

# Report

## LV Vlaemynck

Season 2017



### Subject

In this report, you can read how we did a test with Bio-Organic Catalyst (BOC) in the irrigation water for tomatoes. These fruits are growing in the glasshouse of LV Vlaemynck in Nevele. The test is to add some BOC at the irrigation water to have more Dissolved oxygen in the water. That makes it easier for the plants to take up the water and, more important, the fertilizers in the water. Those are the fundamental elements that the plant needs to grow and produce tomatoes with a good quality.

During the season there was a big problem with blossom end rot in the tomatoes at Nevele. When the plant can not take enough Calcium from the irrigation water, it takes it back from the growing tomatoes. That results in blossom end rot. These tomatoes can not be sold anymore. So that problem can cause a big loose of money for the company. Therefore it was a good test to make sure that the plants can take easier the Calcium and other elements by cause of the excessive oxygen in the water.

### The test

In April we started to add every day a few ml of the solution to the feeding water. In the beginning we didn't see any difference at the plants. The only thing we saw was, while adding the solution in the irrigation water, there were a lot of bubbles coming. That means there comes a lot of extra oxygen in the water. So we knew the product was working.

### Results

In the summer time we didn't see much at the plants or the roots. The roots were very good, what you can see on the picture down. That is the first important thing to have a good crop for the whole season.



One thing we saw was the usage of hydro peroxide was less in the summer. We use the peroxide to keep the irrigation system clean at the inside. So that means the solution keeps also the pipes clean, what is a good advantage.

An other thing we saw was the roots were developing very good. There were a lot of roots under the blocks with plants, what you also can see on the picture down.



An other thing you can see on that picture is the upper side from the block. It is nice and dry. There is no algae and no mucus on the block. That means there is much more oxygen in the water than last year. Than al the blocks had the algae and the mucus.

The biggest advantage is that there is not too much damage from blossom end rot. This season we have long tomatoes from the type of San Marzano (you can see it on the picture below). They are more sensitive for blossom end rot than the round tomatoes we had last year. Now there is much damage from blossom end rot by cause of the hot wheater from last weeks.



There are approximately 6 tomatoes with blossom end rot per plant in our company. That is actually too much. Next year it has to be less than that. Our colleagues with the same variety of tomatoes have around 17 tomatoes per plant with damage. So here in Nevele it is a lot better than the other companies. We are not 100% sure the result only comes from the product, but it certainly has to do some thing good for the plants.

## **Future**

We are satisfied with the product and we would like to try it again next year. Only we have to calculate how much we need exactly for the best results. Also we have to look to the costs to use the product.