

Effects of shackling and cone restraining on meat quality of broiler chickens slaughtered at two categories of live weight

ABSTRACT

A study was conducted to determine the effects of shackling and cone restraining methods on meat quality of broiler chickens slaughtered at two categories of live weight. Fourty Cobb 400 male broilers were randomly assigned to a 2×2 factorial arrangement in a completely randomized design with 10 birds of each treatment group. The birds were slaughtered at 2 kg and 2.5 kg live weights using shackling or cone restraining methods. Neither cone nor shackle restraining methods affected the pH change of both slaughter weights. Birds weighing 2 kg subjected to cone method had higher ($P < 0.05$) a^* , b^* and lower ($p < 0.05$) L^* , drip loss, cooking loss and shear force than those subjected to shackle method. Birds weighing 2.5 kg subjected to cone method had higher ($p < 0.05$) b^* and lower ($p < 0.05$) L^* and cooking loss than those restrained with a shackle method. Results of shear force values, L^* , a^* , b^* , and pH change were significantly higher ($p < 0.05$) in 2.5 kg chickens compared with those 2 kg chickens using shackling restraining method.

Keyword: Broiler chickens; Cone restraining; Meat quality; Shackling; Slaughter weight