Field Evaluation of Poultry Litter Generated from Feeding HAP Corn and Phytase. (S08-binford075315-Poster)

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Abstract:

Reducing the amount of P in poultry litter is of great interest in many states. Diet modification is one approach for reducing P in litter. In the winter of 2000, a Delaware integrator conducted a feeding trial with four feeding scenarios that included normal corn with and without phytase enzyme and a 0.1% reduction in inorganic P, and low phytate corn with and without phytase enzyme and a 0.2% reduction in inorganic P. After two flocks of broilers, the poultry litter was collected and used in field studies during the 2000, 2001, and 2002 growing seasons at two locations. These studies consisted of 10 treatments: control (no P), the four litter samples from the feeding trial, poultry litter from a typical Delmarva poultry operation, and four rates of inorganic P fertilizer. Corn was planted to all plots and harvested for grain yield, and soil samples were taken at various times and analyzed for soil test P and water-soluble P. The various diets affected the P concentration of the litters, and the soil P levels followed trends similar to those expected from the analyses of the litter. No differences were observed in grain yields among the poultry litter treatments in 2000 or 2001.

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