

Starter Fertilizer on Corn

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Private Industry Cooperator: Ed Penas

OBJECTIVE: To determine and document the profitability of using no starter vs. premium starter vs. 10-34-0 starter

TREATMENTS:

1997 (Soil P: 6 ppm)

	<u>Fertilizer</u>	<u>Costs</u> <u>Application</u>	<u>Total</u>
No starter	-----	-----	-----
8-20-2-1 @ 5 gal/ac	\$11.40	\$1.50	\$12.90
10-34-0 @ 5 gal/ac (57 lbs)	\$ 6.56	\$1.50	\$ 8.06

1998 (Soil P: 10 ppm)

No starter	-----	-----	-----
8-23-5-1 @ 5 gal/ac	\$11.97	\$1.50	\$13.47
10-34-0 @ 5 gal/ac (57 lbs)	\$ 6.41	\$1.50	\$ 7.91

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RESULTS:	1997 CORN	1998 CORN
Moisture (%)		
None	17.4***	15.6***
Premium Starter	16.7	15.2
10-34-0	16.6	15.2
Test Weight (lbs/bu)		
None	54.6	56.5
Premium Starter	54.8	56.6
10-34-0	54.6	56.7
Yield (bu/ac @ 15.5%)		
None	97**	150
Premium Starter	111	153
10-34-0	114	154
Plant Height, inches @ 6 weeks		
None	19.1***	28.0***
Premium Starter	25.8	33.3
10-34-0	26.1	33.8
Plant Population, per acre		
None	18,780	19,900
Premium Starter	18,500	19,700
10-34-0	18,420	19,960

** significantly different at 95% confidence level

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Summary: Use of starter fertilizer increased early growth and grain yield and resulted in lower grain moisture at harvest in 1997. There was no significant difference in performance of the two starter fertilizers. In 1998, the use of starter resulted in increase in early plant growth and lower grain moisture at harvest. There was no significant difference in the performance of the two starter fertilizers.

