

## Sensory meat quality differences for crossbred offspring of different terminal sire lines

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In Flanders, pig production is characterized by a low feed conversion ratio and carcasses with a high lean meat content. However, nowadays there is an increasing concern about inferior sensory and technological meat quality. One problem is the high incidence of PSE meat and in addition, as a result of the selection for a high carcass lean meat content, the meat is nowadays characterized by a low intramuscular fat content. The objective of this study was to evaluate the eating quality of the loin of crossbred offspring of three terminal sire lines. A homozygous stress positive sire line with high lean meat percentage (Belgian Piétrain (BP)) was compared with homozygous stress negative sire lines with a potentially better sensory meat quality (French Piétrain (FP) and Canadian Duroc (CD)). A total of 120 pigs (40 pigs/sire line) were sampled for assessment of sensory quality. This was evaluated on the one hand by a trained expert panel (EP) and on the other hand by a consumer panel (CP). The trained EP consisted of 6 experts and 10 sessions. The CP was executed by 120 households (*i.e.* a cook and a taster). Each household received three packages with each one sample to prepare and evaluate at home. A linear mixed model was used for statistical analysis of both panels. No significant difference was observed for tenderness (EP:  $P=0.060$ , CP:  $P=0.117$ ), but the EP results showed a trend towards lower tenderness in BP compared to the FP and CD. The EP evaluated the juiciness of FP and CD samples higher compared to BP ( $P=0.049$ ), but this was not observed by the CP ( $P=0.181$ ). The overall liking of FP and CD samples was higher compared to BP by the EP ( $P=0.005$ ). This was partly confirmed by the CP, which evaluated the overall liking of the CD higher compared to FP and BP ( $P=0.030$ ). In conclusion, it was not possible to differentiate meat of crossbred progeny from three sire lines regarding tenderness, whereas BP had lower scores for juiciness compared to the other two sire lines. The overall liking of BP was lower compared to CD.