

# Investigation of the reproduction and egg production performances of the HLAPS cockfighting<sup>(1)</sup>

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## Abstract

The purpose of this experiment was to study the reproduction and egg production performance of Taiwan HLAPS cockfighting during the breeding period, which came from the Hualien Animal Propagation Station. A total of 306 breeding females and 114 breeding males were collected in this selection. The results showed that in terms of egg production performance at 40 weeks of age. The body weight at first egg, age at first egg, and egg weight at first egg of the cockfighting hens were 2,920-3,126 g, 173-187 days, and 38-42 g. At 40 weeks of age, the laying eggs rate was 48-61%, hens were laying 58-64 eggs. At 50 weeks of age, the laying eggs rate was 46-56%. The body weight at first egg and age at first egg of the cockfighting hens were 2,920 g and 178 days in 2021, respectively. In terms of reproductive performance, semen quality of 30-week-old HLAPS cockfighting roosters was analyzed. The concentration of sperm was  $5.25-7.04 \times 10^9/\text{mL}$ , the sperm motility was 75.8-86.2% and the sperm survival rate was 61.5-82.8%, respectively. The rate of fertilization and the hatching at 33-35 weeks of age were 88% and 68%, respectively. Meanwhile, the breeding rate of 22-weeks was 95% in 2021. It is shown that the breeding birds of the HLAPS cockfighting cock have excellent egg-laying performance and reproductive performance. Their performances became steadily. This data will become the basis for studying the performance of Taiwan cockfighting and provide a reference for the selection of the original quality of Taiwan cockfighting breeding farms. It can also be used as a basis for researching to understand the improvement of the herd of Taiwan cockfighting in the future.

Key words: Taiwan cockfighting, Laying performance, Reproductive performance.

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