

Matrix Crop Report – Week #9

Belgium February 23rd, 2004

The weather had many ups and downs the last few days. One day with a lot of light and the next day we have to put up with many rain and/or snow showers. The temperatures were also very erratic. It is therefore very difficult to realize a good climate and irrigation regime. Assess the situation every day and make the necessary changes.

Below are some points for your attention.

- If snow or hail showers are expected, limit the maximum pipe from 09:30 till 16:30 hrs to 60-65°C. For the rest of the day the maximum pipe can be set at 75-80°C. With such weather, a large reduction on light (-10 to -15°C) can be useful.
- When it is very sunny (more than 500 W/m²), the greenhouse temperature can easily overshoot to 26-27°C, even when the outside temperature is low. If we then start venting we run the risk of cold air falling on the heads. Transpiration will then stop and the plants cannot cool themselves anymore. This will increase the risk of BER. Because the plants have not seen much of the sun so far, their ability to cool themselves is not yet as strong as in the spring.
- Be careful with venting. Do not vent too much before 10:00 hrs in order to avoid cold heads. In new greenhouses it is good to loosen the vents from 10:00 hrs on to maintain sufficient activity and to achieve a more uniform climate. Additional venting may be needed for humidity control.

In a few places we see some growth spots. This is an indication of watery, weak plants. Such plants are more susceptible to Botrytis and leaf necrosis. There are a number of causes of growth spots:

- High humidity
- Watering too much, so that more water is pumped into the plants than is transpired
- Irrigating too early and too late
- Low drip and slab EC

Matrix is a generative variety by nature. Now that the fruit load is increasing, it may be important to maintain a smaller day-night difference so that the heads will get stronger. This is best done by having a lower day temperature set point.

In the earlier plantings, the second truss does not look as nice. The fruits are not as round, so watch out for hollow fruits. Avoid high pipe temperatures close to the slabs.