

GARLIC TEST –Using MicroSoil® Mexico

The test was conducted at El Rancho in 1997. The following is a 6-month after the use of MicroSoil® and 2)



“Los Rancheros” at Pabellon Ags, Mexico evaluation of 1) soil conditions prior to and the results of yield at harvest.

Soil Analysis:

Soil sample #1 was taken in October MicroSoil® and the planting of the was diluted in 100 (one-hundred) The MicroSoil® dilution was applied in conjunction with 80% of the amount of fertilizer normally used prior to planting. Soil sample #2 was taken on May 7, 1997 just prior to harvesting the garlic crop.

1996 prior to the application of garlic. Then, 1 (one) liter of MicroSoil® liters of water and applied to each hectare.

SOIL ANALYSIS REPORT

SAMPLE		#1	#2	DIFFERENCE
Organic Matter	0%	0.57	1.45	0.88
pH		8.15	7.6	0.55
C.E.C.	ms/cm	0.3	2.7	2.4
Nitrogen	ppm	15	35	20
Phosphorus	ppm	31.73	25	6.73
Potassium	ppm	882.29	180	*
Calcium/Magnesium	ppm	4080	1225	*

What does the soil analysis tell us?

1. The organic matter went up 0.88% and supplied nitrogen throughout the growing season.
2. Due to the increase in organic matter, the higher pH of 8.15 was reduced by 0.55.
3. CEC was elevated by 2.4 (this is substantial).
4. The nitrogen rate was elevated by 230%.
5. Phosphorus was low and remained low.
6. *It is quite apparent from the test results on potassium, calcium and magnesium that these were being tied up in the soils and by using MicroSoil® they were able to be released and used by the crop. In soil sample #2, amounts of these nutrients are now at a more normal rate.

GARLIC YIELD AT HARVEST

FIELDS	*A	**B	**C
	Kgs/Ha	Kgs/Ha	Kgs/Ha
Harvest results	11534.88	15391.86	13164.12
Difference		3856.98	1629.24
% Increase in Crop Yield		33%	14%

*Field A is the control plot with normal fertilization. **Fields B & C show MicroSoil® application at a rate of one (1) liter per hectare with a 20% reduction in normal fertilization.

Conclusion:

When MicroSoil® was used with reduced amounts of chemical fertilizers, not only was there a substantially higher crop yield, but the overall condition of the soil was much better due to increased organic matter, a more balanced pH, and a much higher (CEC) cation exchange capacity at harvesting.

Note: Although this was an informal test, we believe that chemical fertilizer use could have been reduced by another 30% and the results still been at least the same as those realized in this test.

