

Biomasters, Inc. MICROSOIL CORN TEST

Conducted in Yucatan, Mexico

www.microsoil.com



Introduction:

The technological advances that have been made in the past years towards the control of parasites and plagues, the production of fertilizers, both solids and liquids, as well as high quality seeds, have significantly elevated the crop yield in the areas where they are used. However, due to the excessive use and application of chemical products, severe damage has been done to the eco-system, not to mention that the quality of life for humans has deteriorated due to the high amount of toxins associated with chemical fertilizer use. As a result of these problems, people are now turning to organic agricultural methods to try to restore the eco-system and some of the natural resources that have been destroyed. This is a long process but one that is urgently needed, because if not addressed, these problems such as the poisoning of our soils, the increase of plagues and more drug resistant illnesses will simply get worse. These can all be addressed, but it will require the participation of everyone involved in agriculture.

We are committed to doing our part in working towards this goal, and have been introduced to a high quality, organic product called, MicroSoil, which is capable of returning the soil to its original condition. MicroSoil contains enzymes and beneficial soil microorganisms to replace those that have been depleted due to the excess use of chemicals, leaving the soil void of nutrients, resulting in diminishing yields.

Professor Migual Alonso, of the pueblo of Tixmeuac, in the state of Yucatan, Mexico agreed to conduct a test, using MicroSoil to see what results he could get and how cost effective it would be.

Objective:

Phase one would entail using MicroSoil in agricultural soil in the south of the Yucatan Peninsula, specifically in the county of Tixmeuac, an area that is not considered very ideal for growing crops.

Preparation and Planting:



98% Germination Rate with MicroSoil

Senor Alonso began by planting 5 hectares in the Spring/Summer of 1997 with Cargill seed DE 343, planting 56,000 plants per hectare. The soil was mechanized and the seeding done by hand with a distance of 70 cm between burrows and 25cm between plants, using one seed per stroke of planting. No herbicide was used either in pre-emergence or post-emergence, neither was a fertilizer used, yet there was a germination rate of 98%. Based upon this fact, Senor Alonso expected to get a yield of 3 tons/Ha which is what most of the other farmers in the area get.

The Test Results:

Ten days after the emergence of the plants, he applied MicroSoil on the surface of the soil at a rate of 1 liter of MicroSoil diluted with 100 liters of water per hectare. He broadcast this dilution with a backpack pump just to the point where the soil was damp. He also applied 100 kg of urea per hectare.

It was necessary to apply the urea because during the first few days the microorganisms in MicroSoil and the plants compete for the nitrogen due to the fact that the microorganisms require a small amount of nitrogen to activate them. Note: The quantity of urea required may vary depending on the amount of nitrogen already available in the soil.



With such rapid growth
No weeds had time to develop



Wider and Deeper Green Leaves
on MicroSoil Crop

In just 15 days it was clearly visible that there was increased thickness in the size of the stems as well as more rapid growth where MicroSoil had been applied. It was observed that the growth was so accelerated that the weeds did not even have time to develop, therefore, no herbicide was used, neither was any weeding required.

It was also observed that the tasselling occurred 8 to 10 days earlier than usual. According to the manufacturer's specs 55 days is normal, but tasselling occurred only 45 days from seeding. It was also observed in the beginning that over 50% of the plants showed pairing (sucker plants) as seen in the photographs, developing large husks between 6-10 inches long.



Significantly better growth rate
with MicroSoil



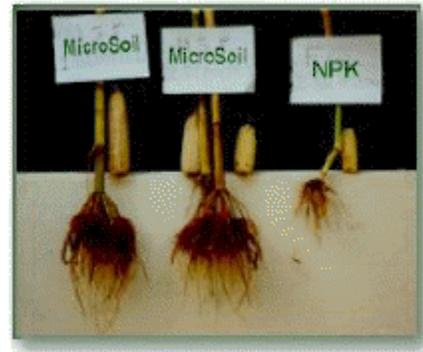
Tasseling at 45 days from seeding - 8 to 10
days earlier than normal!



Bending the corn

Finally, they proceeded to the bending of the corn to let it dry out. When the last measurements were taken, the average height was found to be 2.50 meters and the thickness of the stems, 1 inch. When compared to the control this was a difference of 50%. Although no measurements were taken of the leaves, it was observed that they were wider and a deep green color.

At harvest, it was determined that the average size of 57% of the husks was between 8 and 10 inches with only 19% being under 8 inches and 24% being greater than 10 inches. The average number of corn rows per husk was 16 with 90% being kernels. The average weight of the husks was 230 grams, and when the kernels were removed, the average weight was 150 grams. The final yield with MicroSoil was 6.5 tons/Ha while the control had a yield of only 2.7 tons/Ha.



See the dramatic difference in the size of the roots and ears of corn

Relative to the cost, we would have to say that there is a great difference between the two treatments.

TREATMENT	FERTILIZATION
	(\$ per ton of product)
MICROSOIL	\$110.00
CONTROL	220.00
DIFFERENCE	+110.00

The main objective of this test was not to show that you can make money and lower your cost while obtaining a greater yield, but emphasize the fact "that plants feed through the roots and for this to take place, the soil has to be in stable condition with a good balance between its animal and organic life," making MicroSoil the ideal alternative.



MicroSoil - "an alternative to enter the organic era and take care of our environment"

The microorganisms are an essential part in the soil's fertile composition, if they don't exist, the soil is inert and it has no life. Only with organic matter and minerals is it possible to deliver nutrients to the plants. MicroSoil provides us with an alternative to enter the organic era and take care of our environment. In addition, the use of MicroSoil gives us great economic benefits as we have observed in this test. MicroSoil is not a product for a specific crop, it is for all types of soil.