Case study
Marjoland

Location	Waddinxveen, the Netherlands
Philips Lighting	Philips GreenPower LED interlighting module

MarjoLand

PHILIPS
sense and simplicity

"Interlighting is good for the development of rose shoots."

Background

Marjoland is one of the most progressive nurseries in the rose world. The company specializes in sustainable and solid growth with the future in mind. The Van den Nouweland family has made technology and energy important focal points of policy. Marjoland invests constantly in innovations to enable measures to be taken in these areas. In Philips, the nursery has found a partner that has the know-how to help the company further in the field of lighting and – more important – is willing share knowledge and invest in research. The partners have been conducting tests with interlighting for the past two years at the location in Waddinxveen.

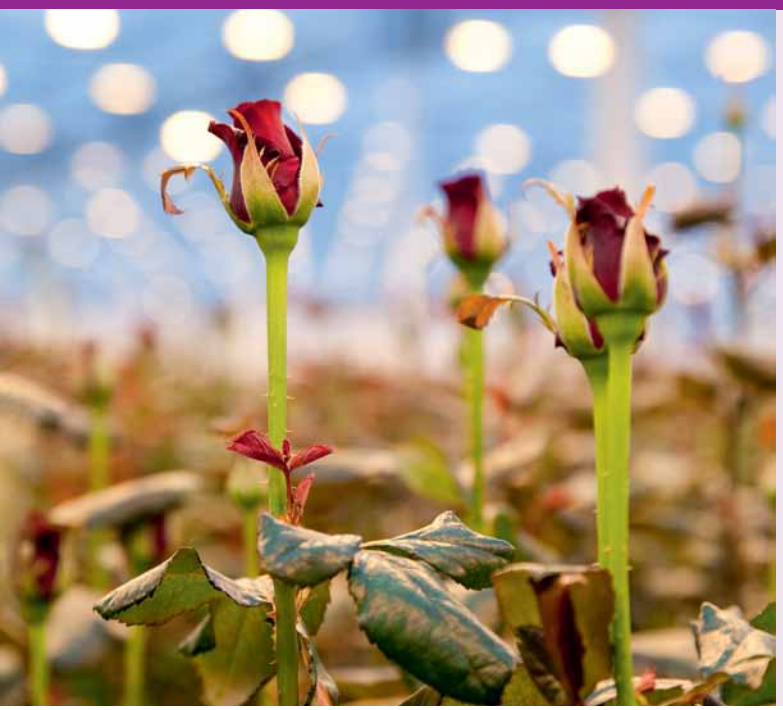
The challenge

Marjoland is looking for ways to make production more efficient, save energy and at the same time, if at all possible, even improve quality. Marjoland has been conducting tests with Philips for several years and has achieved good results with the interlighting of Passion roses with GreenPower LED modules. This was why last year Marjoland decided to extend the tests. Philips and Marjoland set aside 1000 m^2 for further development and optimization of the light recipe that they had found. The plan for next year is to attempt to optimize the light recipe for a new cultivar.

The solution

Several lighting variants were installed at Marjoland rose nursery in Waddinxveen. During the tests the LED modules were combined with SON-T lamps. The modules were positioned in the crop so as to also light the plant base, where the development of new shoots is stimulated,

Marjoland and Philips are together achieving successes in the search for better and more efficient production



Fast Facts

Grower
Marjoland, Van den Nouweland family
Sector
Ornamental plant cultivation
Crop
Roses (Passion)
Locatie
Waddinxveen, The Netherlands
Solution
Philips GreenPower LED interlighting module

and where the leaves that normally receive little light can now also actively take part in photosynthesis. "Interlighting is good for the development of shoots," says Daniël van de Nouweland, who is supervising the test at the company. "That's an important advantage. With conventional lighting, too little light gets to the lowest leaves, where the new shoots are produced. So the interlighting modules get light to the places where this was not previously possible."

Benefits

One of the most important advantages of LED interlighting for roses is that faster shoot development can be achieved by using the spectrum and positioning intelligently. What was also found is that not only was more light introduced, but the plants handled the light more efficiently. In this way the tests showed that the LEDs contribute to greener and more economical production.

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Marjoland's objectives were therefore achieved. In addition, the cooperation between two innovative partners brings about improvements to the production process and an increase in know-how at both companies.

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