



# Case study

## Strawberry grower Alain Lutz

Location  
Philips Lighting

Melsele, Belgium  
Philips GreenPower LED flowering lamp

**PHILIPS**  
sense and simplicity



“When used with the right light recipe, the GreenPower LED flowering lamps offer markedly improved stem elongation, a higher level of early production and a low number of malformed fruits.”



## Background

Alain Lutz and his wife Hilde van de Vyver grow strawberries at two sites in the Belgian town of Melsele, a true ‘strawberry village’ that is known for its strawberry fair. Despite – or perhaps because of – the town’s history, Lutz is an innovative entrepreneur. The climate in his greenhouses is fully computer-controlled, as is the irrigation and fertilizing. Partly thanks to this advanced approach in the greenhouses, this year, for the third year in a row, Lutz had the honor of presenting his strawberries to the King of Belgium at the strawberry fair in Melsele. In accordance with tradition, these are the first strawberries from Melsele, although the tradition has become outdated since the introduction of new technology. For Lutz the season now begins well before the strawberry fair. Two Belgian strawberry growers – Alain Lutz and Jan Jansen – have recently decided to install Philips GreenPower LED flowering lamps as an alternative to the well-known incandescent lamp.

## Challenge

For years it has been common practice to apply additional cyclic light from incandescent lamps. However, incandescent lamps are now being phased out so strawberry growers are having to find an alternative solution. Lutz chose the Philips GreenPower LED Flowering lamps to illuminate his 10,000 m<sup>2</sup> of strawberries. The installation was supplied by Maïs and installed by Elektravon Haket. Lutz grows an early variety of strawberries and therefore uses the type of flowering lamp with a spectrum made up of deep red, white and far red. He chose this type of lamp because tests carried out on it at a number of testing stations and in various practical applications in the Netherlands and Belgium showed that far red is essential to ensure good stem elongation.

# LED flowering lamp proves to be ideal successor to cyclic incandescent lamp



## Feiten

### Grower

Alain Lutz

### Sector

Fruit cultivation

### Plant

Strawberry

### Location

Melsele, Belgium

### Solution

Philips GreenPower LED flowering lamp

## Solution

The specific type of LED flowering lamp with the spectrum combination that includes far red clearly produces the desired stem elongation, and even makes it possible to achieve a higher yield of early strawberries with a low percentage of malformed fruit. These LEDs can equal the cyclic incandescent lamps and produce a comparable or better result. They would therefore seem to be a robust and reliable replacement for the incandescent lamp. Lutz is delighted with the new solution: "The higher purchase price of the LEDs is compensated for by the improved results and the lower energy consumption."

## Benefits

Apart from being good for the plants, the flowering lamps are also much more energy efficient than incandescent lamps. They deliver an energy savings of 82-85% compared to the incandescent lamp. One of the reasons Lutz opted

for LEDs was because of their low energy consumption. It was also very important to him that the light from the lamps was white, and not red or purple. This means that people can also work under this light and the light people see from outside the greenhouse is in keeping with their expectations. Because the flowering lamp is good for the plants, easy on the purse and kind to people and the

"The improved results and low energy consumption compensate for the higher purchase price of the flowering lamp."

environment, it represents the perfect solution to the problem Lutz was facing now that incandescent lamps are being phased out. And, with a bit of luck, Philips will have played a part in supplying strawberries to the Belgian royal family this spring.



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