

**Matrix Crop Report – Week #27**  
**Belgium June 28th, 2004**

It still does not look like we will get real summer weather in the coming week. One day the temperature can get quite high while the next day it may not even reach 20°C. It is therefore important to review the temperature set points every day and adjust if necessary.

Some reminders about summer time set points from the previous tip:

- The K/Ca ratio can change as a result of the large amounts of water applied when warm and sunny. This can lead to more BER. Try to avoid this by using liquid calcium nitrate instead of the ammonium containing dry formulation, which increases the risk of BER.
- Grow as cool as possible if the 24-hr temperature will exceed 20°C.
- The pipe temperature can be taken out except for those with a buffer tank. They should keep it at 40 to 45°C in order to empty the tank in the morning (for instance, from three hours before sunrise to two hours after). It is also better to have a warm pipe if there is a risk of condensation on the fruits.
- If it is not too cool in the morning (>15°C), the day/night set points can be 15/15°C.

If we get a very cloudy day after a few sunny days, quickly reduce the irrigation. Start about one half hour later and stop at 17:00 hrs if it is cloudy or raining. Make sure that the slabs are not too wet going into the night. Closely follow when the first drain occurs and adjust start and stop times accordingly. Also consider increasing the length of the irrigation turn if less water is given so that the EC will not increase too much.

Also pay attention to the climate settings. It is important that the 24-hr temperatures are achieved. During warm days, lower targets are often used to lower the 24-hr temperature. These low set points now have to be brought back to normal values. The minimum pipe may also have to be increased.

With regard to russetting, it is advisable to have a sufficiently high night temperature with a high enough minimum pipe. A minimum pipe is also needed on cool mornings, from 1.5 to 2 hours before sunrise. The fruits will then be warm enough by the time the greenhouse temperature is warm.