Enlightening Collaboration Between Heliospectra And the University of Tokyo

Unleashing the Potential of Indoor Sole-Source LEDs on Tomato Production

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Heliospectra AB, a world leader in intelligent lighting technology for greenhouse and controlled plant growth environments, announces an exciting collaboration with the Institute for Sustainable Agro-ecosystem Services (ISAS), the University of Tokyo. In an effort to redefine and unleash the potential of indoor tomato production, this will be a joint research project with the University's Institute for Sustainable Agro-ecosystem Services (ISAS), in collaboration with Associate Professor Wataru Yamori at the Agricultural Biology and Biogeochemistry Group, and Heliospectra Japan.

With the average age of Japanese farmers reaching 67 years old and younger generations migrating to cities, traditional farming is facing a crisis. This is forcing the country to investigate new ways to produce food. Plant factories are scaling to meet consumer food demand, mainly in vegetable cultivation in both solar and artificial light environments, and the industry is growing. Japan already has approximately 200 lettuce factories using artificial light, and that number is expected to double by 2025. However, to-date, plant factories have been unsuccessful in cultivating light-hungry vine crops such as tomatoes in indoor artificial light. We want to challenge this.

Working together, we are looking to build a business model for Japan's plant factories and PFAL (Plant Factory with Artificial Lighting) organizations for indoor tomato cultivation. In the University lab, the Professor and his students will be using Heliospectra's MITRA linear, the horticulture market's first truly modular LED light. Designed by growers for growers, MITRA is the perfect solution for high-light crops, with high-intensity light output and electrical efficacy of up to 2.8 µmol/J.

"We are very excited to be a part of this research together with Dr. Yamori and the ISAS at the University of Tokyo. Over the years, Heliospectra has conducted research on light's effect on tomatoes in indoor facilities with great results," comments Yasuhiro Suzuki, General Manager of Heliospectra Japan. "We now look forward to further expanding our knowledge and developing more effective indoor cultivation of tomatoes for commercial use. We look forward to collaborating with the university and sharing with the world our knowledge of growing tomatoes indoors."

This collaboration presents an opportunity for growing healthy, nutritious vine crops indoors on a global scale, and it is a strategically important installation for Heliospectra Japan as they build their local market presence.

Empowering growers with advanced LED lighting technology, Heliospectra is redefining nature's potential with the goal of feeding and healing the world. Visit www.heliospectra.com to learn more.

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Heliospectra AB was founded in 2006 in Sweden by plant scientists and biologists with one vision – to make crop production more intelligent and resource-efficient. Today, with customers across six continents, Heliospectra is the global leader in innovative horticulture lighting technology, custom light control systems and specialized services for greenhouse and controlled plant growth environments. Designed by growers for growers, Heliospectra builds customized LED lighting strategies and controls to automate production schedules, forecast yields and monitor crop health and performance with real-time data and response, to deliver the light plants love and the consistent results growers need.

For more information, please visit https://www.heliospectra.com.