EFFICACY OF AN ALGO-CLAY BASED ADSORBENT ON BREEDING DUCKS EXPOSED TO POLYCONTAMINAION OF MYCOTOXINS.

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*Fusarium* mycotoxins (fusariotoxins) are globally distributed contaminants produced by *Fusarium* molds in cereal grains. The adverse effects of these compounds on animals have been reported. The prevention of fusariotoxicosis by certain feed additives has also been demonstrated in previous studies. The objectives of the current study were to characterize fusariotoxicosis in breeding ducks and to evaluate the efficacy of an algae-clay based product (MT.X+). A total of 396, 19-week-old breeding ducks (Triet Giang genetic) with 33 birds per replicate and 3 replicates were randomly assigned to each of 4 diets including (1) control, (2) contaminated, (3) control + 0.1% algae-clay based product and (4) contaminated + 0.1% algae-clay based product for a 13-week period. The experimental parameters analyzed were feed conversion ratio (FCR), laying rate, mortality and egg hatchability (after 5 and 17 days of incubation). Feeding diets naturally polycontaminated with fusariotoxins, mainly deoxynivalenol (2.42 µg/g) and fumonisins (1.61 µg/g), slightly increased FCR and mortality while significantly reducing egg rate compared to controls (65.67 % vs 70.98 %). The adverse effects of feeding polycontaminated diets on egg hatchability were also found after 5 and 17 days of incubation compared to controls (66.67 % and 61.33 % vs 92 % and 88.67 %, respectively). The tested product was completely effective in preventing these effects. It was concluded that relatively high concentrations of *Fusarium* mycotoxins can adversely affect egg rate and egg hatchability in laying ducks. The tested algae-clay based product appears as a promising multi-mycotoxin management product for poultry producers.