# INFLUENCE OF LITTER ON FOOTPAD DERMATITIS AND BODY WEIGHT IN BROILERS

**Constantin Sorin MIHAI[1], Ilie VAN[1], Georgeta CIURESCU[2]**

e-mail: mihai_constantin_sorin@yahoo.co.uk

**Abstract**

*Footpad dermatitis* (FPD) is a relatively widespread problem in Europe and constitutes a welfare issue. FPD affect the plantar regions of the feet. In this study the influence of four type of litter (whole wheat straw, wood shavings, rice hulls and mixture of all three in the same proportion) on body weight and FPD was determined. A total of 1260 as-hatched broiler chickens (Ross 308) were randomly allocated in 12 pens of 5.0 m x 1.4 m. The body weights were recorded and calculated weekly for all birds from day 1 till 42 days. FPD occurred at as early as 7 days. Both foots were examined and scored for the incidence and development of FPD on a scale from 0 (no lesion) to 2 (very severe lesions). The body weights at 42 day were 2290.04 grams for birds reared on whole wheat straw, 2371.78 grams for birds reared on wood shavings, 2304.07 grams for broilers reared on rice hulls and 2321.85 grams for birds reared on mixture. FPD scores at 42 days were 7 (wood shavings), 24 (rice hulls), 78 (mixture) and 150 (hole wheat straw) exceeding the value of 50 points considered by the EU proposal 221 "Laying down minimum rules for the protection of chickens kept for meat production" as threshold. The incidences of FPD were 8% (wood shavings), 22% (rice hulls), 52% (mixture) and 80% (whole wheat straw). The litter had no significant effect on mortality. Mortality rate was lower than 1%+0.06% multiplied by 42 days (Council Directive 2007/43/EC). The results obtained in this study lead to the conclusion that litter type influences in a great extent the FPD score and body weights of broiler chickens at slaughter. *($P<0.05$).*

**Key words**: Broilers, footpad dermatitis, litter, body weight