

GoldEdge Performance Study in Laying Hens
January 2019

Study_GE01_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 13757 (Lohmann White) laying hens (average IBW= 1392 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), average case egg weight) was monitored and recorded from wk 18 to 72.

Materials and Methods

GoldEdge was supplemented at 42 wk. Therefore, the effect of GoldEdge supplementation on performance was determined from 42 to 52 wk (n = 11 wk, 13453 birds) and without GoldEdge (i.e. control, commercial diet without any medications) from 31 to 41 wk (n = 11 wk, 13557 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 (livability, egg production, and average case egg weight 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 27 (98.2%), and average livability was 97.83% during the whole trial. Livability (target and actual) was 98.80 and 98.19%, respectively under without GoldEdge treatment during 31 to 41 wk. Whereas, livability (%) recorded during 42 to 52 wk for target and actual was 97.68 and 97.45, respectively with GoldEdge treatment. Laying hens fed GoldEdge supplementation had lower difference on livability value compared to those fed without GoldEdge (0.232 vs. 0.616, P<0.01). Moreover, both without GoldEdge and with GoldEdge treatments had higher actual production compared to the target (95.39 vs. 95.15 and 94.07 vs. 93.027, respectively). However, the difference between actual and target values showed a tendency with higher values in GoldEdge supplementation compared to without GoldEdge supplementation (1.045 vs. 0.242, P=0.092). Average case egg weight difference between the two treatment groups had no significant differences (P>0.10), but GoldEdge supplemented actual values had less difference from the target (48.20 vs. 49.60) compared to without GoldEdge supplementation (48.25 vs. 46.69).

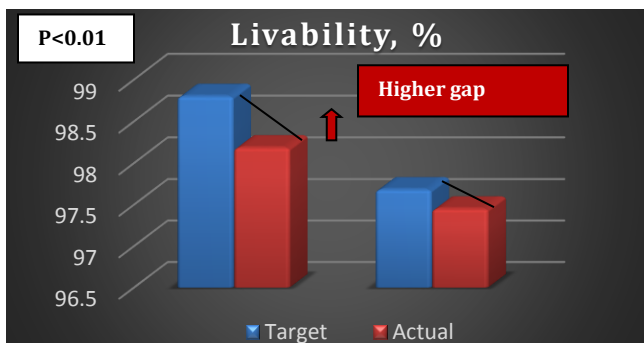


Figure 1: Effects of GoldEdge on livability of laying hen

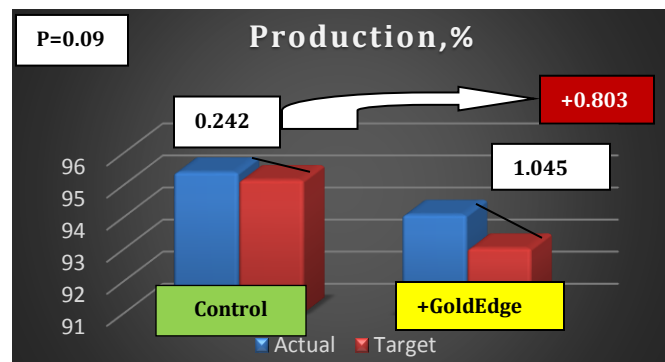


Figure 2: Effects of GoldEdge on egg production of laying hen

Conclusion

GoldEdge supplementation increased livability and tended to increase egg production compared to without GoldEdge supplementation in laying hens.