Universität Basel

Research Project

PlantHUB: ESR9 Hoch

Third-party funded project

Project title PlantHUB: ESR9 Hoch
Principal Investigator(s) Hoch, Günter ;
Project Members Chiang Silva, Camilo ;
Organisation / Research unit
Departement Umweltwissenschaften / Physiological Plant Ecology (Kahmen)
Department
Project Website https://ppe.duw.unibas.ch/en/planthub-esr9/
Project start 01.10.2016
Probable end 30.09.2020
Status Completed

Since horticultural LED technology evolves rapidly and becomes more and more economical, an increasing number of growth facilities are installing LED grow light as replacement for conventional HPS lamps. The large choice in LED systems and the option to dim individual channels in a multi- channel system results in an immense variety of different spectra to be used. This challenges the comparability of observations in plants grown in different LED indoor facilities, especially since a universally agreed-on standard spectrum for LED plant growth chambers is missing. In a new project that will be jointly led by plant physiologists at the University of Basel in Switzerland and LED experts at Heliospectra in Göteborg, Sweden, we aim to develop optimized setups for different LED systems to enable near-natural plant growth and a better comparability among different LED-based growth chambers.

Financed by
Commission of the European Union

Add publication

Published results

4612307, Chiang, Camilo; Bånkestad, Daniel; Hoch, Gunter, Reaching Natural Growth: The Significance of Light and Temperature Fluctuations in Plant Performance in Indoor Growth Facilities, 2223-7747, Plants, Publication: JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

4612309, Chiang, Camilo; Bånkestad, Daniel; Hoch, Günter, Reaching Natural Growth: Light Quality Effects on Plant Performance in Indoor Growth Facilities, 2223-7747, Plants, Publication: JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

4613291, Chiang Silva, Camilo, Reaching natural growth: Sources of variation in plant traits between indoor and outdoor experiments, Publication: Thesis (Dissertationen, Habilitationen)

4627527, Chiang, Camilo; Bankestad, Daniel; Hoch, Gunter, Effect of Asynchronous Light and Temperature Fluctuations on Plant Traits in Indoor Growth Facilities, 2073-4395, Agronomy, Publication: JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

4525354, Chiang, Camilo; Olsen, Jorunn Elisabeth; Basler, David; Bankestad, Daniel; Hoch, Gunter, Latitude and Weather Influences on Sun Light Quality and the Relationship to Tree Growth, 1999-4907, Forests, Publication: JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

Add documents

Document
20170707092050_595f36522cc2e.pdf |

Specify cooperation partners

ID	Kreditinhaber	Kooperationspartner	Institution	Laufzeit - von	Laufzeit - bis
3869438	Hoch, Günter	Bankestad, Daniel, Research and Development Engineer	Heliospectra AB	01.07.2017	30.11.2020