

ABSTRACT

The objective of this project was to determine the effect of zinc bacitracin taken from two different sources on broiler. Zinc bacitracin of two different sources i.e., Commercial Zinc Bacitracin and PCSIR Zinc Bacitracin were tested by mixing in the normal corn-soya based feed of animals and their effects were studied on

1. some growth parameters (body weights, total feed consumption, dressing percentage and weight of internal organs) upto 6th week of age
2. and microbiological studies of earlier region of small intestine on 5th and 6th week of age.

Following exposure of Commercial Zinc bacitracin and PCSIR Zinc Bacitracin there was no significant change in body weights, feed consumptions, dressing percentages and weights of internal organs as compared to untreated group of animals in all the six weeks of age. No significant decrease in microbial load of small intestine was observed in Commercial Zinc Bacitracin fed group, however microbial load significantly decreased in PCSIR Zinc Bacitracin fed group as compared to control group in 5th and 6th week of age. The decrease in population of *E.coli*, *staphylococcus* and *salmonella spp.* was non significant in Commercial Zinc Bacitracin fed group. The population of *E.coli* and *staphylococcus* decreased significantly whereas decrease in *salmonella spp.* population was non significant in PCSIR Zinc Bacitracin fed group in 5th and 6th weeks of age.