

Proof of Concept (POC) in United Arab Emirates (UAE) - Tomatoes

Located on the outskirts of Al Ain in the United Arab Emirates (UAE) this farm is the only organic farm certified by ICEA of Italy in the UAE. Their customers include RipeME, Carrefour and Spinneys, etc. The farm grows vegetables, dates and some fruits in their 60 air-cooled greenhouses and adjoining 40 acres of land.

Case Study Brief

Challenges in farming:

Mortality of the crop is the biggest risk for a farmer which makes them over dose pesticides or PKN (Phosphorus Potassium Nitrogen) based fertilizers in their crops. The irrigation system of a typical green house in the desert is a drip-irrigation system so the roots also curl up in a bunch around the plant making the foundation of the plant weak.

Solution:

- Using Pure Agri the above challenges were negated, and the yield of the plant was doubled. The photos will showcase the progress of crops with their control subjects.
- The test was started at infancy stage of the crop and continued for a period of 6 months for the tomatoes.
- No fertilizer or urea was used in this experiment.
- Cow manure was applied, and the growing medium was 40% desert sand and 60% organic compost.





1st dose

Plants 100mm high on the day of 1st dosing









End of first month dosed crop



End of 1st month non-dosed crop

Notice the inconsistency in height and dwarfed in comparison to the dosed crop







End of 2^{na} month dosed crop



End of 2nd month non-dosed crop







End of 3^{ra} month dosed crop



End of 3rd month non-dosed crop

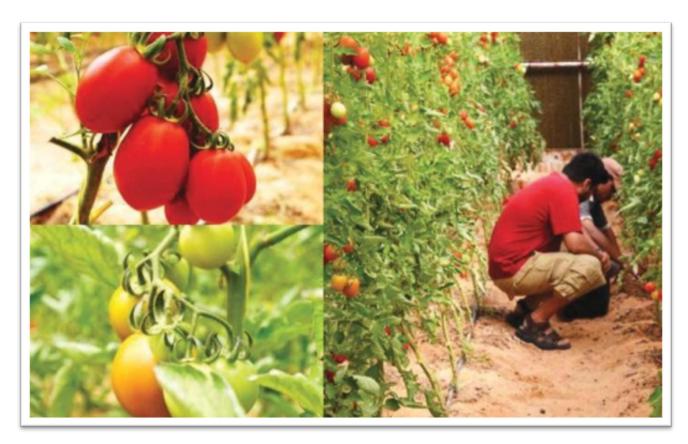






End of 4th month dosed crop

First harvest has already been picked



End of 4th month - non-dosed crop

Tomatoes are still green, and the leaves are starting to wilt







End of 5th month dosed crop

Third harvest starting to ripen



End of 5th month non-dosed crop

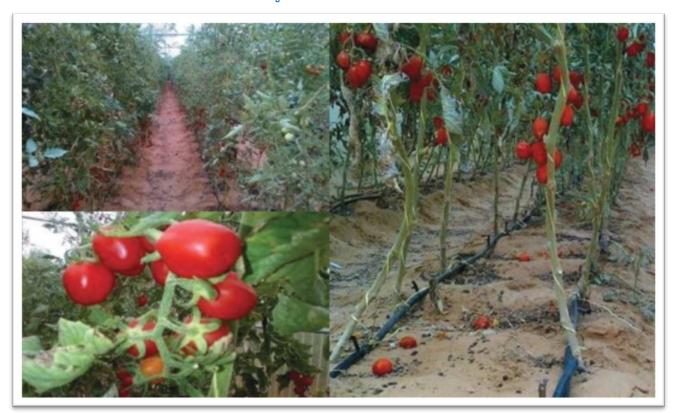
One harvest was achieved







End of 6th month dosed crop



End of 6th month non-dosed crop







End of 7tm month dosed crop

Still flowers and producing tomatoes



End of 7th month - non-dosed crop

Plants have died









- The final yield of the crop was 2 times over that of the control.
- The plants were still flowering and bearing fruit but due to the high temperatures in July (50C) they were turning red at a very young age. But they were still flowering off season.
- The plants were stronger and more robust than the control which ended its cycle when the season ended.
- As of 3rd August, the crop is still flowering and bearing fruit, and monthly dosing will continue to see if it can survive another two months.
- September the crop had to be pulled out to make way for new plantation but was still flowering and bearing fruit. Although not a very large sized fruit.
- The control had a 30% mortality while the treated had a 100% survivability rate
- No urea or PKN was used in either of the subjects.



- Control non-dosed crop yield 720 kg (seven hundred and twenty kilograms)
- Dosed with Pure Agri crop yield: 1.715.5 kg (one thousand seven hundred fifteen and a half kilograms)



An unofficial Parsley test was done, and Parsley was harvested 5 times before the left side non-treated soil could grow to its full height – 500% increase in yield.





