CRYPTORCHIDS HAVE NO MORE SKIN OR CARCASE DAMAGE THAN OTHER LAMBS

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Cryptorchid lambs are generally leaner than ewes or wethers at any given weight, and can be used to produce large lean carcases from existing genotypes. Some meat processors claim that cryptorchid lambs are harder to skin than ewe or wether lambs and therefore are reluctant to purchase them. This study investigated the skin and carcase damage of cryptorchids, ewes and wethers of similar genotypes over a range of weights and fat scores.

Eight- to nine- month old second cross Poll Dorset/Border Leicester x Merino lambs (n=729) were selected on the basis of liveweight and fat score from two properties. These included 250 cryptorchid, 322 ewe and 157 wether lambs with liveweights ranging from 32 to 61 kg, and fat scores from 1 to 4. The lambs were acclimatised at Rutherglen for at least 40 days prior to slaughter. After slaughter measurements of hot standard carcass weight, tissue depth at the GR site, carcass length and carcass damage (bruising, knife damage and tissue tears) due to processing were recorded for each carcass. Skin damage was assessed at two stages; as a green skin and as a fellmongered pelt. Grain break, grain strain, pelt tear and the commercial grade were recorded for each skin. All results were analysed using GENSTAT regression analysis and are presented in Table 1.

Table 1. Mean carcass measurements, proportion of carcass damage, skin damage, and skin grade for each gender

	Cryptorchid	Ewe	Wether
Mean hot standard carcass weight (kg)	19.5 [b]	20.0 [a]	20.3 [a]
Mean tissue depth at the GR site (mm)	5.0 [c]	10.8 [a]	9.2 [b]
Mean carcass length (mm)	1097.0 [a]	1078.1 [b]	1081.4 [b]
Proportion of carcasses damaged (%)	18.8	8.7	10.2
Proportion of skins affected by: Grain break (%)	58.2 [b]	71.8 [a]	79.3 [a]
Grain strain (%)	77.2 [b]	87.4 [a]	88.4 [a]
Pelt tear (%)	45.1 [a]	38.3 [ab]	36.9 [b]
Proportion of commercial run grade pelts (%)	44.3 [a]	38.8 [b]	38.3 [b]

a,b,c Different letters within rows indicate significant differences ($P<0.05$)

Carcass weight, tissue depth and carcass length, but not gender, all affected carcass damage. Carcass damage decreased ($P<0.05$) as carcass weight and tissue depth increased. This finding supports the generally accepted view by processors that fatter carcasses skin more easily. Carcass damage increased ($P<0.015$) as the carcass length increased. Skin damage was influenced by carcass weight, tissue depth, carcass length and gender. Wethers had a greater ($P<0.05$) level of grain break and strain than cryptorchids and ewes. The proportion of pelts affected by grain break and strain increased ($P<0.05$) as the tissue depth and carcass length increased. The incidence of pelt tear increased ($P<0.05$) as the carcass weight and tissue depth increased. A higher ($P<0.025$) proportion of cryptorchid pelts were assessed as meeting the commercial run grade, 44% compared to 38% for ewes and wethers, respectively, and indicating that these skins may be more resistant to minor processing damage.

These results show that the concerns by industry associated with the processing of cryptorchids are related to carcass weight, tissue depth and carcass length, but not to gender. Processing methods to reduce skin and carcass damage of large lean lambs may need to be revised to effectively utilise this lamb type.

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