



## Summary bougainvillea trial

- **Date:** April 2022
- **Cultivation:** Bougainvillea
- **Location:** Huub van Leeuwen Westland
- **Researcher:** HortiTech

At Huub van Leeuwen Westland, CLX V1000 grow lights were installed for 30 weeks for the cultivation of bougainvillea pot plants, to monitor the effect of the grow light on the crop. The research was carried out by HortiTech.

The trial was conducted in a 2,000m<sup>2</sup> greenhouse section in combination with two other crops: hydrangeas and French geraniums. The department was controlled separately climatically and technically. In total, the department was equipped with 144 CLX V1000 grow lights.

Light measurements were taken prior to the test to determine the light levels present. The measurements were divided into three sections: Climalux on the left, Climalux in the middle and SON-T, measured at a height of 30 cm.

During the light measurement, it was noticeable that the differences between SON-T fixtures are very large, partly because the SON-T lamps are outdated. In addition, the light distribution was not optimal. After the light measurement, the grower was advised to install three C-profiles, however, he opted for the two C-profiles that were already present. At the end of the study, this choice appeared to have no adverse effect on the results.

This trial is not about development speed due to more light/m<sup>2</sup>, but about comparison in plant morphology. More light would mean more growth with a shorter cultivation time and that is not the desired goal of the grower.

### Production

The bougainvilleas are placed under the Climalux lamps in week 46. At the beginning of cultivation, the plants soon have considerably more growth, thicker trunks, more roots and the plants have more shoots later. More growth also takes place on the trunk itself. The plants can be topped two weeks earlier. However, this is not done because the plant could then run too far ahead. The very first plants will be delivered from week 14 and the Bougainvillea under the Climalux lamp are on delivery week 17.

After the first pruning you will see growth shoots appearing after about five days. With the reference you only see that after two weeks. The second pruning can also take place much earlier, but is not done earlier. In week six, the second pruning takes place. (Too) much of the plant is cut off. A number of plants have now also moved to locations under SON-T. These plants show that there is a lot of extra energy in the plant and that the plant has no trouble adapting. Here too, new shoots show themselves earlier.

After the second pruning, one section of Bougainville remains under the Climalux lamp. Here they go to 'short day' period. The plants have an average of 2.8 shoots compared to 2.2 shoots under SON-T. Many more shoots emerge under the Climalux lamp.

Now that the plants are ready for delivery, the induction appears to have taken place two weeks later. Flowering also comes later. However, the entire plant is larger and there are more flowers. The overall 'short day' to bloom lasts longer. Nevertheless, the ornamental value is much greater.

## **Conclusion**

In summary, the following can be concluded from the trial:

- At the start of cultivation, the plant soon has considerably more growth, thicker trunks, more roots and the plant lets out more shoots.
- More growth takes place on the trunk.
- New shoots show themselves earlier.
- The fan is designed to cool the lamp. The vertical vortex also ensures a more natural climate. Moisture between the plants is just slightly lower. This can already give the plant a different 'look' and ensure the desired plant structure.

## **Additional information**

Would you like to know more about this bougainvillea trial? Please contact Niels Damen, operational manager. He can be reached directly via [n.damen@climalux.nu](mailto:n.damen@climalux.nu) or +31 6 18 67 81 29.