



Controlling Light Unleashes Possibilities

- LED lighting controls are a “game changer” for the next generation of growers

(GOTHENBURG, Sweden, March 4, 2021, at 14.00 CET) – Heliospectra AB, a world leader in intelligent lighting technology for greenhouse and controlled plant growth environments, has partnered with Carleton College, a private liberal arts college in Northfield, Minnesota, United States, to upgrade the campus greenhouse facilities. Carleton College installed Heliospectra’s ELIXIA adjustable spectrum horticulture lighting and the helioCORE™ light control system to expand the school’s plant research capabilities with a focus on vegetable and herb transplants and native plant propagation. The project is led by Randall Hagen, Staff Biologist at Carleton College with support from Martha Larson, Manager of Campus Energy and Sustainability.

Carleton College’s recent retrofit of the Integrated Science Center included tying all three science buildings into the campus geothermal system, aligning with Carleton’s initiative for the entire campus to become carbon neutral by 2050. Applying funds from the college’s energy and sustainability budget, the Carleton team was also able to refurbish the greenhouse cooling system and replace old, antiquated 1000W HPS lights with the more efficient, safer Heliospectra LEDs and [helioCORE](#) controls after conducting an extensive lighting search and evaluation. The project generated over \$17,000 in rebates from the local utility and is expected to lower annual greenhouse lighting electricity consumption by over 100,000 kWh, a 65% reduction.

“The capabilities of the helioCORE control system will give us much better use of lights for our existing greenhouse applications and opens up many new opportunities to expand our student programs and research focus,” said Randall Hagen, staff biologist at Carleton College. “With the low winter light conditions and poor performance of the HPS lights, it has been a struggle to maintain uniform, high quality plant growth. Heliospectra and the helioCORE software controls are an immediate game changer.”

Carleton’s greenhouse applications for labs and research include growing tomato plants, nicotiana, arabidopsis, medicago, and chamaechrista. Hagen and his team of students and researchers also grow a wide range of herbs and vegetable transplants and a diverse collection of cacti, succulents and other specimen plants for demonstration in classes and trial projects. The school recently started propagation of native plant material for the 880-acre Cowling Arboretum, recognized as one of the nation’s top college arboretums.

The greenhouse retrofit project strengthens Carleton College’s commitment to collaboration with the community, supporting local food production, plant nurseries and agriculture enterprise in the local area while providing students with comprehensive opportunities to gain real-world, practical growing experience working alongside plant scientists, faculty and industry professionals.

The use of Heliospectra’s helioCORE and light spectrum control capabilities will help students optimize growth of vegetables and herbs transplants for the Carleton campus farm as well as support the possible development of an indoor year-round growing facility. Much of the produce from the farm is served by Carleton’s food service team in the dining halls.

“Carleton College embodies our mission to feed and heal the world with a true farm to table concept,” said Ali Ahmadian, CEO, Heliospectra. “It is a privilege for Heliospectra to support this educational greenhouse that demonstrates the true capabilities of our LED lighting and control technologies. The students, researchers and local food producers create lasting impact in their community while ensuring the next generation of growers and horticulture professionals move our industry forward.”

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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>.