



Carcass and meat quality traits of four commercial pig crossbreeds in China

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ABSTRACT. We evaluated carcass and meat quality traits of two Chinese native crossbreeds Landrace x Meishan (LM) and Duroc x (Landrace x Meishan) (DLM) and two foreign crossbreeds Duroc x (Landrace x Yorkshire) (DLY) and PIC (an imported five-way crossbreed). One hundred and twenty weaned pigs (half castrated males and half females) were reared and slaughtered at a predestinated slaughter age. The general carcass and meat quality traits were measured and analyzed. The DLY and PIC crosses had significantly heavier live weights (93.39 and 96.33 kg, $P < 0.01$), significantly higher dressing percentages (80.65 and 79.39%, $P < 0.05$), significantly bigger loin areas (42.69 and 43.91 cm², $P < 0.001$), and significantly more lean carcasses (65.78 and 66.40%, $P < 0.001$) than LM and DLM. On the other hand, LM had a significantly lower live weight (70.29 kg, $P < 0.01$), significantly thicker back fat (3.54 cm, $P < 0.001$), significantly less lean carcasses (46.82%, $P < 0.001$), and significantly less ham and breech (26.53%, $P < 0.05$) than the other crossbreeds. Among meat quality parameters, LM had the highest intramuscular fat content (5.02%, $P < 0.001$) and the smallest fiber area (3126.45 μm^2 , $P < 0.01$). However, PIC showed the lowest pH₁ (5.82, $P < 0.01$) and pH₂

(5.63, $P < 0.01$), the highest drip loss (2.89%, $P < 0.01$), and the lowest intramuscular fat (1.35%, $P < 0.001$). We concluded that LM and DLM had good meat quality traits but poorer carcass traits than DLY and PIC; DLY had good carcass and meat quality traits; PIC had good carcass traits, but it had less intramuscular fat, lower pH and higher drip loss.

Key words: Crossbred pig; Carcass traits; Meat quality