



DIBS

**Dairy
Issue
Briefs**



DIB# 16-09

May 2009

Plummeting prices in the dairy industry are creating critical cash-flow and long-term survivability issues on Ohio's 3,328 dairy farms. Cost-cutting decisions must be made with full awareness of both short and long-term production and economic consequences. OSU Extension's Dairy Working Group, a collaboration of OSU Extension Educators and Specialists discuss:

Reducing costs to improve short term cash flow

Do "Pop-Up" Fertilizers Make Sense in Corn Silage Production?

One area where many dairy farmers may be looking for ways to minimize costs is with use of starter fertilizer. Below is a summary of research conducted over three consecutive years on the same dairy farm in Tuscarawas County. Our objective was to evaluate the effect of different forms of starter fertilizer on corn silage production.

Background

- Fitchville Silt Loam, moderately drained soil
- Previous crop – conventional corn
- Variety – Masters Choice
- Buffer pH 6.6, P 28 ppm, K 180 ppm
- Planting rate – 30,000 seeds/acre in 30 inch rows
- Planting dates: 5/18/05, 5/10/06, 5/15/07
- Harvest dates: 10/4/05, 10/10/06, 10/08/07

Results

Pop-up Fertilizer	Corn Silage Yield (lb/ac)
2005	
5-15-15	20,180
10-34-0	20,540
2006	
10-34-0	16,098
6-24-6	18,230
8-19-3 + Zn	14,150
0	12,081
2007	
6-24-6	19,520
10-34-0	20,110
8-19-3	18,750



Bottom Line: While some very minimal differences could be seen early in the growing season, there was relatively little difference in plant height or yield. In this study, there was very little potassium response because of adequate levels of K in the soils at this site.

In 2006 we evaluated the addition of Zinc (added from the 8-19-3) and found no yield benefit. Thus, if micronutrient deficiency has not been a problem in a particular field, application is not recommended.

In our study, the 10-34-0 was nearly half the cost of the 5-15-15. Additionally, the 6-24-6 was 30% higher and the 8-19-3 was 37% higher in price compared with the 10-34-0.

If you use starter fertilizer, carefully consider the cost of each available form and use the data from this study to evaluate options and make management decisions.

Author: Chris Zoller, Extension Educator, Tuscarawas County.

Contact at zoller.1@osu.edu, 330-339-2337.

More DIBS are posted on-line at <http://dairy.osu.edu>.

Ohio State University Extension embraces human diversity and is committed to ensuring that all research and related educational programs are available to clientele on a nondiscriminatory basis without regard to race, color, religion, sex, age, national origin, sexual orientation, gender identity or expression, disability, or veteran status. This statement is in accordance with United States Civil Rights Laws and the USDA.