

FOR IMMEDIATE RELEASE

JAH Cultura's Deep Tech Solution Yields A Sustainable Food Future

Local deep tech firm's Unitatem CULTURA™ has been tested to increase crop yield, enhancing food security across the region



(Singapore, 21 June 2022) New deep-tech startup JAH Cultura wants to cultivate a sustainable future by revolutionising agriculture. Using its proprietary technology, it has created a series of ceramic-alloy products to significantly boost harvests for farmers and hobbyists.

Unitatem CULTURA™ is a unique field generated by JAH Cultura's proprietary ceramic-alloy developed over 20 years of deep tech research.

In 2021, JAH Cultura engaged Republic Polytechnic Agriculture Technology to test and verify the previously observed effects of Unitatem CULTURA™ in agriculture. A feasibility study of the effects of JAH Cultura's treated water on the growth of vegetables was conducted at Republic Polytechnic's Agriculture Technology laboratory. An increase of 21.42 per cent in yield was observed for treated Bok Choy seeds, and Bok Choy plants growing with treated water showed an increased yield of 18.5 per cent under laboratory conditions.

The seeds can be treated by simply leaving them in JAH Cultura's ceramic-alloy capsules prior to germination. The water used to feed these plants can be treated by running through JAH



Cultura's water system. The soil can be treated using JAH Cultura pegs inserted into it. Subject to weather conditions, one or all three of these methods can be used.

The proprietary ceramic-alloy material has been certified safe under the EU REACH for Chemical Substances. JAH Cultura has worked with research institutes such as Republic Polytechnic and Denova Sciences to test and verify the effects of its technology on plants and animal cells.

Tan Chong Hui, CEO and Co-Founder of JAH Tech, the parent company for JAH Cultura, is excited about the prospects of Unitatem CULTURA™ for agriculture. "The results from our third-party research institutes on Unitatem CULTURA™ exceeded our expectations. They show that our technology has the potential to help solve farming issues such as low crop yield by as much as 21 per cent from just exposing seeds and water to our technology."

"As a sustainable solution, Unitatem CULTURA™ doesn't require additional energy sources because the field emitted from the ceramic-alloy field is a naturally occurring wave frequency. It interacts directly with the water supply, rearranging molecular structure of water for easy absorption, which accounts for the accelerated plant yield," adds Tan.

Accelerating Plant Growth, from Singapore to Cambodia

Singaporean commercial urban farm, Farmer Nick, will be the first to benefit from the technology. Under Nature's International Commodity (NIC), the farm signed its official agreement on 6 June for its farm in Singapore and its sister company Twinagri Tech Co Ltd in Cambodia to be a partner of JAH Cultura.

Prior to the agreement, JAH Cultura assisted Farmer Nick to boost vegetable growth in its organic farm in Singapore through the application of Unitatem CULTURA™. In comparison with its plants grown without Unitatem CULTURA™, quicker, stronger yield was clearly visible and that led to the agreement for a full roll-out of the technology on all its farms.

Having increased local produce helps alleviate the reliance on importing from traditional farms and food suppliers overseas. The technology aims to help increase Singapore's food security, and help farmers achieve the nation's 30 by 30 sustainability goal. Carbon footprints will also be reduced.

As Singapore is land-scarce, JAH Cultura's technology helps farmers like Farmer Nick utilise their land space for increased yield.

Nicholas Goh, Founder of NIC, says, "JAH Cultura's technology has helped shorten my seed-to-harvest time frame with improved plant health and resilience. All we needed to do to our existing infrastructure was connect their water system to our existing irrigation system without altering any existing infrastructure. This makes it extremely easy, customisable, and economical to use in our urban farm, which is set atop a multi-storey carpark."

"Going forward, we are excited to expand our collaboration with JAH Cultura to Cambodia, where we run a 79-hectare mango farm."



Building the Future with Deep Tech

To educate our youth on sustainable urban farming, JAH Cultura will visit local primary schools in July under the Nature's International Commodity (NIC) school integration programme.

This programme is meant to generate community interest in urban farming. It is designed for youth to learn how science can help accelerate plant and animal growth to increase food production.

“In an increasingly populated environment with scarce resources available, we want to help build a sustainable mindset in our future generations, so that they can thrive in a healthy environment with self-sufficiency,” said Barton Lee, Group Chairman and Co-founder of JAH Tech.

“Our technology was sparked from our passion to use the naturally occurring ceramic-alloy field to boost farming harvests. It offers a cleaner, greener solution to our farming needs. Likewise, we want to inspire others to think of more ways to contribute to the future of farming, while minimising the resources required to provide food for everyone.”

For independent horticulturalists, farmers, and even green fingers, JAH Cultura's products will soon be available for sale at [Farmer Nick](#) and on selected e-commerce platforms.

For more information or media interviews:

Marie Wee LLP

Marie Wee

T: (65) 9061 6082

E: marie@mariewee.com

Raquel Lee

T: (65) 9247 4078

E: raquel@mariewee.com



About JAH Cultura

JAH Cultura believes in cultivating for a sustainable future through innovation. Through smart farming with Unitatem CULTURA™, its proprietary technology developed for the agricultural industry, JAH Cultura aims to increase harvests to combat the anticipated increase in global food demand.

As part of the JAH Tech group, JAH Cultura's technology allows for the customisation of its products to any farming requirement without altering existing farm infrastructure.

In line with JAH Cultura's goal of sustainable farming, its proprietary technology does not require additional energy sources, and its products will be continually recycled and reused to minimise waste.

About Unitatem CULTURA™

Unitatem CULTURA™ by JAH Cultura is a unique field generated by our proprietary ceramic-alloy developed over 20 years of deep tech research. This field has been shown to provide enhancement properties to the yield of stem cells, plant growth, and enhanced growth.

A third-party test by Denova Sciences on stem cell culture showed a 50 per cent improvement in cell growth when Unitatem CULTURA™ was present. This test result shows possible improvement in the growth of plants and animals in farming conditions.

About Barton Lee



Barton Lee is Group Chairman of JAH Tech, the parent company of JAH Cultura. Lee has over 20 years of experience as a Technopreneur, including being a founder of research and tech development firm, Strategic Technology Limited.

A graduate of Boston University, he holds a degree in Business Management. “Having an open and objective mind is the key to thinking out of the box and innovation” says Lee. His vision and commitment to technology have attracted a team of like-minded scientists and researchers, which led to the establishment of JAH Tech in 2019 in Singapore.

About Tan Chong Hui



Singaporean Tan Chong Hui is the CEO and Co-Founder of JAH Tech, the parent company of deep tech firms JAH Cultura, JAH Life, JAH Materials and JAH Gaia.

Chong Hui’s business travels introduced him to the technology of Unitatem CULTURA in 2016. With the support of his partner, Barton Lee, Chong Hui started up JAH Tech to provide Unitatem CULTURA™ to the mass markets across Asia.

“We have tasked ourselves to build a long-lasting legacy where our technology will help us create a green, sustainable future for us all.”

A passionate father of two daughters, and a seasoned traveller, integrity is a key value which Tan lives by every day.

Chong Hui is a software engineer by training and has over 20 years of experience in the IT industry. Recognising his interest in technology, he holds an Information Technology degree from Brigham Young University in Hawaii.

Chong Hui leads the overall operations of the JAH Tech group, including JAH Cultura. JAH Tech holds and manages the commercial rights to a wide portfolio of cutting-edge technologies and works actively with partners globally to apply these technologies for a positive, lasting impact on everyday life and the environment.

About Farmer Nick



Farmer Nick specialises in the design, build and operations of sustainable, efficient and modular farms within the community. Vegetables and fruits grown on our farms are 100 per cent free from harmful chemicals and are grown at least 30 per cent more efficiently. Its business is to create food security and educate locals for that cause. It aims to start a new tradition.

Farmer Nick is not a born farmer. The team receives its farming knowledge from its experience in ventures overseas in Cambodia and Vietnam. In addition to the do's and don'ts, it has since developed its own method of sustainable farming, combining the tried and tested with innovative solutions. Farmer Nick also aims to "grow health". The team knows that food grown on unpolluted soil, with natural farming methodology will bring us healthy food. So they aim to act as stewards of this land, caring for its health to support yours.



FACT SHEET

Website www.jahcultura.com

Instagram @jahcultura

Facebook @jahcultura

Products CULTURA Peg
CULTURA Capsule

For farm set-up info@jahcultura.com