

Study_GE02_18: Effects of GoldEdge supplementation on performance in laying hens

This study was conducted to investigate the effects of feeding GoldEdge supplemented diet on performance in laying hens. A total 5000 (Lohmann White) laying hens (average IBW= 1295 g) were housed at the age of 18 wk. Production performance (i.e. actual and target values of livability, egg production, eggs per hen housed (EHH)) was monitored and recorded from wk 18 to 52.

Materials and Methods

GoldEdge was supplemented at 45 wk. Therefore, the effect of GoldEdge supplementation on performance was determined from wk 45 to 52 (n = 8 wk, IBW= 1660g, 4950 birds) and without GoldEdge (i.e. commercial diet without any medications) from wk 37 to 44 (n = 8 wk, IBW= 1645g, 4987 birds) considering that those weeks were the constant reproduction performance periods usually observed in Lohmann White. Target values were set from the management guide of Lohmann LSL-LITE (LOHMANN TIERZUCHT GmbH). Data (i.e. livability, egg production, and EHH and actual and target values) from two treatment groups (without GoldEdge vs. with GoldEdge; 1kg/MT) were statistically analyzed using MIXED Procedure of SAS program (SAS, 2013).

Results

From the overall data (wk 18 to 72), peak actual production was recorded at wk 38 (98.01%), and average livability was 99.50% during the whole trial. Livability (target and actual) was 98.35 and 99.45%, respectively under without GoldEdge treatment during 37 to 44 wk. Whereas, livability (%) recorded during 45 to 52 wk for target and actual was 97.53 and 98.68, respectively with GoldEdge treatment. There were no significant differences on livability difference value (subtracted target value from actual value) between GoldEdge and control groups (1.15 vs. 1.10, P>0.10). Both without GoldEdge and with GoldEdge treatment had higher actual production compared to the target (96.57 vs. 89.34 and 96.36 vs. 98.35, respectively). The difference between actual and target values on production performance showed a higher value in GoldEdge supplementation compared to without GoldEdge supplementation (7.23 vs. 3.71, P<0.01). Difference value on EHH in laying hens fed GoldEdge supplementation had higher than those fed without GoldEdge supplementation (12.97 vs. 9.15, P<0.01).

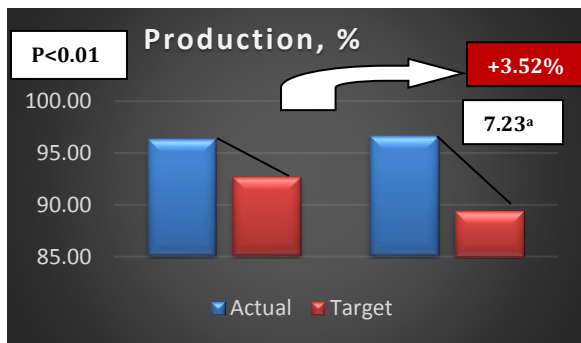


Figure 1: Effects of GoldEdge on egg production of laying hen

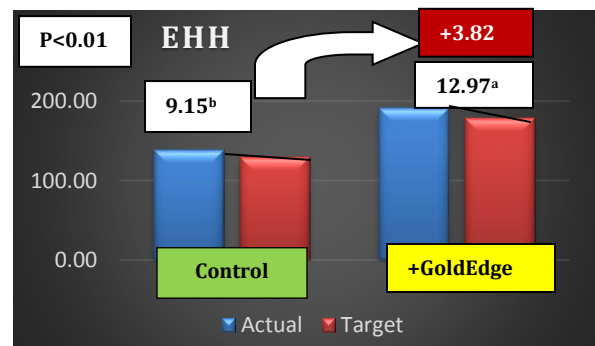


Figure 2: Effects of GoldEdge on EHH of laying hen

Conclusion

GoldEdge supplementation increased egg production and EHH compared to without GoldEdge supplementation in laying hens.