

SAISEKO

CASE STUDY

Tenerife Lettuce Farm

16 July 2012

Early in 2012, TecoAvant the Spanish distributor for Saiseiko carried out an extensive study of the effects of using the SEM500 to create alive water to irrigate crops at a lettuce farm in Tenerife.

About the Lettuce Farm

The Lettuce Farm is located in El Socorro, Tenerife, where the climate requires that the crops are irrigated as there is insufficient natural rainfall to allow them to grow effectively. Normally the plants would be irrigated with water directly from the water main.

The Test

The test is to compare the growth results from plants grown with Saiseiko SEM treated water and standard water.

A field of Lechuga Romana (Roman Lettuce) is grown with half being irrigated using the standard water supply and the other half being irrigated with the same water passed through the Saiseiko SEM500 Triple Vortex Water Conditioner.

The field was planted on the 24th March 2012, and the SEM500 was installed on 30th March 2012. This photo was taken 11 days after the initial installation.



To the right of the red line is the section of the crop irrigated with the SEM treated water, to the left is the section irrigated with untreated water.

After just 11 days the difference can be seen easily. Below are two close up photos. The lettuce on the left is being grown with non-SEM water, whereas the lettuce on the right is being grown with SEM treated water.



After 52 days

The test was concluded when the lettuce was harvested on 17th May 2012. The results were spectacular.



The lettuce grown using SEM treated water was on average 20% larger in terms of weight and size than the non-SEM lettuce

In this picture it is clear to see that the boxes designed to take 6 lettuces grown with untreated water are unable to contain six lettuces grown with SEM treated water.

When the lettuces are placed on the ground in front of the box the difference is even clearer to see.

The Results

The average weight of the six lettuces grown with non-SEM treated water was 5.8Kg, whereas the average weight of the six grown with SEM treated water was 7Kg.

The size of the stem is a key factor that determines the overall size of the plant and is a key indicator of the number of leaves.



Shelf Live

Once the lettuces were harvested the shelf life was measured over a 15 day period. After 9 days the lettuce grown without SEM water was starting to show signs of mould and decomposition (see the image on the left below).



The outer leaves we removed on both plants and left in the refrigerator for a further 2 days (see the image on the right above). At this point the outer leaves of the lettuces grown without alive water were again starting to show signs of decay and decomposition.

Again the rotting leaves were removed (plus the same number of leaves on the healthy lettuce), and left for a further 4 days.



At the end of the test the lettuce grown with alive water was still fresh and when eaten, still tasted good, whereas the lettuce grown without alive water was not fit for consumption.