

華鵝的利用與展望

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試驗為瞭解華鵝品種作為生產肉鵝之雜交組合對屠體性狀之影響，作為將來進一步之利用與研究。試驗一分成四個雜交組合，BW：褐色華鵝♂×白羅曼鵝♀；WB：白羅曼鵝♂×褐色華鵝♀；WC：白羅曼鵝♂×白色華鵝♀；CW：白色華鵝♂×白羅曼鵝♀，每個組合分別於13、14、15、16週齡逢機屠宰4隻(2♂2♀)，二重複，進行屠體性狀測定。試驗二分成五個處理組，A組：100%褐色華鵝；B組：100%白色華鵝；C組：50%白色華鵝×50%白羅曼鵝；D組：25%白色華鵝×25%白羅曼鵝×50%褐色華鵝；E組：75%白色華鵝×25%白羅曼鵝；每個組合於16週齡逢機屠宰8隻(4♂4♀)，三重複，進行屠體性狀測定。試驗三目的乃探討白羅曼鵝與雜交華鵝的生長性能和比較飼料成本。選用4週齡白羅曼鵝12隻和雜交華鵝24隻，白羅曼鵝為對照組，給飼生長鵝飼糧(CP 15%，ME 2,750 kcal/kg)，雜交華鵝則逢機為2組，分別為飼糧任食組與飼糧限食組(200 g/goose/day)，限食組同時再額外補充狼尾草任食。試驗一結果顯示，以白色華鵝♂×白羅曼鵝♀之後裔在16週齡時體重最重，而白羅曼鵝♂×白色華鵝♀之後裔在16週齡時體重最輕。試驗二結果顯示，以C組之後裔在16週齡時體重最重，加工方式以醉鵝評價較佳，此研究結果可提供肉品加工業者之參考。試驗三結果顯示，4週齡白羅曼鵝開始進行試驗時的體重為 2.51 ± 0.04 kg/goose，顯著較雜交華鵝(1.93 ± 0.04 kg/goose)重($P < 0.05$)，以同週齡進行比較，全期的體重均以白羅曼鵝較重，表示白羅曼鵝的體型較雜交華鵝重。飼料消耗量方面，任食之白羅曼鵝平均每日的飼料消耗量為 250 ± 16 g與雜交華鵝的 254 ± 5 g沒有顯著差異，但由於雜交華鵝的飼養期較長，以致雜交華鵝(16週齡上市)的飼料轉換率(F/G)較白羅曼鵝(13週齡上市)差($P < 0.05$)。3組鵝隻體增重的飼料成本，每公斤分別為64、76與79元，以白羅曼鵝的飼料成本最低，雜交華鵝限食組的飼料成本則高於任食組，表示此雜交華鵝全期限食之飼養模式不能有效降低飼料成本。

關鍵語：屠體性狀、雜交、生長性能、華鵝

Utilization and Prospect of Chinese geese

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Experiment 1. This study was conducted to investigate effects of hybridization of geese breeds on the characteristics of carcass. There were four hybrid combinations. The BW was Brown Chinese geese male to mate White Roman geese female. The WB was White Roman geese male to mate Brown Chinese geese female. The WC was White Roman geese male to mate White Chinese geese female. The CW was White Chinese geese male to mate White Roman geese female. At 13, 14, 15, and 16 weeks of age, 4 goslings (2 males and 2 females) were sampled from each pen and sacrificed for measurements of carcass traits. Experiment 2. There were five treatment groups and three replicates for each treatment. The A was Brown Chinese geese. The B was White Chinese geese. The C breed composition was White Chinese geese 50% and White Roman geese 50%. The D breed composition was White Chinese geese 25% and White Roman geese 25% and Brown Chinese geese 50%. The E breed composition was White Chinese geese 75% and White Roman geese 25%. At 16 weeks of age, 8 goslings (4 males and 4 females) were sampled from each pen and sacrificed for measurements of carcass traits. Experiment 3. The purpose of this study was to evaluate the growth performance and feed cost of White Roman (WR) and Hybrid Chinese geese (HC). A total of 12 WR and 24 HC geese, at 4 weeks of age, were used in this study. The control group was WR fed with grower diet (CP 15%, ME 2,750 kcal/kg). There were two treatment groups, i.e., HC fed with grower diet *ad libitum* (HCAL) and HC fed with grower restricted to 200g/goose/day plus Napiergrass fed *ad libitum* (HCRN) during the experimental period. Experiment 1. The results were obtained as follows: The body weight for CW was found to be the highest among the four hybrid combinations at 16 weeks. Weight for WC was found to be the lightest among the four hybrid combinations at 16 weeks. Experiment 2. The results were obtained as follows: The body weight for C group was found to be the highest among the five groups at 16 weeks. Geese Processing methods by Liquor-Soaked has better evaluation. The data can provide information for the meat processors. Experiment 3. The results indicated that the body weight of WR geese was significantly ($P < 0.05$) higher than that of HC at 4 weeks of age. In the experimental period, the body weight of WR was higher than that of HC at the same age. It indicated that the body size of WR was larger than that of HC. The feed consumption between WR (250 ± 16) and HC (254 ± 5 g/goose/day) was not different. The feed conversion rate of WR was significantly ($P < 0.05$) better than that of HC, because the growth period of HC (16 wks) was longer than that of WR (13 wks). The feed costs of BW gain in WR, HCAL, and HCRN were 64, 76, and 79 NTD/kg, respectively. The feed cost for WR was lowest. The feed cost for HCRN was higher than that for HCAL, indicating that for whole period, restricted feeding could not reduce the feed cost.

Key Words: Carcass traits, Hybrid, Growth performance, Chinese geese