June 1st, 2023

Establishment of "Sustainable urban Environment vegetable supply chain Development Consortium" with a focus on promoting urban environment-friendly farm vegetables

United Super Markets Holdings Inc. (Headquarters: Chiyoda-ku, Tokyo, President and Representative Director: Motohiro Fujita, hereinafter referred to as U.S.M.H) and PLANTX Corp. (Headquarters: Chuo-ku, Tokyo, CEO: Kosuke Yamada, hereinafter referred to as PLANTX) launched the vegetable factory "THE TERRABASE Tsuchiura" in June 2022 and have maintained stable operation for one year.

Expanding upon this initiative, aiming to promote the market expansion of urban farm vegetables as part of domestic urban environmental efforts, we have established the "Sustainable urban Environment vegetable supply chain **D**evelopment (**SEED**) Consortium."

The SEED Consortium aims to gather collaboration partners and design the future of urban environment farm business models.











Background of SEED Consortium establishment

As environmental problems continue to worsen, there is an increasing demand for environmental considerations in our daily lives. To deal with these circumstances, U.S.M.H launched the own label "Green Growers" with the concepts of "safety and security," "healthy," and "environmentally friendly." Starting from 2021, we have been selling sustainable Green Growers lettuce cultivated through hydroponics in completely sealed shelves within our factories. In 2022, we added the plant-based alternative meat "BEYOND MEAT®" from the American company BEYOND MEAT to our brand lineup, seeking to expand our market presence as a brand dedicated to urban environmental initiatives.

We founded "THE TERRABASE Tsuchiura" plant factory in collaboration with PLANTX in June 2022 to provide greater value for customers through Green Growers. The delivery system was built through SPF model that U.S.M.H involves the entire process from product development to production, distribution, and sales. It allows to bring ultra-fresh lettuce in stores within 24 hours harvesting. Additionally, from the lettuce cultivated in the fully sealed and mechanized plant factory using PLANTX's technology does not require washing before eating and boasts crisp texture with high nutritional value. The factory consistently ships lettuce to approximately 200 stores every day.





Photo: Shelves of Green Growers lettuce. Delivered to the stores within 24 hours from harvesting.







Technology of PLANTX

"THE TERRABASE Tsuchiura" incorporates various cutting-edge technologies developed by PLANTX.

The most notable feature is the world's first sealed cultivation device, which allows for extraordinary environmental



*The image is for illustration purposes only

control through its closed structure. It becomes possible to maximize the performance of the plants by precisely controlling 20 environmental conditions (such as temperature, humidity, airflow speed) related to light, air, and water that affect plant growth. Furthermore, each device can have its own set of environmental conditions. It means that the cultivation of multiple vegetable varieties (such as lettuce and basil) is enabled under their respective optimal conditions.

The cultivation devices operate automatically based on instructions from the plant growth control system uniquely developed by PLANTX. Various environmental conditions and the growth status (such as photosynthesis rate and transpiration rate) are continuously monitored in real-time. It allows to prevent and detect plant growth abnormalities at an early stage, also supports stable operation of the factory.

In the newfangled plant factory equipped with those technologies, it becomes possible to produce delicious and nutrient-rich vegetables smoothly from the beginning of factory operation, even without expertise in plant.







The future of SEED Consortium



Photo: Press release in the headquarter of U.S.M.H on May 31st, 2023. (Left) Koshiro Mitsuyuki, Program Manager of U.S.M.H, and Kosuke Yamada, CEO of PLANTX

The SEED Consortium aims to further develop "the manufacturing and retail model of sustainable vegetable" by U.S.M.H and PLANTX. Also we have a goal for delivering high-quality and diverse vegetables generated by PLANTX's technology to a wider range of customers. We are seeking collaboration partners who resonate with our philosophy.









U.S.M. Holdings PLANTX NEWS RELEASE

In addition to the approach to environmental issues by Green Growers, the SEED Consortium will also address challenges such as stable food supply in urban areas by establishing new supply chain models together with collaboration partners.

Contact Information for this press release and the Consortium

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Previous release on vegetable factory

<u>In-house operated plant factory goes into full operation</u> (June 17th, 2022)





