



Worthwhile Operational Guidelines & Suggestions

BROILER PROCESSING TIMELY INFORMATION – NOVEMBER 2006

Drumstick Bruising

Broiler processing plants periodically complain about a bruising problem, commonly referred to as “pink drums”, that affect the distal portion of the drumstick. The lesions, ranging from a mild discoloration to a marked hemorrhage, are confined to the medial surface of the tibia. Histopathological observations indicate acute hemorrhaging of the tibial artery at or near the time of stun-kill-picking processes. Field observations indicate that exposure to mycotoxins may be the hidden culprit with pink drums. Mycotoxins, such as aflatoxins and a variety of toxins produced by *Fusarium* sp. (T-2, DON, fumonisin), even at very low levels, increase the fragility of the vascular system and red blood cells and alter blood clotting in broilers. The result is a lowered threshold for or increased susceptibility to blood splash, especially in areas of the carcass (i.e., hock joint) where the vascular system has little protection but receive excessive external pressure (catching, hanging, picking).



The entire feeding system (i.e., ingredient sources, feed-mill storage bins, finished-feed transport trucks, on-farm feed bins and boots, hoppers, cross-augers, and feed pans) is a suspect for introducing these potent toxins to the birds. Certainly visibly moldy/caked feeds in the bins (leaking bins or excessive condensation), hoppers and pans, as well as stored left-over feeds are major contributors to the problem. Molds typically grow in various nooks and crannies in high moisture environments and inoculate the feed with toxins on a continuous basis. In one operation, thorough inspection, cleaning and sanitation of the “feeding system” reduced the incidence of pink drums from 39%, to 19% (after feed mill cleanup) and 6.5% (after farm cleanup). Focus on ingredient screening for mold and mycotoxins, feed mill sanitation, farm bin management and sanitation, and the use of mold inhibitors or mycotoxin binders to control this bruising problem.



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