

白色賓朗豬之選育與展望

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本研究分別進行賓朗豬與畜試花斑豬，以及賓朗豬、蘭嶼豬之回交試驗，以了解賓朗豬全白毛色之基因，與蘭嶼豬全黑毛色及畜試花斑豬，花斑毛色基因有無顯隱性關係，並進行賓朗豬之 KIT 交替基因之序列分析，以確認賓朗豬 KIT 交替基因之遺傳型，並進行賓朗豬之繁殖、生長與體型性狀，及調查不同品種小型豬血液性狀。結果顯示，賓朗豬之白色外觀屬純合子隱性遺傳，KIT 交替基因序列亦顯示為非顯性白色。賓朗豬之母豬初產日齡介於 251 日齡與 310 日齡之間，平均每胎產仔數、每窩分娩活仔數與每窩離乳仔豬數分別為 4.78 ± 1.48 頭、 4.67 ± 1.22 頭與 4.00 ± 1.58 頭，育成率為 $84.44 \pm 15.50\%$ 。賓朗豬之平均出生體重、八週齡重與五月齡重分別為 0.78 ± 0.10 Kg、 7.94 ± 1.53 Kg 及 28.61 ± 6.87 Kg，其中八週齡重與五月齡重顯著高於畜試花斑豬與蘭嶼豬。利用全自動血液分析儀測定小型豬血液的生理指標，對不同品種的血液測定值進行分析與比較，結果顯示不同品種血液生理指標是有差異，顯示各具獨特的生理特徵，希望對小型豬應用人類醫學研究提供參考依據。

關鍵語：小型豬、賓朗豬、毛色遺傳

Selection and Prospect of White Binlang Pigs

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The purpose of this study was to investigate the coat color genetics, reproductive and growth performance of Binlang pig. The results showed that the white coat color of Binlang pig was a homologous recessive trait, and it was also not dominant white in KIT (*i/KIT1*) allele sequencing. The age of the first birth of gilts was between 251 and 310 days, and the litter size at birth, born alive and litter sizes at 8 weeks of age were 4.78 ± 1.48 , 4.67 ± 1.22 and 4.00 ± 1.58 , respectively. The survival rate at 8 weeks was $84.44 \pm 15.50\%$. Average body weight at birth, 8 weeks and five months were 0.78 ± 0.10 , 7.94 ± 1.53 and 8.61 ± 6.87 kg, respectively. And the body weight at 8 weeks and five months of Binlang were heavier than Spotty lanyu and Lanyu breeds. Eight hematological parameters in minipigs were measured using automatic hematological analyzer and the differences between species were analyzed. there were significant differences. the reference could help the use of miniature pigs in medical science research.

Key Words : Minipig, Binlang pig, Coat color genetics