RED WINGTIPS

Chicken wing portions continue to be a popular and profitable finger-food in the US. Consequently, maximizing wing harvest (i.e., wing yield) is a critical during processing of broiler chickens. The red wingtip is a trimmable defect that not only detracts from the overall appearance and downgrade the product, but also reduces saleable plant wing harvest. Several factors could be contributing to the occurrence of red wingtips in broiler chickens. First of all, removal of large flight feathers during plucking often ruptures blood vessels in feather follicles and messages blood into the surrounding tissues, thereby encouraging expression of the defect. More importantly, increased bird activity (i.e., wing flapping) prior to (catching, loading, and plant holding; unloading from the transport modules; traveling on conveyors or transferring from one conveyor to another), during (pile-ups on the hanging belt; birds dragging their wings on other birds and/or objects) and after hanging (wings beating against crates, poles and or other close solid metalwork; tight shackles; elevations and turns on the overhead conveyor line; pre-stun shocks) will increase the incidence and severity of the problem. Chickens use their wings to maintain balance and will flap their wings until muscle fatigue sets in (breast muscles are anaerobic in metabolism and fatigue very quickly). Plant observations also indicate a strong correlation between the frequency of wing flapping during bleeding and red wingtips. The live bird handling procedures (both pre-slaughter and slaughter) should be assessed (see WOGS October, 2004) by on-site observations and necessary adjustments should be made to reduce occurrence of this condition and to improve wing yields.

Contact: S. F. Bilgili, Ph.D.
Phone: (334) 844-2612
E-mail: bilgisf@auburn.edu
Poultry Science Department, Auburn University
Auburn, AL 36849-5416 USA
www.ag.auburn.edu/dept/ph/