

Use of *Saccharomyces cerevisiae* Cell Walls in Diets for Two Genetic Strains of Laying Hens Reared in Floor and Cages

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Abstract :

Two trials were carried out to evaluate the productive response in Bovans white hens housed in cages and Isa Brown hens reared in floor fed with sorghum + soybean meal supplemented with *Saccharomyces cerevisiae* Cell Walls (CW) growth promoters or zinc bacitracin in the diets. In the first one, 216 Bovans hens, 45 weeks old, reared in pens, were allocated in a completely randomized design in three treatments with 6 replicates of 12 hens each one. In the second one, 600 Isa Brown hens, 43 weeks old, were used and allocated in floor with straw litter and three treatments with 4 replicates of 50 hens each one. For both trials, the following treatments were used: 1.- Diet without growth promoter, 2.-As 1 + Zinc bacitracin (30 ppm), 3.- As 1 + CW (500 ppm). Water and feed were given ad libitum. Feed intake records, egg production, egg weight, egg mass per bird per day, dirty egg and feed conversion ratio, were taken during 14 weeks. At the end of the trials, to the variables above mentioned, an analysis of time repeated observations was carried out. Results indicated for Trial 1, difference among treatments ($p < 0.05$), with higher percentage of dirty eggs the treatment without promoter. In Trial 2, there was better egg production, feed conversion ratio, egg mass and less dirty eggs with CW, being these results similar to those of Zinc bacitracin treatment ($p < 0.05$) and higher than treatment without promoter. The results obtained show a promoter effect on the production of hens reared in floor, when CW or zinc bacitracin were included in the diet.

Key Word :

Laying hen, *Saccharomyces cerevisiae* cell walls, production system, zinc bacitracin