EFFICACY OF DIFFERENT PHYTASE PRODUCTS IN BROILERS

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Objective was to determine the in vivo efficacy of commercial phytase products in broilers on production performance from 5-21 days and on bone ash at 21 days of age. Test products were: Ronozyme NP L, Optiphos 2000 L, Finase EC 5L, Quantum5000 L and Natuphos 5000 L. The trial consisted of 19 treatments with 9 replicates each (20 birds per replicate). Phytase products at three dose levels (50%, 100% or 200% recommended dose (RD)) were supplemented to a negative control diet (NC) low in phosphorus. Besides NC was supplemented with monocalcium phosphate (MCP) at three inclusion levels (positive controls). Diets were fed from 5-21 days of age. Production was measured from 5-21 days of age. Tibia were collected at day 21 to determine ash and P contents.

Addition of phytase to a P-deficient broiler diet significantly improved performance and bone ash, irrespective of the phytase product. Based on this trial it was concluded that the MCP-P-equivalency (i.e. FTU needed per kg diet to replace 1.0 g MCP-P or 1.2 g MCP-P) based on tibia ash for all phytase products was as follows: 851, 327, 337, 201 and 344 FTU/kg for Ronozyme NP, Optiphos, Finase EC, Quantum and Natuphos, respectively.