

# Nutrient Management

only 14 lbs P/acre and the field had not received manure in >20 years!

Silage samples from five sites were tested for nutrients. Average P concentrations in these silage samples (on a dry matter basis) were 0.24% P ("without P") and 0.25% P ("with P"). The "without P" plots removed 49-74 lbs  $P_2O_5$  (an average of 3.9 lbs  $P_2O_5$ /ton of corn silage) while the "with P" plots removed 49-82 lbs  $P_2O_5$  (average of 4 lbs  $P_2O_5$ /ton).

## Conclusions

There was variation in the yield data among the sites most likely as a result of differences in cultural practices, growing conditions, and manure histories. Averaged among all fields, no yield increase was obtained by adding starter P to soils with initial STP's of 20 lbs P/acre or higher. These results support the current recommendation of a banded P starter of not more than 10 lbs  $P_2O_5$ /acre for soils with a STP of 20 to 39 lbs P/acre (Morgan solution).

## Starter P Project in 2001

The starter P project will be continued

Table 2: Fertilizer treatments and yields (grain yields at 15% moisture, silage yields at 65% moisture) of the P starter demonstration trials in 2000.

Producer	Planting Date	No P	With P
Gary Gaige et al.	May 10 2000	188 lbs 21-0-0 18 tons	188 lbs 15-13-10 19 tons
Steve Nemec and Shawn Bossard	May 8 2000	100 lbs 10-0-10 124 bu	100 lbs 10-10-10 134 bu
Jerry Blumer and Shawn Bossard	May 31 2000	250 lbs 10-0-10 15 tons	250 lbs 10-10-10 14 tons
Ev Thomas, Miner Institute	May 17 2000	250 lbs 10-0-10 18 tons	250 lbs 10-10-10 18 tons
Maurince Stoughton and Janice Degni	May 3 2000	200 lbs 10-0-10 167 bu	200 lbs 10-10-10 166 bu
David Post and Dale Dewing	May 4 2000	225 lbs 21-0-0 16 tons	200 lbs 20-10-10 13 tons
Steve and Gary Natali and Kevin Ganoe		250 lbs 10-0-10 12 tons	250 lbs 10-10-10 12 tons
Joe and Kirk Schwasnick and Kevin Ganoe		250 lbs 10-0-10 18 tons	250 lbs 10-10-10 20 tons
Mark Jahnke and Kevin Ganoe	May 1 2000	250 lbs 10-0-10 167 bu	250 lbs 10-10-10 171 bu
Mark Jahnke and Kevin Ganoe	May 11 2000	250 lbs 10-0-10 85 bu	250 lbs 10-10-10 83 bu

this summer. Demonstration efforts will focus on monitoring recommendations for STP levels between 9-19 and  $\geq 40$  lbs P/acre, and identifying past management and environmental factors that may affect when and how much starter P is needed. The treatments for these demonstration trials will be standardized and extended to include: 1) no starter; 2) 200 lbs of 10-0-10; 3) 200 lbs of 10-10-10; and 4) the producer's usual starter blend and application rate.

In 2000 several producer field days were held to view the plots and discuss oppor-

tunities for P management. Those field days will be continued in 2001. Added will be a survey among participants in the project and producers that visit the field days to assess impact of the project.

Demonstration plots will be supplemented this year with replicated trials on experimental stations at Batavia's New York Crop Research Facility, Cornell University's Willsboro Farm and the Musgrave Research Farm in Aurora. These replicated trials will focus on STP levels between 9 and 19 lbs P/acre and involve three treatments: 200 lbs per acre of 10-0-10, 10-10-10, or 10-20-10 in four replicates. Field

days are planned at all three locations.

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