



ORIGINAL RESEARCH PAPER

Veterinary Science

TRIALS CONDUCTED WITH OVIRICH SHOWING SIGNIFICANT IMPROVEMNET IN EGG PRODUCTION AND FEED EFFICIENCY

KEY WORDS:

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|------------------------|---|
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INTRODUCTION

Poultry layer farming is gaining popularity in India due to its lower production cost and growing demand of eggs. In India the layer industry is growing with the rate of 7% yearly. The major issues in the layer industry are different diseases, bad management practices and decreased egg production in the form of quality and quantity, all these things my leads to loss in the layer farming. By preventing above factors we will improve egg production and profitability in layer units. Feed is the most important key factor for layer industry profitable ratio. Since feed represents between 65% of the total cost of egg production, there is a need of attention to increase feed efficiency to decrease the cost of egg production. Selected phytogetic feed supplements may be the key factors which are capable of supporting layer performance in these ways. The biodiversity of the flora provides a huge numbers of different herbs and spices with an enormous number of active substances exerting different effects in the organism. PhytoGENICS have traditionally been used as flavors and spices from ancient era to till now in human nutrition and ayurveda medicine. These phytogetic active compounds can stimulate gut microflora, different type of enzyme secretion, and provide gut protection. Their mechanism of action depends on the chemical structure of the active substances or constituents.

MATERIAL & METHOD

For the trials birds has been chosen in the flocks approaching the peak of Production that is around 36th week of age. The feeding and other management aspects were kept the same for both control as well treatment flock. In Treatment group OVIRICH has been supplemented with dosage of 1 Kg Per Metric Ton. The common parameters cush as egg Production, Feed efficiency, Weekly Feed intake and few egg quality parameters such as Egg Mass, Albumin index and shell quality also been observed.

RESULTS & DISCUSSION

TRIAL 1

A Trial study conducted at a Aminorich research facility Ghaziabad, Uttar Pradesh in India cemented the higher effects of a least cost formulated feed additive (OVIRICH, Aminorich nutrients B.V. Netherlands) on Total egg production, feed intake, feed efficiency, egg size feed conversion ratio (FCR), egg weight and egg shell quality. The study showed increased egg production (+6.40%), feed intake (+6.5 g/day), egg weight (+1.58 g) and egg mass (+2.47 kg). FCR was -0.15 lower in the OVIRICH group compared to the control group.

TABLE –In house trial results explained in table below

| S. No | Parameter | Control | OVIRICH* | Difference |
|-------|-----------------------|---------|----------|------------|
| 1 | Egg production (%) | 82.46 | 88.86 | +6.40 |
| 2 | Egg weight (Gm) | 57.32 | 58.90 | +1.58 |
| 3 | Egg mass (Kg) | 50.20 | 52.67 | +2.47 |
| 4 | Feed intake(Gm/day) | 106.07 | 112.66 | +6.5 |
| 5 | Feed conversion ratio | 2.35 | 2.20 | -0.15 |

Future population growth and limited resources will be key drivers for looking at solutions to improve efficiency in poultry production.

In the poultry, impaired feed conversion results in decreased performance. The significant influence of precisely formulated phytogetic feed supplements improved feed efficiency and egg performance.

TRIAL 2

In another trial conducted in Rewari Area at Kiran Poultry Farm in Haryana India with layers birds from start of 36th week to 41st week were chosen for trial with OVIRICH.

The data was observed as there was marked improvement in feed intake especially at start of trial but as peak came it turns to be not significant.

FEED INTAKE DURING WEEK BY EACH HEN

| Age of Layer | Control (Each Hen/Wk) | Supplemented with OVIRICH (Each Hen/Week) |
|--------------|-----------------------|---|
| 36 Wk | 752.81 | 758.72 |
| 37 wk | 812.67 | 810.61 |
| 38 wk | 794.00 | 852.00 |
| 39 wk | 848.75 | 809.30 |
| 40 wk | 887.17 | 856.63 |
| 41wk | 832.84 | 823.93 |
| Mean | 821.37 | 818.53 |

Other than that the feed consumption during the whole trial when OVIRICH is supplemented was not significant.

Same trial when the feed efficiency was compared it was found as Significant improvement in group supplemented with OVIRICH as compare to control.

FEED EFFICIENCY PERWEEK

| Age of Layer | Control (Each hen/Wk) | Supplemented with OVIRICH (Each Hen/Wk) |
|--------------|-----------------------|---|
| 36 Wk | 1.34 | 1.37 |
| 37 wk | 1.50 | 1.44 |
| 38 wk | 1.54 | 1.48 |
| 39 wk | 1.66 | 1.50 |
| 40 wk | 1.65 | 1.43 |
| 41wk | 1.77 | 1.44 |
| Mean | 1.57 | 1.44 |

Lower Feed efficiency also supported the fact the FCR has improved significantly when hen supplemented by OVIRICH, which has improved overall profitability.

When compared to Egg Production per hen the flock supplemented with OVIRICH has significant increase in egg production as shown in below table.

Higher egg production at lower feed efficiency has increase overall profitability at times when egg prices were at bottlenecks.

EGG PRODUCTION BY EACH HEN PER WEEK

| Age of Layer | Control (Each hen/wk) | Supplemented with OVIRICH (Each Hen/wk) |
|--------------|-----------------------|--|
| 36 Wk | 6.73 | 6.45 |
| 37 wk | 6.50 | 6.78 |
| 38 wk | 6.17 | 6.88 |
| 39 wk | 6.17 | 6.76 |
| 40 wk | 6.78 | 7.05 |
| 41wk | 6.30 | 6.60 |
| Mean | 6.44 | 6.75 |

At end of trial at 42nd day Egg quality parameters were observed for flocks supplemented with OVIRICH as well control.

EGG QUALITY PARAMETERS AT END OF TRIAL

| Age of Layer | Control | Supplemented with OVIRICH |
|----------------------|---------|---------------------------|
| Yolk ratio | 25.80 | 26.60 |
| Albumin ratio | 61.90 | 60.91 |
| Shell ratio | 12.10 | 12.40 |
| Shell thickness (mm) | 0.35 | 0.37 |

Overall the egg quality parameters like Yolk ratio, shell thickness and Albumin ratio were almost same during trial as well in OVIRICH.

But on comparison OVIRICH treatment always better when compared with control.

TRIAL 3

One more Trial was conducted at Deoria in Uttar Pradesh with OVIRICH and on 20000 layer birds.

The parameters such as Weekly feed intake per hen, Feed efficiency per week, weekly egg production by each hen and egg quality parameters were studied.

Per Week feed consumption (gm/week) each layers from another groups

| Age | Control (Each Hen/Wk) | Supplemented with OVIRICH (Each Hen/Week) |
|--------------|-----------------------|---|
| 36 Wk | 750 | 767 |
| 37 wk | 810 | 859 |
| 38 wk | 790 | 889 |
| 39 wk | 840 | 902 |
| 40 wk | 880 | 937 |
| 41wk | 830 | 760 |
| Overall Mean | 820 | 852 |

There was marked improvement in Feed Intake during the trial as OVIRICH was supplemented which emphasizes that OVIRICH supplementation do help in improvement of Feed Intake. Similarly FEED efficiency was measured for the flock supplemented with OVIRICH.

Week feed efficiency on per 12 eggs produced of layers from another groups

| Age of Layer | Control (Each hen/Wk) | Supplemented with OVIRICH (Each Hen/Wk) |
|--------------|-----------------------|---|
| 36 Wk | 1.32 | 1.35 |

| | | |
|--------------|------|------|
| 37 wk | 1.52 | 1.53 |
| 38 wk | 1.56 | 1.65 |
| 39 wk | 1.65 | 1.62 |
| 40 wk | 1.64 | 1.63 |
| 41wk | 1.76 | 1.42 |
| Overall Mean | 1.56 | 1.53 |

As compare to Feed Intake when Feed efficiency was compared it was found that it's almost same or some sense better with group supplemented with OVIRICH which again proves that OVIRICH increase feed intake and same time better the feed efficiency.

Also with better Feed efficiency the Egg production was also observed which proves that there was marked improvement in Egg production when supplemented with OVIRICH.

Egg production per hen per Week

| Age of Layer | Control (Each hen/wk) | Supplemented with OVIRICH (Each Hen/wk) |
|--------------|-----------------------|--|
| 36 Wk | 6.70 | 6.86 |
| 37 wk | 6.55 | 6.66 |
| 38 wk | 6.25 | 6.53 |
| 39 wk | 6.15 | 6.66 |
| 40 wk | 6.75 | 6.60 |
| 41wk | 6.60 | 6.62 |
| Overall Mean | 6.40 | 6.65 |

When compared to Control Overall Egg Production by each Hen per week Increase to 6.65 egg as compare to 6.40 egg in Control. This proves the fact that OVIRICH significantly increase Egg production

CONCLUSION

From all the studies done with OVIRICH it has been proved that There was significant improvement in Egg Production when supplemented with OVIRICH in Layer diet. Not only the Egg Production but other parameters such as Egg quality also get improved with OVIRICH. The farmers who have conducted these trials have got significant benefits and were very satisfied.

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References

1. www.aminorich.nl
2. dikshapmt@aminorich.nl