

Evaluation and improvement of reproductive performance of KHAPS and Duroc cross breed

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The growth and reproductive performance of commercial black pigs are unstable because of the complicated breeding herd. Furthermore, it affects their value and decreases the economic benefits. Now using KHAPS black pig (K) sows which contain exceptional reproductive performance and MM genotype of estrogen receptor gene (ESR) mating Duroc (D) boars with better growth performance to produce hybrid generation (KD). The progeny was controlled to mate each other within their own generation. Meanwhile, the growth and reproductive performance of each generation of KD were collected. The specific genotype of AA and MM for the porcine stress syndrome (PSS) and ESR gene was strictly selected to accelerate the fixing of hair color as black, to raise growth performance, and to retain good reproductive quality. This study collected the reproductive performance of KD in each generation including number born (NB), born alive (BA), body weight (BW) at born, body weight and survival rate at the third week. There had been 23 parities of KD 2 generation sows breeding. The results showed that the average NB, BA, BW, body weight and survival rate at the third week was 11.6 ± 2.6 head, 10.1 ± 2.7 head, 1.30 ± 0.16 kg, 4.39 ± 0.89 kg and $86.3 \pm 12.8\%$, respectively. Besides, the rate of black hair in KD 3 generation was 93.5%. Further data collecting and analysis are still needed in the future.

Key words: KHAPS black pig, cross breed, reproductive performance