

Corn Response Trial - 2006

PELLETIZED LIMESTONE TECHNOLOGY

Table 2 - Corn Response to Pelletized Lime

Treatment		2006 Yield	Yield Gain Over Control	Gross Dollar Value* Per Acre	4-Year Avg. Yield Bu/Acre
1	Standardized Fertilizer Program w/Pellet Lime 250 lbs <i>Pellet Lime</i> 100 lbs Potash 125 lbs MAP 150 lbs Nitrogen (Actual N)	177.45 bu	22.47 bu	\$532.35	187.43 bu <i>10.65 bushel increase with Pellet Lime!</i>
2	Standardized Fertilizer Program 100 lbs Potash 125 lbs MAP 150 lbs Nitrogen (Actual N)	164.4 bu	9.6 bu	\$493.20	176.78 bu
3	Pellet Lime w/Nitrogen 250 lbs <i>Pellet Lime</i> 150 lbs Nitrogen (Actual N)	174.6 bu	19.62 bu	\$523.80	181 bu <i>14.53 bushel increase with Pellet Lime!</i>
4	150 lbs Nitrogen (Actual N) 150 lbs Nitrogen (Actual N)	154.98 bu	--	\$464.94	166.47 bu
LSD (P=.05) C.V.		5.392 bu 2.01%	Add'l Test Notes: Ave. soil pH = 6.4; P levels "Medium; K levels "Medium"*Corn \$3.00/Bu; Potash \$13.00/cwt; MAP \$18/cwt; Pellet Lime \$5.5/cwt; Urea \$16.50/cwt		

Comments

The results in the fourth year of this study show that **Treatment 1 with Pellet Lime out yielded Treatment 2 the Standardized Fertilizer Program by over 13 bushels/acre.** The four year average difference between Treatments 1 & 2 is 10.65 bushels per acre. This difference is statistically significant and shows Pellet Lime can contribute towards maximizing yields. For four consecutive years and due in part to high soil P/K levels, Treatment 3 with Pellet Lime and Nitrogen significantly out yielded the N/P/K control. Visual

observations showed the Pellet Lime treated plots to have better tip fill and overall longer ear length. The theory that nitrogen use efficiency increases with the addition of calcium is gaining credibility and is further illustrated by this year's new Lysimeter Well study seen on page 9.

This trial is a good example of corn response to pellet lime by combining soil pH management and calcium nutrition.