



Analysis of carcass and meat quality traits and nutritional values of hybrid wild boars under different crossing systems

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ABSTRACT. The aim of this study was to analyze the results of two crossing systems between wild boars and different domesticated pig breeds. Hybrid wild boars were produced by crossing captured wild boars with Meishan pigs and LY sows according to the traditional production system. The resultant commercial hybrids were black and white in coat color, respectively. Significant differences were found in the carcass and meat quality traits and nutritional values between these two hybrid wild boars. Compared with the white hybrid wild boars, at the age of 300 days, the body weight of black hybrid wild boars was 9.41 kg lower, while percent lean was 2.51% less and percent fat 2.45% higher ($P < 0.05$). The black hybrid wild boars had higher pH₂ (6.17 vs 6.09) and intramuscular fat (3.34 vs 2.52%), lower drip loss (2.21 vs 2.68%) and shear force (44.00 vs 52.23) ($P < 0.05$), and more unsaturated fatty acids and essential amino acids ($P < 0.05$). In conclusion, cross breeding was shown to be an effective method to improve the overall production performance of wild boars, but crossing

with different dam line breeds caused different responses. Compared with the white hybrid wild boars, the black hybrid wild boars had worse growth rate and carcass traits, but better meat quality traits and nutritional values.

Key words: Wild boars; Hybrid system; Carcass; Meat quality; Nutritional value