

Comparison of pork meat quality of traditional black pigs between feeding kitchen waste and feed

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The meats of black pigs were widely recognized as having good flavor in Taiwan because the black pigs grew slowly and their muscle fibers were getting mature during the long-term feeding period. In the past, the black pigs were fed low-cost and low-nutrition feed such as kitchen waste in Taiwan, and this was also another reason for the slow growth rate. However, African swine fever was outbreaking in recent years in Asia, and kitchen waste feeding was considered to be a high-risk way of infection. Therefore, replacing kitchen waste with feed was an important control method to prevent the pandemic of African swine fever. In order to understand the effects on the meat of black pigs feeding feed and kitchen waste, the local black pigs were fed different crude protein content of feed namely CP13% (C13), CP15% (C15) and kitchen waste (KW) respectively. This experiment was conducted to analyze the proximate analysis, meat quality traits, free amino acid contents, fatty acid contents, and sensory evaluation. The results showed the KW had lower moisture content (68.43%) and higher crude fat content (9.03%) than C13 (71.07%, 6.40%) and C15 (70.23%, 7.86%), but had no significant differences. The KW had higher fatty acid content such as C18:2, C18:3, C22:4, C22:5 and C22:6, and resulted in significantly higher polyunsaturated fatty acids content (13.70%) than C13 (7.76%) and C15 (7.06%). Besides, C13 (51.93%) and C15 (50.07%) had significantly higher monounsaturated fatty acids content than KW (44.86%). Although other analysis items had no significant differences among the three groups, this experiment could be continued to compare other low-cost feed to affect the meat of local black pigs, and reduced the impact of change of the black pig feeding model in Taiwan.

Key words: Black pig, meat quality, kitchen waste