Carcass and Meat Quality of Red Sokoto Buck Goats Differently Dressed

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Abstract

A total of eighteen good grade Red Sokoto buck goats weighing between 15.25–16.50 kg were sacrificed to evaluate the effect of salding, singeing and skinning on yield, physico-chemical and keeping quality of goat meat in a completely randomised design. The animals were well rested, starved of feed for 16 hours, weighed, stunned and slaughtered in batches of three under commercial conditions. The samples for pH and chemical analysis were taken from the longissimus dorsi, while the loin were used in evaluating shear force value, cooking loss, water holding capacity (WHC) and modified peroxide values (mPV). The internal temperature values were taken at a depth of 1 cm at the longissimus dorsi immediately after dressing. The result showed that the dressing percentage was highest (p < 0.05) in scalded carcasses (58.29 %) and least in skinned carcasses (46.27 %). The carcass length was least (p < 0.05) in singed carcass (34.35 cm) and highest (44.76 cm) in skinned carcasses. Singeing imposed a higher degree of toughness on the meat while the cooking loss was highest in singed carcasses. The WHC was highest in scalded carcasses (69.35 %) followed by skinned (64.36 %) and least in singed carcasses (50.35 %). The visual colour score was highest (7.45) for singed carcasses, followed by scalding (6.16) and least in skinned (5.30). Moisture, ether extract and ash were affected (p < 0.05) by the dressing method while crude protein was not significantly (p > 0.05) influenced. Singeing imposed a higher temperature on the longissimus dorsi. The modified peroxide value (mPV) increased as storage period increased while in each of the storage period, meat from skinned carcasses gave the highest mPV values. Post slaughter processing methods (dressing) were found to affect the quality of meat from Red Sokoto goats.

Keywords: Goats, scalding, singeing, skinning

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