

# **The influence of different diets on growth and hematological characters in Lanyu pigs**

S30005

Yi-Long Chen<sup>1</sup>, Han-Sheng Wang<sup>1</sup>, Yu-Ling Huang<sup>1</sup>, Shih-Hsin Li<sup>1</sup>, Sheng-Yang Wu<sup>1</sup> and Chia-Chieh Chang<sup>1</sup>

<sup>1</sup>Taitung Animal Propagation Station, Taiwan Livestock Research Institute, Taitung, Taiwan

This study was conducted to evaluate the effect of different diet sources on growth performance, feed efficiency and hematological parameters of weaned Lanyu pigs. Sixteen weaned Lanyu pigs (eight barrows and eight gilts) with 6.4 kg of body weight and were assigned to one of the dietary treatments in a 2 x 2 factorial design (two diet sources from different protein ingredients and two sex). Two different diets, the commercial Laboratory Mini-Pig Grower Diet 5081 (Labdiet 5081, Crude protein 14%, Metabolizable energy 2,410 kcal/kg and Lysine 0.65%) and the treatment formula (Crude protein 14%, Metabolizable energy 2,400 kcal/kg and Lysine 0.64%) were used in this study. Pigs were fed restrictively by their body weight and free to water. The results showed that the average daily gain (ADG), average daily feed intake (ADFI) of total period and final backfat thickness (BF) were not significantly different between treatments. The Gain/Feed (G/F) of the treatment formula group was significantly higher than that of the Labdiet 5081 group ( $P < 0.05$ ). In hematological parameters, the mean corpuscular hemoglobin (M.C.H.) of the Labdiet 5081 group was higher than the treatment formula group significantly ( $P < 0.05$ ) at 20 weeks of the test. The red blood cell (RBC) of the treatment formula group was higher than the Labdiet 5081 group significantly ( $P < 0.05$ ) at 33 weeks of the test. And there were no significant differences in other hematological parameters found between treatments. In conclusion, the treatment formula has better feed efficiency and it reduced the cost of feed compared to the Labdiet 5081. Meanwhile, the results could provide as reference data for the growth pattern of Lanyu pigs.

**Key words:** Lanyu pigs, growth performance, physical performance.