Effect of Slaughtering Age and Sex of Strain Cobb and Hybro on Cutup Weights

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The qualitative properties of the meat are of major importance for poultry processing, since meat is now widely consumed as cuts or as processed products. The aim of this study is to evaluate the effect of slaughtering age, sex and strain Cobb and Hybro PG+ on cutup weights. The experiment was conducted with 192 broilers of two different strains (Cobb and Hybro) which were reared in a fully automated, closed house system at Crysbro Group of Company, Jayamalapura, Gampola. Birds were slaughtered at the age of 33 to 42 days. All broilers were kept on a 12 hours starvation period then weighed before slaughtering. At the end of processing, carcasses were portioned into five different parts such as Leg, Breast, Back, Wing and Neck and weighed to the nearest ±0.01 g. Data were analyzed by Multiple Regression employing sex and strain as two dummy variables. Age of birds was taken as a quantitative variable. The results revealed that all variables except the Neck% varies significantly with age ($P<0.05$). All variables have varied significantly with the strain ($P<0.05$). Sex had shown a significant effect ($P<0.05$) on Neck (N %) and Back (B %). Wing (W%), Breast% (Br %) and Leg (L %), have increased with slaughtering age ($P<0.05$) while Back (B %) has decreased with slaughtering age. No change observed in Neck (N %) with the slaughtering age. Processed weight of male was higher than that of female in both strains. Strain Cobb was identified as the most suitable strain for portioning as expensive cut percentages such as Breast% and Leg% are higher in Cobbs than Hybro PG+. At 38 days of slaughtering age, strain Cobb produced average 2.143 kg of live weight, Back 15.19%, Wing 7.68%, Leg 23.0%, Breast 27.61% and Neck 4.43%. Therefore, strain Cobb could be used to obtain high carcass weight or expensive portions from 38 days of age.

Key Words: Hybro PG+ , Cobb, Strain,Carcass weight, Starvation