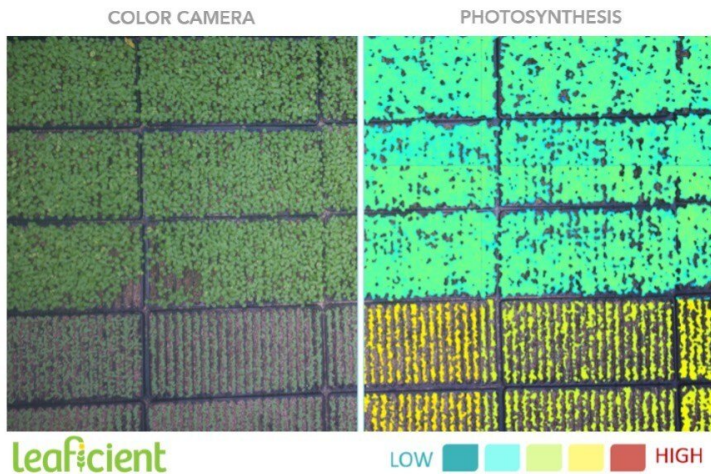


Sollum and Leaficient partner to develop the first plant-adaptive dynamic lighting system

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Sollum Technologies and Leaficient are pioneering a breakthrough technology that redefines how LED lighting adapts to plant growth.

Traditional lighting strategies rely on Daily Light Integral (DLI) as the primary metric for optimizing plant growth, based on the premise that plants absorb and use light with the same efficiency throughout the day and at all growth stages. However, recent research has shown that plant productivity can change significantly depending on a myriad of factors relating to the environment, resources provided and internal biological processes. In response, Sollum and Leaficient are collaborating to develop the first closed-loop, plant-adaptive dynamic lighting system, which adjusts lighting in real time based on plant productivity and growth rates.

This groundbreaking collaboration between Sollum and Leaficient marks a paradigm shift in controlled environment agriculture with the first plant-aware dynamic lighting solution that maximizes yield and sustainability.

François R-Moisan, CTO and co-founder of Sollum Technologies based on "Growers are often paying for photons that plants are not using effectively. By integrating Leaficient's real-time plant measurement technology with our dynamic LED lighting solution, we can now ensure that every photon is maximally utilized—boosting yields while reducing energy costs."

A new era in dynamic lighting

The combined Sollum-Leaficient solution leverages Leaficient's cutting-edge plant monitoring technology to measure photosynthetic efficiency and adjust light intensity accordingly. This closed-loop approach ensures that plants receive the exact amount of light they need, precisely when they need it, eliminating unnecessary energy costs and optimizing growth conditions for any crop variety.

"The future of horticultural lighting isn't just about delivering more light—it's about delivering the right light at the right time," said Brian Stancil, co-founder and CEO of Leaficient. "By focusing on real-time plant productivity rather than static lighting schedules, we're not just improving efficiency—we're transforming how growers manage their crops."

Industry disruption with real-world impact

For greenhouse and vertical farm operators, this innovation offers a compelling alternative to legacy lighting strategies that often rely on static schedules and overcompensate with excessive energy consumption. Instead, Sollum and Leaficient offer an intelligent lighting system that adapts to crops' biological rhythms to ensure optimal performance at every stage of development. Beyond optimizing lighting efficiency, this breakthrough will enable precise control over crop development—triggering fruiting and flowering at optimal times or even enhancing specific nutrient and flavor profiles.