

The effect of cellulose arbocel on pododermatitis in broiler chickens

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Abstract

Incidence of footpad dermatitis (FPD) is one of the welfare indicators during broilers fattening period. The incidence and severity of FPD are affected mainly by litter quality, especially its moisture, which is also influenced by nutrient density in the diets. Serious FPD can negatively affect broiler performance including carcass quality. In this study the effect of cellulose Arbocel addition to the starter and grower diets on FPD incidence was observed in broilers. Two identical commercial houses with the same age and origin of broilers were used. The cellulose Arbocel supplemented the starter and grower diets at 0.7% level till 21 days of age for the chickens in one house. At the end of the fattening period, 34 day of age, approximately 3500 footpads were scored for each flock.

Chi-square test was used for evaluation the effect of Arbocel on FPD. Addition of cellulose Arbocel at 0.7% level to the diets for 21 days had a significantly positive effect on the severity of FPD ($P < 0.05$). Very serious footpad damage was lower with Arbocel use ($P < 0.05$, 67.9 vs. 83.2%). In slight or undamaged footpads there was no significant difference between the houses.

Key words: footpad, arbocel