

MATRIX Crop report – Week# 21

Belgium, May 19th, 2003

All the light that we had this season has finally resulted in a higher production. Yields of 2.5 kg/m²/week for two or three weeks have been achieved during the last period. The cumulative yield to May 15 is 14 – 16 kg/m². Striking is the uniform size, mainly +82 and +92 mm. Most blocky fruits have been picked and there is less fruit drop when lowering.

In the coming period we have to pay attention to russetting. There is a little, but the fruits stay shiny. Keep in mind that the fruit temperature does not rise as quickly as the air temperature. This can lead to condensation and also shrink cracking.

Recommendations:

- Do not let the night temperature get too low.
- Ramp up slowly (3 to 4°C/hr) and start in time.
- Keep the fruits exposed.
- Have a small P-band. This means that the vents open quickly when it gets warmer so that the greenhouse temperature does not rise too fast.

The actual 24-hr temperature when there is not much sun will be 18 – 19°C. Should it improve the next couple of days and the 24-hr temperature go over 19.5°C, try to lower the temperature. If the 24-hr temperature is going to be between 20°C and 21°C, grow as cool as possible.

Squeezing

Keep the crop growing strong. However, when the leaves get shorter, increase the night temperature a little. When we have real summer-like weather, slowly squeezing the vents on the wind side (starting at 17:00 hrs) can also have a good effect. At that time the power of the sun decreases and the humidity deficit starts to increase (RH goes down). If we limit the maximum position of the wind side vents to 70%, we will see that the temperature will increase by no more than 0.2 to 0.3°C while the humidity will increase. The plants stay active and will create a better climate due to continued transpiration. Starting at 21:00 hrs the maximum opening can be increased again to 100% over a 1.5 to 2 hour period. Squeezing should only be done if the greenhouse temperature does not go up. So, squeeze slowly enough; it may easily take 3 hours before the maximum is reduced to 70%.