

Effect of Deep Litter and Slatted Floor Systems on Broiler Breeder Performance of, Hatchability, Fertility and Exterior Quality of Eggs

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An experiment was conducted to compare the effect of deep litter and slatted floor systems on broiler breeder performance, hatchability, fertility and exterior quality of eggs. A total of 23100 female and 2100 male commercial broiler breeders (Cobb 500) were randomly assigned in to two different treatments and housed under two different rearing systems (deep litter and slatted floor) from 26 to 34 weeks of age. Each treatment replicated three times. Data were recorded daily and analyzed using Analysis of Variance (ANOVA) in Complete Randomized Block Design (RCBD) and means were separated using Tukey's means of comparison. The highest ($P < 0.05$) female body weight (3.6 kg), number of damaged eggs (143) and number of destroyed eggs (99) were recorded from 2/3rd of slatted floor system. The highest ($P < 0.05$) daily egg production (2846), male body weight (4.1 kg), and number of floor eggs (40), number of doubled yolk eggs (270), number of misshaped eggs (12) were recorded from deep litter system. Female and male mortality percentage, egg weight, number of tiny eggs, fertility and hatchability percentages were not affected by floor systems ($P > 0.05$). The results concluded that birds reared on deep litter system were exhibited better broiler breeder performance as compared to slatted floor system during 26 to 34 weeks.

Keywords: Bird performance, Deep litter, Egg quality, Hatchability, Slatted floor