



Summary hydrangea trial

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

At Huub van Leeuwen Westland, a number of CLX V1000 grow lights were installed for the cultivation of hydrangeas during a specified period, in order to monitor the effect of the grow light on the crop. The hydrangeas for this trial were grown at a different location. At the trial location, all they had to do was produce five pairs of leaves and a flower. The research was carried out by HortiTech.

The trial was conducted in a 2,000m² greenhouse section in combination with two other crops: bougainvillea and French geraniums. The department was controlled separately climatically and technically. In total, the department was equipped with 144 CLX V1000 grow lights.

Production

The hydrangeas in this trial were not illuminated. The grow lights were mainly used because of the vertical ventilation system.

Five pairs of leaves grew from the hydrangeas in this trial, after which the flower bud became visible. The flower was already induced. The extension of the internodes gives the ornamental value. This means that by administering inhibitors, the flowers were brought to the same height.

The internodes of the Hydrangeas under the Climalux grow lamp remained clearly shorter and above all more even compared to the reference. The shoots that grew along the first flower buds showed a flower bud earlier. This created more equality. The test set-up with the grow lamps consumed fewer inhibitors compared to the reference. The crop was firmer and showed more shoots.

This test has shown that the vertical air movement from the grow lamp leads to a sturdier plant, which blooms more evenly.

Conclusion

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

- It is very striking that the plant can develop fully. This can be done almost without using inhibitors. The ornamental value increases considerably due to the formation of more shoots.
- The cultivation time can be shortened in the growing part on the one hand, after which it takes more time for the plants to flower.
- The fan is designed to cool the lamp. By creating a vertical vortex, this creates a more natural climate. Moisture especially between the plants is slightly lower. This can already give the plant a different look and ensure the desired plant structure.
- By using less pipe temperature and having to dehumidify less, this system is very energy-saving.

Additional information

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