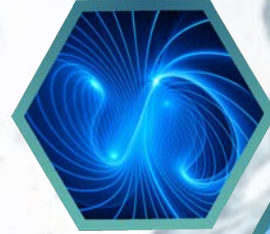
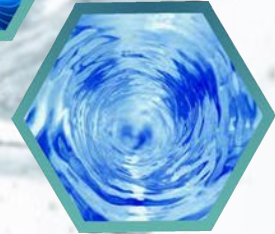
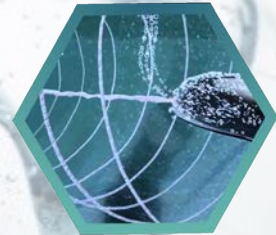
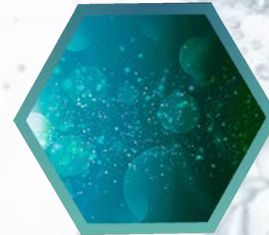
EXPERIMENTAL VALIDATION REPORT
Root Development



ABOUT KAIROSPACE

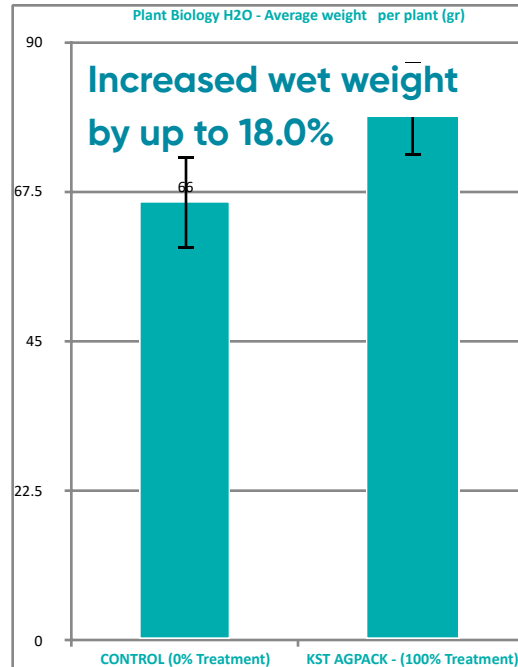
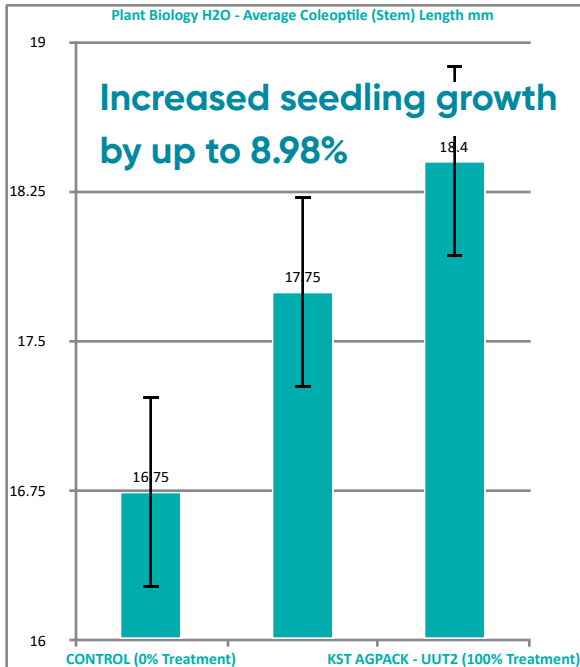
Our groundbreaking and innovative solutions leverage fundamental principles of physics, including plasma, electromagnetism, frequency induction, ultra fine bubbles, cavitation and fluid dynamics to enhance the physicochemical properties and structure of water without harmful chemicals.

We produce positive environmental and economic results by employing cutting edge science and research to develop novel solutions to current industry and government challenges.



BENCH TESTING & EXPERIMENTAL VALIDATION

Plant Biology Series – Seedling and Plant Growth



Plant Biology Series –

Seedling and Plant Growth

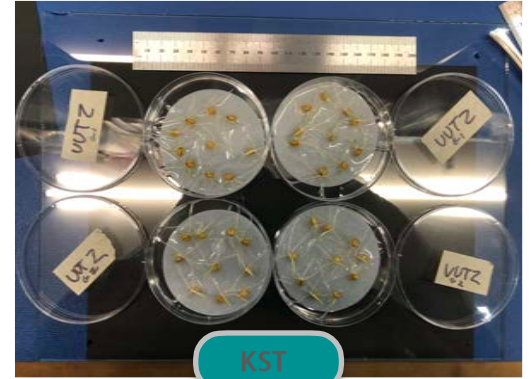
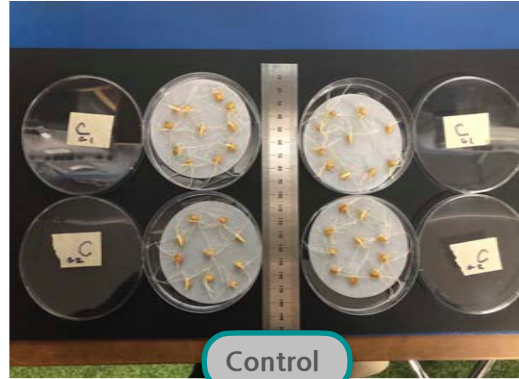
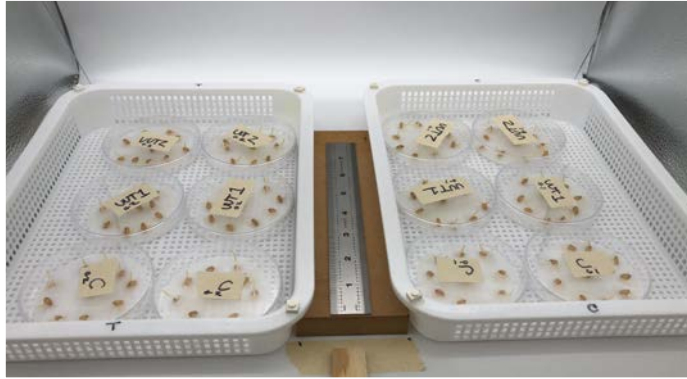
Plant growth is affected by several factors such as seed variety, amount of water, soil type, amount of light, temperature, humidity, and others. There are many factors to be considered in terms of water quality. One of the most critical factors for plant biology is the concentration of dissolved oxygen (DO). Aquatic and terrestrial plants as well as many species of microorganisms require oxygen for cellular respiration to generate the energy necessary for carrying out life processes.

In this seedling plant growth experiment, the effect of high concentrated DO on plant growth in a hydroponic environment has been investigated. Three experiment groups were prepared; CONTROL (0% DO treatment), UUT1 (20% DO solution treatment), UUT2 (100% DO treatment). It is considered that UUT2 is in a super saturated state. The seedling groups were continuously measured and grown into a mature state for further (Brix) testing.

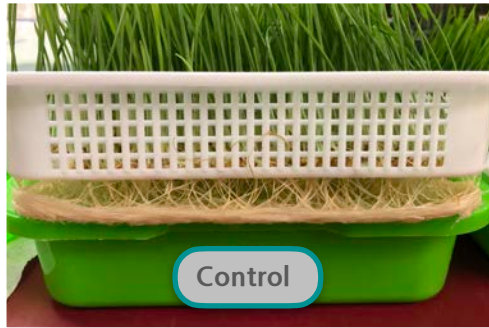
In the wet weight experiment we used lettuce as test crop. The effects of the treated water shown a remarkable increase of 18%

The KST AGPACK application of kinetic mixing and magnetic resonance induction treatment, coupled with O₂ saturated ultra fine bubble treatment, influenced the plant biology parameters, increasing plant growth by up to 8.96%. Experiment replication and statistical analysis showed that our experimental results are significant.

Plant Biology Series - Seedling and Plant Growth



Plant Biology Series - Seedling and Plant Growth

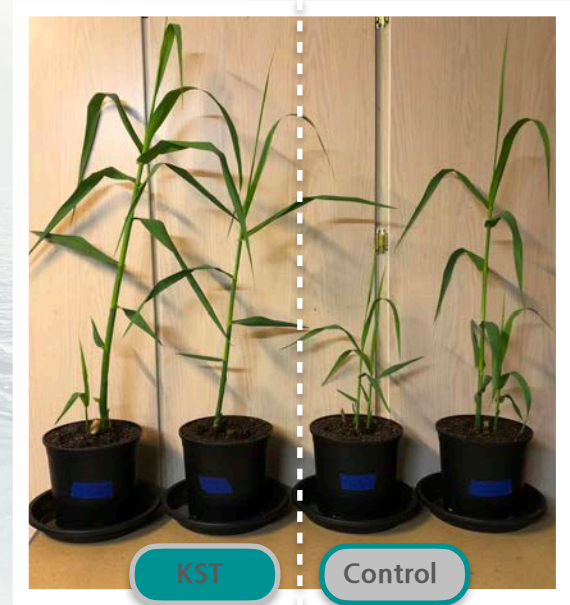
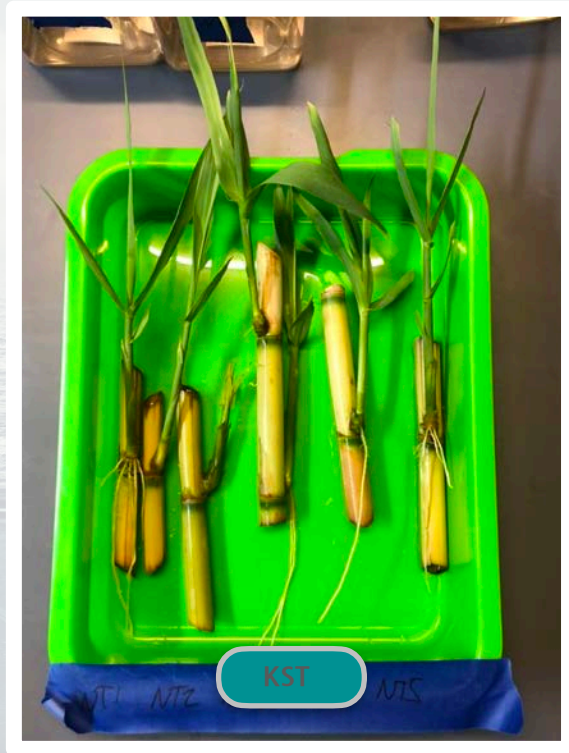


Wheatgrass. 2X root development. + 15% Brix.



Lettuce. +18% Wet Weight.
-10% Time to Harvest.

Plant Biology Series - Regenerative BioMass

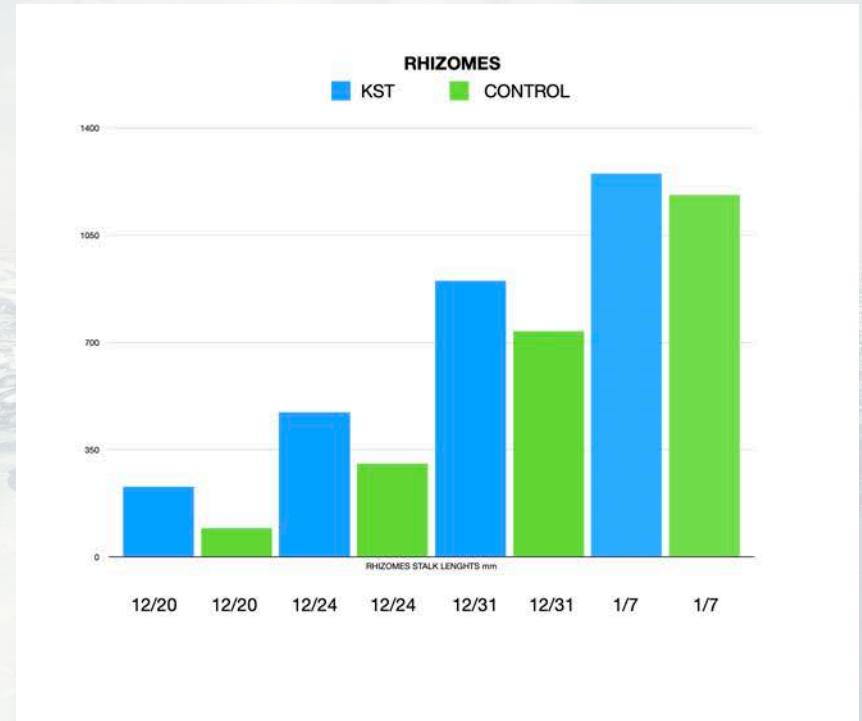
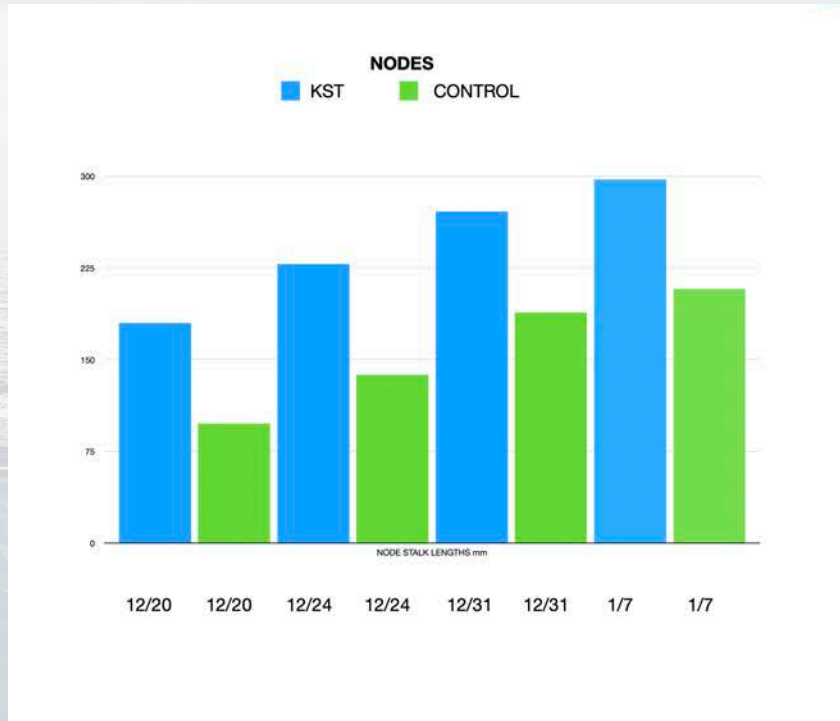


Regenerative-Biomass. 1.5X growth.

Plant Biology Series - Regenerative BioMass



Plant Biology Series - Regenerative BioMass



Plant Biology Series - Root Development Turf

Untreated

Treated KST



Plant Biology Series - Root Development Turf



Untreated



Treated KST

Plant Biology Series - Root Development Turf

MEASUREMENT MARKERS

Germination time

12 days untreated
9 days treated KST
28.5% difference

Shoot length, vertical inches of vegetative increase

3.75" untreated
4.5" treated KST
18.18% difference

Observed results in treated group:

General increase in cycle growth rate into "elongation" cycle
General increased root mass density
Potential water-savings

Plant Biology Series - Root Development Turf



Plant Biology Series - Root Development Turf



KST



Control



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