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PhytoLux news

The latest news and views and industry information from the LED plant growth lighting specialists

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LED lighting improves strawberry quality and yield

Strawberries grown using supplemental LED lighting in autumn are tastier, yield higher and have more vitamin C, Dutch researchers have found. Five different strawberry varieties were planted in the glasshouses of Wageningen UR's Innovation and Demonstration Centre, Bleiswijk, on 20 August. They found that strawberries were sweeter, more aromatic and "fruitier", while refraction and acidity increased, along with vitamin C content. Production also increased by around 15% by the end of November.



PhytoLux, a **British** company based in Surrey, has been working with Rothamsted Research and other UK institutions to develop a generic LED solution to replace traditional artificial growth lighting in controlled environments. Managing Director **Steve Edwards** has taken a unique engineering approach in the design of the **Attis** range of LED plant growth lighting to produce a practical, high quality, energy efficient and commercially viable solution.

Lettuce growth advantage with PhytoLux's Attis-5 at Moulton College

Commencing in early September 2014, Moulton College has been testing the difference in Arctic King lettuce plants grown under the PhytoLux Attis-5 LED in an enclosed Grow Tent versus plants grown outdoors under natural light in a cold frame. By December the trial had produced some very interesting and exciting results, with lettuces grown under the Attis-5 having;

- More compact plant morphology
- Higher chlorophyll content
- Thicker and sturdier leaves - equating commercially to a longer shelf life and easier processing
- Faster growth rate
- Higher dry weight while maintaining root:shoot ratio
- A growth advantage when germinated under LED before moving to natural light

The team intend to repeat the experiment with Arctic King lettuce in spring 2015, when light levels and temperature are higher for the outdoor grown plants. Lettuces will also be grown to a larger size in order to compare the full growth cycle length of plants under LED vs natural light. Over the intervening winter, Red Lettuce – Rossa Di Trento will be grown in the Grow Tent under PhytoLux LED to investigate whether red pigmentation can be achieved under the PhytoLux spectrum without UV from natural sunlight. Early results are looking positive and further information will be released once the trial is complete.



Dr. Wanda McCormick, Research and Knowledge Transfer Co-Ordinator at Moulton College comments, "The trial has produced some interesting and positive results which suggest that plant growth is enhanced when grown under PhytoLux's LED lights. We are looking forward to gaining more positive insights through the next stage of the trial"



If you would like more information about this trial please contact; wanda.mccormick@moulton.ac.uk