Public Abstract

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Graduation Term:FS 2010

Department:Animal Sciences

Degree:MS

Title:APPROACHES FOR ALLEVIATING TOXIC EFFECTS OF AFLATOXIN IN LACTATING DAIRY COWS AND WEANLING PIGS

Two experiments were conducted to evaluate two approaches for reducing toxic effects of dietary aflatoxin fed to lactating dairy cows and weanling pigs. Experiment 1 was conducted to determine the efficacy of three adsorbents, Solis (SO), NovasilPlus (NOV), and MTB-100 (MTB), in reducing aflatoxin M1 (AFM1) concentrations in milk of dairy cows fed an AF-contaminated diet. Results indicated that SO and NOV at 0.56% of the diet were effective in reducing milk AFM1 concentrations in cows consuming a total mixed ration (TMR) containing 112 μ g of AFB1/kg of diet DM, but MTB at 0.56% was not. Experiment 2 was conducted to evaluate the efficacy of curcumin, an antioxidant supplied by turmeric (*Curcuma longa*) powder (TMP), to ameliorate the adverse effects of aflatoxin B1 (AFB1) in weanling pigs. Curcuminoids from turmeric at 100 mg/kg of diet did not alleviate toxic effects of aflatoxin, and appeared to negatively affect growth and health of weanling pigs.