



De Ruiter®

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# Growing tips Completo

## End artificial lighting

Now in the spring Completo will keep its strength. The vigor is still more than enough, which is visible in the strong head of the plant and the still strong truss development. Most trusses still have at least 11 flowers. The development of the vegetative parts is good, the leaves are large and strong and give a lot of filling. It is therefore necessary to remove a leaf in the head. Make sure that enough leaves remain on the plants. With the increasing radiation from outside, more cooling capacity of the crop is required. With this crop it is possible to make a good final shot.

The good final shot must be made possible by effectively converting the light from the sun with additional light from the lighting. The cool outside conditions are ideal because the CO<sub>2</sub> content can be kept at a high level with limited ventilation.

The lighting is switched on on days with an expected irradiation of 20Mol PAR or less in the greenhouse (1800Joule with 60% light transmission of the greenhouse). The lamps are switched on after at least 6 hours of darkness, so that the plants can convert the produced assimilates into growth. Switching off takes place at 350 W from the outside. Switching off the light in time is important to prevent the too high rising of the temperature and/or opening the windows too much. A too rapid rise in the temperature or too much opening of the windows prevents evaporation rising too quickly and the emptying of the rather old long stem. This can take a lot of growth. (intermediate) LED lighting provides less heat and can be switched off later.

The CO<sub>2</sub> level can be maintained in the greenhouse by dosing enough CO<sub>2</sub> and reducing emissions to the outside by carefully ventilating. This can be done by increasing the ventilation temperature based on the irradiation. Also, make sure that the P-Bands are set large enough, the air windows will open and close smoothly. This also prevents shocks in temperature and humidity.

We see that if the humidity is high at Completo, problems arise in the truss shape and flowering. The truss position then rises too much and the petals develop long and curled. To prevent the high air humidity in the greenhouse, a minimum vent position is set for humidity, but always ensure that the temperature in the greenhouse does not drop due to a vent position on humidity. The ventilation temperature can also be lowered at a high absolute humidity content in the greenhouse.

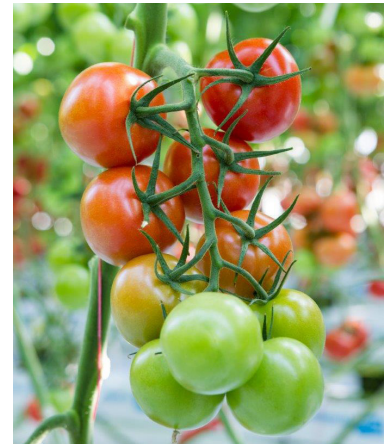




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The screen is still used when the greenhouse has a high heat requirement. Humidity becomes the limiting factor for using the screens. A moisture gap is a possibility, but this often creates inequality, especially with long driving lengths. In the period when the lamps no longer turn on in the morning, the screen can be useful to bring the crop up to temperature in the morning. This helps to prevent leaf scores.

Due to the increasing evaporation, the water absorption will increase considerably in the coming period. A larger part of the water is needed for cooling the crop. The EC may therefore drop in the gift and the slabs in the coming period. With the larger amount of water, more transport of elements also enters the plant. The target value for the EC in the mat is 4 - 4.5. The EC in the gift will then be between 3 and 3.3. The increase in watering also increases the gift of Potassium. During this period, care must be taken that this element does not rise too much and that the K / Ca ratio becomes unbalanced. The amount of nitrate can be increased to stimulate growth when needed in this period. The advice remains to regularly take a slab analysis and adjust the fertilization accordingly.



Healthy roots are essential for good growth in this old crop. The right balance between air [oxygen] and water plays a role in this. By tarring enough, more space becomes available for air, besides, the dynamics of high and low water contents and a drier mat provide stronger roots. Especially the stopping time determines how much the mat intends, we prefer not to give a gift in the evening, because this makes the mats wetter and the roots weaken. In the morning realize the first drain at 400 Joule or 600W outdoor light, so that the plants can absorb water well when the sun increases in strength. Aim for about 30% drain.

The plants have now reached a considerable length and not every plant is the same length. Therefore, make sure that the plants are all at the same height when lowering and that the distribution between the plants is good. Each plant must be able to intercept the same amount of light. Dead plants are removed including the stems. The resulting holes must be filled again by adding an extra head.

**Good luck with growing Completo!**



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