

Matrix Crop Report – Week #31 Belgium July 26th, 2004

Under quickly changing weather conditions it is important to keep a close eye on the irrigation strategy. The crops are not used to much yet. Start times are generally at about 07:45 hrs. The first drain should occur at 09:45 hrs. On rainy days, the first drain will be much later, and this will cause an increase in the slab EC. Such a high EC can lead to BER on sunny days.

Sufficient drain is especially important during the afternoon. On a sunny day, the amount of water given to the crop can be as high as 10 litres/m².

Be aware the plant will not be at its maximum level of activity on the first sunny day. Pay particular attention to the drain therefore and adjust the irrigation strategy accordingly.

Stop times can vary much, from 16:45 hrs till 19:45 hrs, depending on the light. If there is enough light, irrigation can continue until 19:45 hrs; starting on light sum only is sufficient. Keep in mind the minimum radiation level below which there must not be any irrigation. Both stopping too early as well as too late have their effects. Stopping too early will reduce growth. Watering too long will reduce the oxygen content in the slab (it is full of water), root tips will die back and plant heads will turn pale as a result.

Yellow heads can also be caused by a large fruit load relative to the light conditions. Translocation of iron and manganese are reduced. Make sure there is plenty and also that it is available to the plants by having a pH of 6.2. If necessary, use some red iron.

To maintain good fruit quality it is important to keep the following points in mind:

- Deleaf enough: keep about 15 leaves and try to have the lower two clusters exposed.
- Do not have the night temperature too low (16.5 – 17°C).
- Keep the minimum pipe in the morning at for instance 45°C during darker days, and reduce the temperature on light.