

Performance Potential of PHYTOCEE® in Poultry: Impact on egg production

OBJECTIVE

To evaluate the Effect of PHYTOCEE® Supplementation on egg production in BV 300 White Layer Birds at Different Age Groups.

MATERIALS AND METHODS

The trial was conducted in BV 300 White Layer birds, which were randomly assigned for 4 groups viz. G1: Phytocee (Week 60 - 73) (Batch No. 131) G2: Phytocee (Week 65 - 78) (Batch No. 130), G3: Phytocee (Week 72 - 85) (Batch No. 129) G4: Phytocee (Week 76 - 89) (Batch No. 128), dosage of treatment groups (200 g/ton). Effect of PHYTOCEE® on egg production Hen Day egg production (HDEP) %, Feed / egg (gm) and Egg weight (gm), Body weight (Kg), Feed intake (FI) g/bird/day, Mortality %, broken egg % parameters were assessed. Duration of the experimentation for 3 months & the number of birds housed were G1 (31969); G2 (31932); G3 (31950) & G4 (32455). The treatment schedule was carried out in 3 phases as Pre-supplementation, Phytocee supplementation & post-supplementation periods for one month each.

RESULTS

Effect of PHYTOCEE® on egg production parameters in BV-300- White layer chickens

Hen day egg production (HDEP) %							
Age of the Bird	G1-Phytocee	Standrad	Phy Vs Std	Age of the Bird	G2-Phytocee	Standard	Phy Vs Std
Week 65 (6)	89	87.7	1.3	Week 70 (7)	86.9	86	0.9
Week 66 (7)	90.3	87.4	2.9	Week 71 (7)	88.4	85.6	2.8
Week 67 (7)	88.8	87	1.8	Week 72 (7)	87	85.3	1.7
Week 68 (7)	89.1	86.7	2.4	Week 73 (7)	86.9	84.9	2
Week 69 (1)	89.2	86.3	2.9	Week 74 (3)	87.2	84.5	2.7
Mean of Supplementation	89.3	87	2.3	Mean of Supplementation	87.3	85.3	2
Week 69 (6)	89.1	86.3	2.8	Week 74 (4)	87.2	84.5	2.7
Week 70 (7)	89.6	86	3.6	Week 75 (7)	87.1	84	3.1
Week 71 (7)	90.4	85.6	4.8	Week 76 (7)	86.9	83.6	3.3
Week 72 (7)	89.4	85.3	4.1	Week 77 (7)	85	83.1	1.9
Week 73 (3)	88.8	84.9	3.9	Week 78 (2)	84.3	82.6	1.7
Mean of Post Supplementation	89.4	85.6	3.8	Mean of Post Supplementation	86.1	83.6	2.5

G1: 60- 73 Weeks (Batch -131) & G2:65- 78 Weeks (Batch- 130); Values expressed as means.

With the supplementation of Phytocee, the percentage of HDEP increased by 9.4% and 11% and by 10.9% and 11.5% in the post-supplementation period in G1 and G2 respectively.

Broken egg %

Age of the Bird	G1-Phytocee	Age of the Bird	G2-Phytocee	Age of the Bird	G3-Phytocee
Week 65 (6)	0.74	Week 70 (7)	1.23	Week 77 (6)	1.39
Week 66 (7)	0.75	Week 71 (7)	0.99	Week 78 (7)	1.37
Week 67 (7)	0.75	Week 72 (7)	0.89	Week 79 (7)	1.27
Week 68 (7)	0.66	Week 73 (7)	1.06	Week 80 (7)	1.14
Week 69 (1)	0.7	Week 74 (3)	1.09	Week 81 (4)	1.22
Mean of Supplementation	0.72	Mean of Supplementation	1.05	Mean of Supplementation	1.28

During the supplementation period, broken egg percentage decreased in G1, G2, and G3

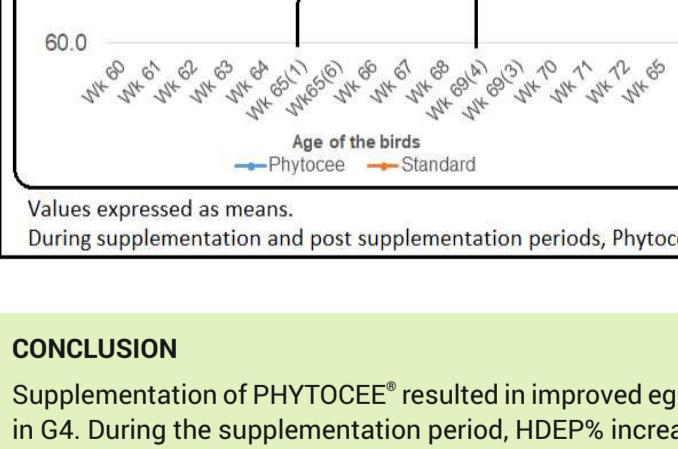
Egg weight (g)

Age of the Bird	G3-Phytocee	Standard	Phy Vs Std	Age of the Bird	G4-Phytocee	Standard	Phy Vs Std
Week 77 (6)	62	60.4	1.6	Week 81 (7)	62.1	60.6	1.5
Week 78 (7)	62	60.4	1.6	Week 82 (7)	63	60.6	2.4
Week 79 (7)	62	60.5	1.5	Week 83 (7)	63	60.6	2.4
Week 80 (7)	62	60.5	1.5	Week 84 (7)	63	60.6	2.4
Week 81 (4)	62	60.5	1.5	Week 85 (3)	63	60.6	2.4
Mean of Supplementation	62	60.5	1.5	Mean of Supplementation	62.8	60.6	2.2

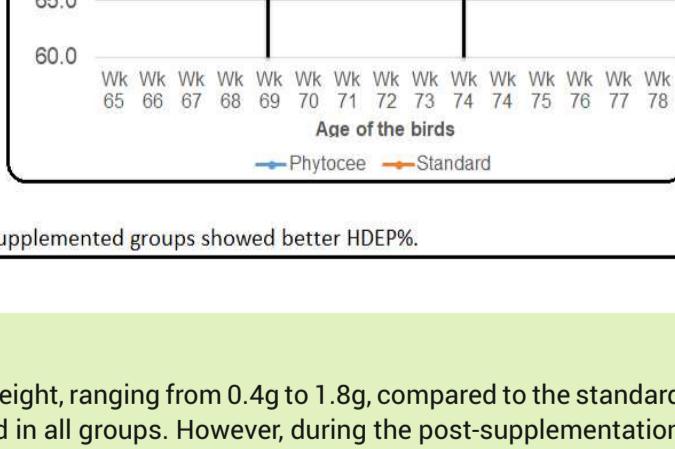
G3: 72-85 Weeks (Batch – 129) & G4: 76-89 Weeks (Batch- 128); Values expressed as means

Both the G3 and G4 groups exhibited a noticeable improvement in egg weight (1.8g and 0.8g respectively) during Phytocee supplementation, as compared to the standard.

HDEP% ((G1:60- 73 (Batch -131)



HDEP% G2:65- 78 Weeks (Batch- 130)



Values expressed as means.

During supplementation and post supplementation periods, Phytocee supplemented groups showed better HDEP%.

CONCLUSION

Supplementation of PHYTOCEE® resulted in improved egg weight, ranging from 0.4g to 1.8g, compared to the standard in G4. During the supplementation period, HDEP% increased in all groups. However, during the post-supplementation period, except for G4, all the other groups exhibited enhanced HDEP%. During the supplementation period, the percentage of broken eggs decreased in all age groups of birds, except for the G4 age group.

OUTCOME

Hence, PHYTOCEE® could be used as a natural & effective supplement to enhance the egg production and egg weight, while maintaining optimal feed intake in aged layer birds (72-85 weeks).