

The Philips logo is displayed in a white rounded rectangle on a dark green background. The background of the entire advertisement is a photograph of a man in a white protective suit and blue gloves holding a wooden crate filled with ripe red cherry tomatoes. The man is looking upwards and to the right. The background is a lush green tomato plant with many small green and red tomatoes. A Philips GreenPower LED toplighting fixture is visible in the background, emitting a pinkish-red glow.

Horticulture  
LED Solutions

Case study  
Le Jardin de Rabelais

Avoine, France

Philips GreenPower LED toplighting  
and Philips GreenPower LED interlighting

# 100% LED – The best way to grow France's tastiest tomatoes year round

Philips LED lighting puts us one step ahead of the competition



“

For us, LED lighting was a step on the path towards year-round uniform production.”

Pascal Delahaye and Matthieu Serrault, Owners



### Background

If you are eating a delicious cherry tomato in France, there is a good chance it's been grown by Le Jardin de Rabelais. This innovative tomato nursery was established in 1989 in the heart of the Loire Valley, France. Owner Pascal Delahaye is a true-blooded Frenchman who gained his knowledge about substrate cultivation abroad and then returned to his native soil to set up his own nursery. His nephew Matthieu Serrault joined the company 8 years ago.

Since 2014, when the nursery first implemented Philips GreenPower LED interlighting, it has continued to expand its LED lighting to lengthen the growing season, improve crop yield and taste, and reduce its environmental footprint.

### The challenge

Le Jardin de Rabelais differentiates its premium tomatoes in Avoine on taste and quality to serve the most critical consumers in Europe. Both fine vine tomatoes and cherry tomatoes are grown at the nursery in a high wire set-up. Delahaye and Serrault decided on the Piccolo variety,

which has a superb taste but is not easy to grow. The company faces the natural constraints of insufficient natural light – especially in winter – which has a big impact on the growth and taste of their tomatoes.

Innovators at heart, Delahaye and Serrault are always looking to improve the yield and taste of their specialty tomato crops. For many years they used an HPS lighting installation to extend their growing season. Delahaye: “We don't need more tomatoes in summer. Our challenge is to grow more tomatoes in the winter with the exact same looks and great taste as summer-grown tomatoes. For us, artificial lighting was a step on the path towards year-round uniform production.” In 2014, they were the first grower in France to adopt LED lighting, starting with Philips GreenPower LED interlighting. They have steadily expanded their LED coverage since.

### The solution

From the very start, Delahaye and Serrault appreciated the constructive support provided by Certhon, certified Philips Horti LED partner. For the first installation, Certhon

performed the entire operation in a greenhouse covering an area of 16,000 m<sup>2</sup> that still had crops growing in it. This is because the production site changes crops once a year, with intermediary crops being planted in September. “In fact we never have a break from producing, since we want to serve the market all year round,” explains Delahaye. Certhon developed a manual hoisting mechanism for the LED interlighting system, so the interlighting can ‘grow along’ with the crop.

The company has expanded several times. They began with a hybrid system (HPS and Philips GreenPower LED interlighting), then added Philips GreenPower LED toplighting to further increase light intensity in various greenhouses. In 2018, they equipped a newly built greenhouse of 2 ha with a full LED system that combines Philips GreenPower LED toplighting and Philips GreenPower LED interlighting. Le Jardin de Rabelais is the perfect example of a grower who is eager to exploit the advantages of LED lighting to the fullest. For the past several years, they have actively participated in Philips Tomato Community Events to learn LED tips and best practices from other growers.

“  
LED lighting is clearly the future – **it allows us to achieve the very best quality and efficiency**”

## Benefits

“We’re excited by the use of Philips horticultural LED lighting which is fundamental for the future growth of our business. If we want to grow premium tomatoes year-round, with consistent taste and quality, we have to have LED lighting to do so. This is what will put us one step ahead of the competition.”

“With the LED lighting we have reduced our energy costs by 40%, which fits our goal of minimizing our environmental footprint as much as possible.” says Serrault. The climate in Avoine is a couple of degrees warmer in both summer and winter compared to the Netherlands. That’s why the grower first looked at LED lamps, because they produce far less heat than HPS lighting. Serrault: “For our particular climate and crop, LED lighting is clearly the future. It allows us to achieve the very best quality and efficiency.”



Philips GreenPower LED toplighting

Philips GreenPower LED interlighting

## Facts

### Horticulturalist/grower

Le Jardin de Rabelais

### Segment

Vegetables & fruits

### Crop

Tomato

### Location

Avoine, France

### Solution

Philips GreenPower LED toplighting  
Philips GreenPower LED interlighting  
Philips HPS toplighting

### Philips LED Horti partners

Certhon

### Result

High, year-round production of superb quality tomatoes with 40% reduction in energy usage





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