

Huma® and Zia Pueblo Farm Corn Project

Field Study

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Huma® Products: 44 Mag®, Breakout®, Calcium, Max Pak®, OM 1-3 mm, OM Soluble Powder, Super Nitro®, Super Phos®, Super Potassium®,

Vitol®, X-Tend®, Zap®

Background

Many small-scale farms (1-2 acres each) are established in Zia Pueblo community near San Ysidro, New Mexico. Huma® Inc. was asked to establish an experimental farm in the tribal community that could demonstrate the usage of beneficial agricultural inputs producing high-yield crop and preserving the health of the soil. Huma® humic-based products stimulate plant growth and soil biology.

Materials & Methods

A 10-acre parcel near San Ysidro, New Mexico, had not been farmed since the last 20 years (Photo 1). The area was cleared and beds were prepared for crop production. Native heirloom sweet corn seeds were planted on May 14. Table 1 outlines the production program throughout the course of the season. The crop was furrow irrigated as needed. No pesticides and herbicides were applied to the field. Another nearby field grew corn without any inputs (Photo 3).

Table 1. Huma[®] Corn Production Program for the Zia Farm.

| Table 1. Hama Comproduction Flogram for the Zia Famil. | | | | |
|--|---------------------|-----------------|---|--|
| Application Date | Product | Amount/ acre | Method | |
| May 3 | OM 1-3 mm | 400 lb | Broadcast | |
| May 28 | Zap® | 1 gal | Band spray on seed line after planting before flood irrigation | |
| May 28 | Super Phos® | 2 qt | | |
| May 28 | X-Tend® | 1 qt | | |
| May 28 | Super Nitro® | 1 gal | | |
| May 28 | 44 Mag [®] | 1 qt | | |
| May 28 | Breakout® | 1 qt | | |
| July | OM Soluble Powder | 40 lb | Broadcast | |
| July 13 | Calcium | 1qt | Foliar | |
| July 13 | Vitol® | 1qt | | |
| July 24 | Breakout® | 2 qt | Foliar | |
| July 24 | Zap® | 1pt | | |
| July 24 | Max Pak® | 1pt | | |

Table 1. Continued.

| Application Date | Product | Amount/ acre | Method |
|---------------------|------------------|-----------------|--------|
| August 8 | Super Nitro® | 2 qt | Foliar |
| August 8 | Vitol® | 1 pt | |
| August 8 | Calcium | 1 pt | |
| August 8 | Super Potassium® | 1qt | |
| August 8 | Super Phos® | 1qt | |
| August 12 | Zap [®] | 2 qt | Foliar |

Results

Photo 2 shows the field several weeks prior to harvest, which occurred on Sept. 10. About 10% of the corn plants had one ear per plant and the majority of them had two ears per plant. About 25% of plants had three to four ears, and a few of them had up to seven ears per plant. The corn ears averaged 45 kernels on a row, and 17–18 kernels around the cob were observed throughout the field (Photo 4). The neighbor field that did not receive any products produced only a handful of ears of corn on the entire field (Photo 3). Yield data were not available because the corn was harvested by the community prior to yield measurement.

Conclusions

The local farmers and the tribal community members were pleased with the corn yield and quality and have agreed to expand the Huma® crop production approach to other farms in the region. In addition, more community members have expressed a desire to volunteer for crop maintenance tasks. We look forward to another year of plenty.



Photo 4: Finished Corn on Zia Pueblo Farm with Huma® Products



Photo 1: Original Desert Plot



Photo 2: Zia Pueblo Farm Corn Project, Huma® Products Applied



Photo 3: Neighbor Field, No Huma®