Study of Egg External Quality Traits in Five Korean Native Chicken Strains Reared Under Controlled Environment

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A total of 240 Korean native chickens in five different (GS-08, GS-10, GS-12, GS-17 and GS-21) strains were used to evaluate strain effect on external quality parameters of egg. Birds were allocated in a completely randomized design (60 cages: 12 replicates with 4 chickens per cage) in their respective controlled environment. All birds were subjected to the same commercial feeding and standard management practices during the rearing period. At the 32 weeks of age, randomly selected 150 eggs (30 eggs per each strain) from total egg collection were used to analyze external quality parameters. The results indicated that significant difference ($P<0.05$) in egg weight, egg shell color, egg shell strength and shell density among the five Korean native chicken strains. No differences were found ($P>0.05$) egg length, egg width, egg shape index and egg shell thickness of the five Korean native chicken strains. Our results indicated that the five Korean native chicken strains would have an interconnection with their external quality parameters of egg.

Keywords: Egg, External quality parameters, Korean native chickens

Acknowledgement: *This study was funded by grants from the Golden Seed Project (No 213005043SBD30, Korea Institute of Planning & Evaluation for Technology in Food, Agriculture Forestry & Fisheries), Republic of Korea.*