

The inclusion of Duroc breed in maternal line affects pork quality and fatty acid profile

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Abstract

The aim of this study was to evaluate the effect of including different percentages of Duroc (D) breed in maternal line [Landrace (LR) × Large White (LW); LR × (LW × D); LR × D] and gender on meat quality and intramuscular (IMF) and subcutaneous (SCF) fatty acid composition. No significant differences were found among dam lines in ultimate pH, L* values and drip and cooking losses. There were higher percentages of saturated fatty acids in LR × D and LR × (LW × D) lines and higher percentages of polyunsaturated fatty acids in LR × LW line in IMF and SCF. Also, LR × D line produced pork with a lower Warner–Bratzler shear force values and higher IMF content and potential of lipid oxidation. Furthermore, the L*, a* and b* values and drip loss were greater in pork from entire males than females. The IMF and SCF of females were more monounsaturated and less polyunsaturated than those from entire males.