Technical Bulletin

Hostazym® X improves early lay performances on a corn-soy-DDGS layer diet

Aim of the study

The aim of this study was to determine the effect of Hostazym® X on layer performance in feed containing DDGS.

Trial description

Set-Up

- <u>Location</u>: Iowa State University, US.
- <u>Animals</u>: Hy-Line® W-36 hens during the first 24 weeks of their laying cycle (age 19-43 weeks of age).
- <u>Set-up</u>: 2 treatments, 8 replications with 9 birds per treatment.
- <u>Feed</u>: Feeds contained 40-50% corn, 17-25% of soya bean meal, 10 % DDGS, 5% of bakery meal and soya oil as source of supplemented fat. Energy content was 2775 Kcal ME/kg.

Treatments

- Control feed
- Control feed + Hostazym® X added at 1050 EPU per kg of feed.

Measured parameters

- Egg weight and mass were determined every 4 weeks by combining 5 days' worth of egg production.
- Feed intake was determined weekly by measuring feed refusal (initial feeder weight with feed + feed added).
- Feed efficiency was calculated as the ratio of egg mass to feed intake.

Results

- The inclusion of Hostazym $^{\circ}$ X resulted in an increase in lay performance of 1.9 % (90.1 vs 88.2 %; 2 extra eggs per hen housed) with a higher egg weight (+ 0.9 g) (Table 1). This yielded a 2.1 g/d increase in egg mass production (56.0 vs. 53.9 g/d; P <0.05).
- As feed intake was quite equal between groups, it could be calculated that the inclusion of Hostazym® X in the feed yielded a 0.07 lower feed conversion (Table 1).
- Average egg mass production during the trial (measured at the end of each 4 week subperiod) showed at some time intervals a significant increase due to the inclusion of Hostazym[®] X (Fig. 1).

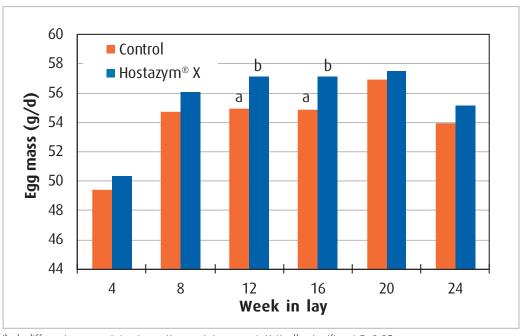


Table 1: Effect of Hostazym® X at 1050 EPU/kg on technical performance in early lay (19-43 weeks of age)

	Lay (%)	Egg weight (g)	Egg mass (g/hen/d)	Feed conversion
Control	88.2	61.2	53.9°	1.82
Hostazym® X	90.1	62.1	56.0 ^b	1.75

^{*}values in a column with different superscript are significantly different P< 0.05

Fig. 1: Egg mass production at the end of each 4 week sub-period using Hostazym® X at 1050 EPU/kg



^{*}a,b different superscripts at one time point mean statistically significant P<0,05

Conclusion

It can be concluded from this trial that Hostazym® X on a corn/soy/DDGS based layer diet has:

- a positive effect on laying percentage (+1.9 %).
- a strong tendency in improving egg weight (+0.9 %) and thereby improving egg mass significantly (+2.1 q/d).
- yielded a 0.07 lower feed conversion.

