EFFECT OF BREWER'S YEAST ON BROILER PERFORMANCE

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In commercial broiler farming 75% of the total recurrent expenditure is feed cost. Therefore a small change in the quality of feed may greatly affect the economy of the poultry industry.

There are several methods to improve the nutritional quality of the diet. One of the most recent methods includes an application of biotechnology, in which microorganisms or extracts of them, are given in the feed or water. The ingested organisms alter the normal gut microflora by stimulating the growth of beneficial bacteria, or the ingested organisms may themselves multiply. The increased microbial population synthesises some essential amino acids and vitamins and also neutralises some of the antinutritional factors in the feed such as non-starch polysaccharides and aflatoxins (Sefton 1989). The objective of the research trial was to determine the effect on broiler performance of brewer's yeast* *(Saccharomyces cerevisiae)* when fed in a commercial diet or in an experimental diet containing wheat and barley.

One-day-old unsexed broilers (n=384) were fed (1g/kg feed) live yeast (LY), killed yeast (KY) or Yea Sacc® (YS) in a commercial diet (CD) or an experimental diet (ED) in four tier battery brooders for a period of five weeks.

Birds fed the commercial diet were heaver than those fed the experimental diet throughout the trial. At the fourth week, birds fed CD with LY recorded a significantly higher body weight than the basal group. But at the fifth week, mean body weight and feed conversion ratio showed no significant difference between the treatments. The increase in body weight of birds fed the yeast supplements were 1-2% higher than the body weights of birds fed the corresponding unsupplemented diets. Analysis indicated that 30 replications would be required to find a difference of this size significant.

These results indicate that provided a larger number of replications is used, further investigation of the value of brewer's yeast in broiler diets is justified.

*Supplied by Castlemaine Perkins Limited and processed by Dr Bhesh Bhandari, Department of Food Science and Technology, University of Queensland, Gatton College.

®Registered name of commercially available Live Yeast preparation manufactured by Alltech Biotechnology, U S A

SEFTON, T. (1989). 'Biotechnology in feed industry'. Proceedings of Alltech's 5th Annual Symposium, p167.

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