

Achieve your growth goals with OSRAM

At OSRAM we envision a future with optimized yield and superb crop quality for growers in greenhouses and vertical farms. We work directly with growers and scientists to bring plant quality and quantity to a new level through the targeted use of light.

OSRAM supports growers and farmers by providing two essential services:

Your individual growth recipes – Research as a service

OSRAM can help you find the right growth recipe for your needs. Our team of experienced scientists develops new growth recipes for your plants in a fully controlled environment. The following environmental parameters are controlled and evaluated to provide you with the best results: temperature, humidity, CO₂ and light levels.

The perfect hardware for your own experiments – Phytofy RL

OSRAM's new research light system, Phytofy RL, covers the spectra from UV-A to far red. Each of the six color channels is dimmable, which will enable you to provide customizable, high light intensities on your plant canopy.



Get free expert advice from our plant scientist

Schedule a phone call with our expert to discuss

- Improvements to your growth strategy
- Plant types you need improved growth recipes for, which can be evaluated in our research as a service program
- Use of our Phytofy RL light system



Sebastian Olschowski Lead Plant Biologist and Manager Horticulture Lab

Send us an e-mail to schedule a free 15 minute call:

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OSRAM



Smart Horticulture Lighting

Improving plant yield by 26%

Case study with red Batavia lettuce

Light is OSRAM

OSRAM

Case study to improve lettuce growth through light

Lettuce is one of the most popular leafy greens on the market. Several varieties with different taste and coloration exist and it is usually produced in an open field (seasonally) or greenhouses (year round).

One of the challenges of production in a greenhouse is to provide constant plant quality and quantity throughout the year. During winter, there is a lack of light, in summer temperatures are too high. Due to this, particularly for red lettuce varieties, the production of anthocyanin is inhibited.

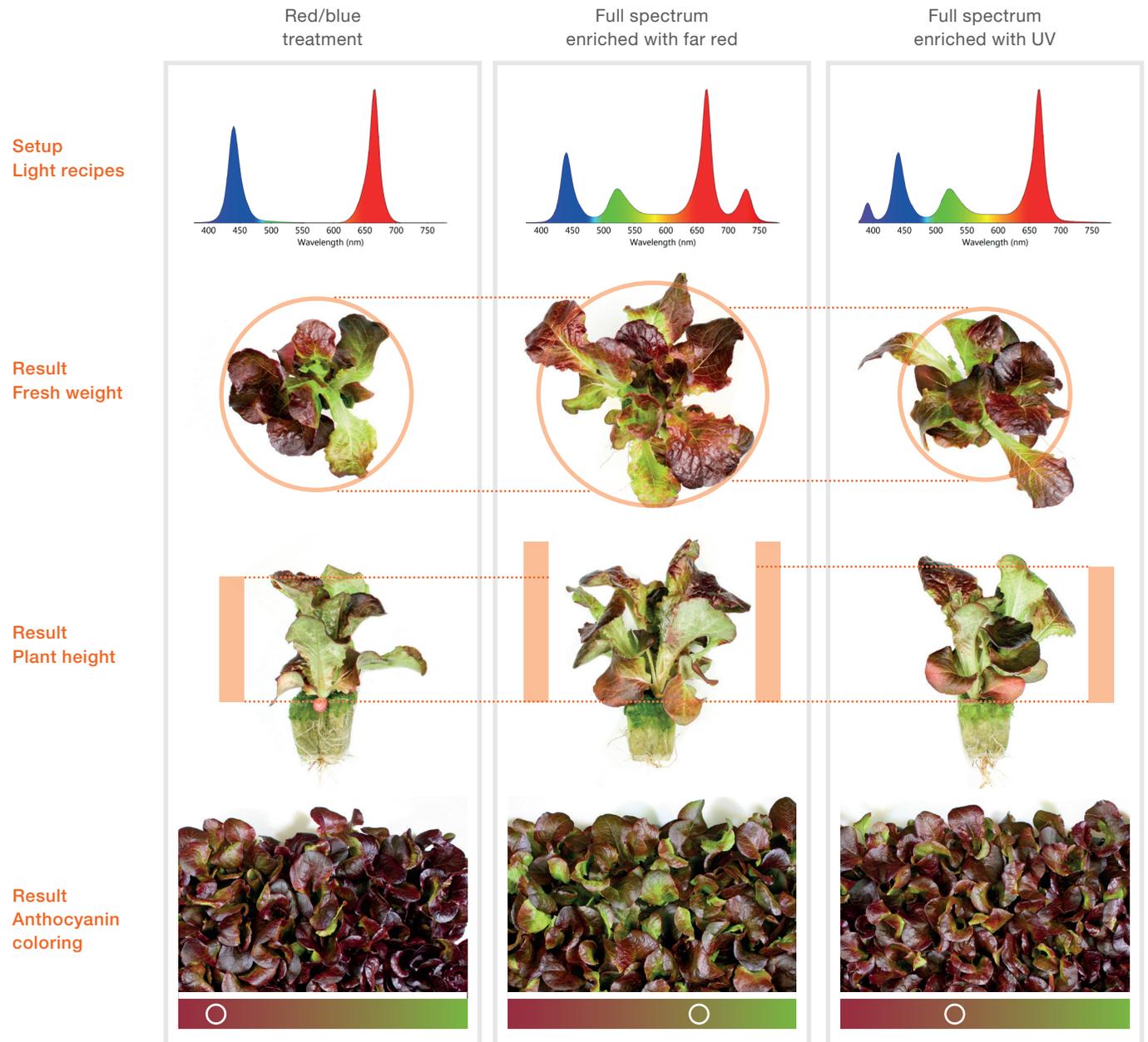
One solution is to move production into an indoor farm. In the following case study, OSRAM tested the reactions to three light recipes for a common red leaf lettuce variety.

The results are reproducible and may provide you with valuable insights into your own growth recipes.



High precision pointed leaf temperature measurements are taken, in order to control the micro-climate at selected places within the canopy.

Illustrative experiment setup and results*



*Depending on your needs additional parameters can be measured, including e.g. dry weight, secondary metabolites, multispectral tasting. For exact setup data and measurements of the case study please contact us: horticulture@osram.de