45. LYD 雜交肉豬飼養於高床刮糞式水簾肉豬舍對生長性能及廢水量之影響

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將體重 25-30 kg LYD 雜交肉豬 500 頭，飼養在高床刮糞式水簾肉豬舍，每頭豬提供約 1 m^2 地面積，至體重 115 kg 結束生長試驗，飼糧與飲水充分供應，調查期間生長性能、水簾豬舍降溫效果，以及採取刮糞與糞尿分流方式對廢水減量效果。結果在環境溫度 34.2℃，啟動水簾與風扇後豬舍內約可降溫 4℃。試驗期間的日增重、採食量及飼料轉換率分別為 0.80 kg/day/pig、2.31 kg/day/pig 及 2.89。在豬隻平均體重 60-70 kg 時，每日平均刮糞量為 1.03 kg/pig，含水率 84.4%，廢水量為 2.93 L/pig，平均體重 105-115 kg 時則分別為 1.58 kg/pig、63.9%及 6.12 L/pig。綜上，水簾系統於高溫環境下可有效降低豬舍內溫度，而豬舍高床下方設置刮糞設施清理豬隻排泄物，具大量減少廢水產生量效果。

關鍵語：高床、水簾、溫溼度

Parameter analysis of three breeds of LYD pigs reared in high-bed water curtain pig house

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Five hundred head LYD crossbred pigs with body weight of 25-30 kg were raised in a high-bed scraping water-pad cooling pig houses. Each pig was provided with stocking density of about 1 m^2. The growth experiment was completed when the weight was 115 kg, and the feed and water were supplied ad libitum. Investigation the growth performance, the cooling effect of the water-pad cooling pig house, and the reduction effect of the wastewater by the method of scraping manure and diverting manure and urine during the period. Results show that the ambient temperature was 34.2°C, the temperature in the pig house could be reduced by about 4°C after starting the water-pad cooling and the fan. The daily gain, feed intake and feed conversion ratio during the experimental period were 0.80 kg/day/pig, 2.31 kg/day/pig and 2.89, respectively. When the average weight of pigs is 60-70 kg, the average daily scraping amount of manure is 1.03 kg/pig, the moisture content is 84.4%, and the wastewater amount is 2.93 L/pig, and when the average weight of pigs is 105-115 kg, it is 1.58 kg/pig, 63.9% and 6.12 L/pig, respectively. In conclusion, the water-pad cooling system can effectively reduce the temperature in the pig house in a high temperature environment, and a manure scraping facility is installed under the high bed of the pig house to clean up the excrement of pigs, which has the effect of greatly reducing the wastewater yield.

Key Words: High-bed, Water curtain, Temperature and humidity