



Case study

Ruibal's Plants of Texas

Location
Philips Lighting

Dallas, Texas, USA
Philips GreenPower LED flowering lamps



PHILIPS



“The LEDs were simple to set up using standard light sockets”



Background

Ruibal's of Texas was started in 1984 by Michael Ruibal, who began selling bedding plants daily in a 10- by 20-foot rental space at the Dallas Farmers Market. He used one truck to bring the plants to the market daily. Michael has been joined by his sons Matt and Mark, who now sell the company's annuals and perennials at the farmers market as well as at four of its own garden centers. The Ruibals also sell to local landscapers.

Plants are produced in 300,000 square feet of polyethylene-covered greenhouses and 200,000 square feet of outdoor production area.

Challenge

Ruibal's has been increasingly receiving requests for flowering bedding plants as early as March. Company vice president Matt Ruibal was looking for a way to flower petunias earlier in the spring. Normally it takes 10 weeks for petunias started in January to flower. In August, when day lengths are longer, Ruibal's is able to flower petunias in just three weeks.

Solution

Working with Hort Americas in 2012, Ruibal's set up a greenhouse trial that included: three different Philips GreenPower LED flowering lamps (deep red/white/far red, deep red/white and far red), CFLs (compact fluorescent lamps) and the natural day length. The far red LEDs were used in combination with the compact fluorescent lamps. All of the lamps were turned on for seven weeks starting from time of transplant. The lamps were turned on at midnight and off at 7 a.m.

About 250 flats of petunias were grown under each light set up. All of the petunias were from the Dream series and included the varieties Midnight, Pink, White and Mixture.

Benefits

Ruibal said the deep red/white Philips GreenPower LED flowering lamps were the most effective.

‘The plants flowered 10 to 14 days earlier and that was pretty much across the board regardless of the flower color,’ Matt Ruibal said. ‘Petunias under the full spectrum LED lamps with deep red/white/far red LEDs and the combination far

The plants flowered 10 to 14 days earlier



Facts

Grower

Ruibal's Plants of Texas

Sector

Floriculture

Crop

Petunia

Location

Dallas, Texas, USA

Solution

Philips GreenPower LED flowering lamps

Philips LED Horti Partner

Hort Americas LLC

Results

Dream petunia series flowered 10 to 14 days earlier regardless of flower color

red LED and compact fluorescent lamps flowered about five days earlier.'

Based on the results of the 2012 trial, Ruibal said the deep red/white LEDs would be the lamps that he would use. He is planning to do another larger lighting trial for spring 2013 to confirm the 2012 results.

Ruibal's decision to trial the LED lamps was made a lot simpler based on the cost for the bulbs and the installation set up. The LEDs were simple to set up using standard light sockets.

'The cost for other light fixtures, such as high pressure sodium lights, was easily 10 times more expensive than the LEDs,' Matt Ruibal said. 'The operating costs are also lower with the LEDs. They are very inexpensive to run compared to other grow lights especially due to their long lifetime.'

Based on the results that Matt Ruibal got with the use of Philips GreenPower LED Flowering lamps on petunias, he is planning to trial the lamps on other crops. He will be doing a light study with mandevilla.

'We produce 1-gallon and 3-gallon mandevilla,' Ruibal said. 'We can't get them to bloom early like the Florida growers can. We can get them to a salable size by mid-April, we just can't get them to bloom until mid-May.'

Ruibal said he brings in finished mandevilla from Florida during the first to second week in April.

'The ones that we grow don't start flowering until mid-May,' he said. 'If we can get those flowering by mid-April, we could cut a month off of the production time.'

Ruibal said he would eventually like to add lights to his propagation house.

'Although we haven't done anything yet, that is definitely something we are considering,' he said. 'During the early part of the spring season our propagation house is completely full. Anything we can do to move the plants out two to three days sooner would definitely help us to get more turns out of the house. The lights would be used to speed up the rooting of vegetative cuttings.'



Photography: Hort Americas.



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