Effect of Feeding Phytase and HAP Corn on the Potential for Phosphorus Losses in Surface Runoff from Virgina Soils Amended with Turkey Manure. (S11-penn160123-Oral)

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Abstract:

Turkey manure from diets receiving (i) normal phytic acid corn (NPA) + phytase enzyme, (ii) high available phosphorus (HAP) corn + phytase enzyme, (iii) NPA corn + 0.135% inorganic phosphorus, (iv) NPA corn, (v) and HAP corn were surface applied to soil boxes containing tall fescue. Soil boxes were pre-saturated twenty four hrs prior to being placed under a rainfall simulator for 30 minutes at an intensity of 7.5 cm/hr. All runoff was collected and analyzed for dissolved reactive phosphorus, total phosphorus, and sediment. A variety of phosphorus water extractions were conducted on the turkey manures and correlated to phosphorus losses in runoff.

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