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News & Comments

Effect of Hen Age on Manure Characteristics

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An important avian bacterial infection known as *Mycoplasma Gallisepticum* (MG) is responsible for serious productivity and financial losses for the global poultry industry. The level of protection and pathogenicity associated with commercially marketed LAVS varies. Popular LAV, the F strain of MG (FMG), has low to moderate virulence but can prevent losses brought on by MG field strain infections. This investigation's goal was to ascertain the faecal characteristics, including moisture content and pH, nutrient content (total N and total C), and mineral composition (Ca, K, Mg, Na, P, Cu, Fe, Mn, and Zn), of excreta from commercial layers aged 39-55 weeks who had been inoculated with the F-strain of *Mycoplasma gallisepticum* (or a sham inoculation) at 12 weeks age (pre-lay) or at 22 weeks of age (onset of laying cycle), while comparing a basal diet to a diet supplemented with PHY and 25-D3. The objective was accomplished by analysing more than 200 samples of manure for the 13 factors.

A commercial layer facility's cages were divided into isolated ends for the sham-inoculated control group (n = 120) and the FMG-inoculated birds (n = 120) in each of the two trials 240 birds per trial. The trial was the block of a randomized complete block experimental design. Except for mineral content, which was only assessed in experiment 1, data from the two trials were combined and analysed jointly. Manure is ejected as being moist, but it eventually dries up. Due to its length of storage and storage on an unpaved surface, the HRDP had the lowest moisture content, at 47%. A recent study showed that faecal moisture decreased as the hens aged, however, the manure handling facilities would be crucial. For the interested reader, An excellent overview of dietary elements that do increase faecal moisture. The FMG immunization given to pullets has different implications on how well the layers work. Due to strong interactions with the experimental treatments, hen age is not taken into consideration when calculating the mineral excretion of Ca, Mg, Na, P, Fe, and Mn. Additional research would be necessary to resolve significant changes in excreta concentrations of minerals.

Article Reference

D.M. Miles, S.L. Branton, E.D. Peebles, M.R. Burnham, J.P. Brooks, P.A. Moore, Jr., 2021. Effects of supplemental dietary phytase and 25-hydroxycholecalciferol on excreta characteristics and nutrient content from commercial layers inoculated before or at the onset of lay with the F-strain of *Mycoplasma gallisepticum*. Int. J. Poult. Sci., 20: 209-214.

KEYWORDS

Layer, excreta, phytase, F-strain *Mycoplasma gallisepticum*, 25-Hydroxycholecalciferol