



Worthwhile Operational Guidelines & Suggestions

BROILER PROCESSING TIMELY INFORMATION – MAY 2006

PAW BURNS

Paw ammonia burns or pododermatitis has become an important economic and welfare issue in market age broiler chickens. The contact dermatitis lesions vary from mild inflammation to deep ulceration of foot pads and burns in hock joints in severe cases. Many factors have been implicated in the etiology of the paw burns, including high stocking density, improper ventilation, poor drinker management, intestinal health, leg problems, and high litter moisture. The type and quality of the litter is certainly an important determinant of paw burns, because of direct and continuous contact of the foot pad with the bedding material. Paw burns were lower on sand when used as a bedding material as compared to pine shaving. Recent research conducted at Auburn University has also demonstrated a significant effect of feed (nutrient density, protein source and levels) and sex on the incidence and severity of paw burns. High levels of litter nitrogen, and subsequently volatile ammonia, was observed from feeding broilers high protein diets. All vegetable diets, formulated to contain only soybean meal as a protein source, have also resulted in high incidences of paw burns. This is attributed to the presence of poorly digested complex carbohydrates in soybean meal that tend to increase stickiness of the fecal material. Male broilers often exhibit higher severity in paw burns than females. Studies are currently underway to determine the influence of feed enzymes and litter amendments on the incidence and severity of paw burns.



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