MATRIX Crop report – Week# 7
Belgium, February 9th, 2004

Matrix is a generative plant by nature. In crops with the fifth truss flowering we see that the heads are thinner and that the truss is a bit weaker due to a lack of light and the increasing fruit load. The fruits are swelling more as well. Therefore we tend to steer the crop in a more vegetative direction.

This can in part be done by reducing the day-night difference.

- For crops planted before December 20 we suggest:

Day: 18.5°C + 0.5°C on light and venting at +1°C
Night: 17°C + 0.5°C on light

- For plantings after December 20:

Day: 20°C + 1 to 2°C on light and venting at + 2°C
Night: 17.5°C + 1 to 1.5°C on light

Make sure that the greenhouse temperature does not get too high when very sunny (to 500W/m2) by reducing the pipe temperature in time.

There are some greenhouses where we see growth spots. Growth spots have a number of causes. The risk of growth spots is higher as the fruit load increases, the slabs get warmer, transpiration is reduced, and too much water is available to the plant.

We can only be happy with the increased fruit load. We try to keep the slab cooler by limiting the maximum pipe at 75°C and, if possible, by using the grow pipe so that the maximum pipe can be reduced another 5 – 10°C.

Transpiration can be stimulated by putting more energy into the greenhouse, possibly by using the grow pipe between the heads. In the evening hours, transpiration can be stimulated by extending the day temperature.

With the weather forecast for the next week in the back of our minds, we have to pay attention to a couple of points. In February, the sun can already bring quite a lot of heat into the greenhouse. If sunshine alternates with snow showers, it is important that the maximum pipe is limited at 70 – 75°C. A reduction of the minimum pipe temperature on light is also necessary (for instance –10°C at 150 – 300 W/m2) so that the temperature does not get too high.

Also pay attention to irrigation. Stop in time: three hours before sunset when sunny and one to one-and-a-half hour earlier on dark days. Irrigating too late leads to more growth spots, paler color of the plants and more humidity in the greenhouse. It is better to irrigate quicker after the first irrigation in the morning, no more than a one-hour interval. This will also give you better control over the slab EC.