Phosphorus Management on Northeast and Mid-Atlantic Dairy Farms: Preliminary Data. (S08-dou133536-Poster)

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Abstract:

Improving phosphorus (P) management on dairy farms is critical for water quality and the sustainability of the dairy industry. Optimizing P in dairy rations is a cost-effective means to reduce the environmental impact of unfavorable P balance on animal farms; however, many dairy producers overfeed P and may be reluctant to modify their feeding strategies. A multi-state, multi-disciplinary project supported by the USDA-IFAFS Program was recently initiated to develop optimal P management technologies on dairy farms. One of the objectives is to determine dietary P range that is adequate for optimal production while minimizing P excretion in manure. We have collected feed and fecal samples from nearly 100 commercial dairy operations in five states in the Northeast and Mid-Atlantic regions. Preliminary results from the initial sampling in Spring 2002 (n=53 herds) show a wide range of dietary P concentrations fed on farms, from 2.8 to 6.6 g/kg feed DM. Water-soluble P in fecal samples from herds fed less than 4.0 g/kg dietary P is significantly lower than herds fed 4.0 g/kg or more dietary P (2.06 vs. 3.5 g/kg fecal DM).

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