

Extremely high production in data-driven cucumber greenhouse BASF 's Gravenzande

Nunhem, 26 September 2022 - On 16 November 2021, the first high-wire cucumber crop was planted in the data-driven greenhouse of BASF's vegetable seed business in 's Gravenzande. The greenhouse was equipped with about 340 umol LED lights from Signify. The second and third crops were planted on 2 March 2022 and 15 June 2022, respectively.

On Monday 26 September, the limit of 400 cucumbers, with an average fruit weight of about 385 grams, will be surpassed. The planned end date of the third crop is 3 October 2022. Production is even a bit higher than calculated in the BASF cucumber team's model. That model was used to determine the potential based on the expected amount of sunlight and artificial light combined. One reason for the higher production is the higher efficiency than in the original plan in grams per mole of light. A second reason is the beautiful summer with about 40,000 joules more sunlight than usual.



Besides Hi Light F1, the main variety in all three crops, many new Nunhems® hybrids were tested. The cucumbers were grown based on Plant Empowerment principles. Several leading growers provided technical support to BASF in this trial. No standard pruning method was used to keep the plants balanced. Every week, leaf splitting was looked at and based on that, it was determined how to prune. Also, based on plant registration, it was determined how many leaves needed to be cut per week for optimal crop balance.

On 9 November, the BASF cucumber team is organizing a cucumber event in the Netherlands and one of the topics is data-driven cultivation. More details of this trial will be discussed at this event and shared afterwards.

Hi Light, the main Nunhems variety in this these data driven cucumber trials

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