

THE INFLUENCE OF SYNTHETIC ENZYME PHYTASE (*RONOZYME P*) ON UTILIZATION OF PHOSPHORUS AND CALCIUM IN BROILER CHICKENS FED DIETS WITH INCREASED AMOUNT OF RAPE CAKE

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**Summary.** The present study was designed to assess the role of synthetic enzyme phytase (Ronozyme P) on feed conversion ratio, phosphorus and calcium utilization, and *tibia* bone mineralization in broiler chickens fed diets with increased amount of rape cake. The results from this study indicate that marked phosphorus reduction in the diet highly increased the feed conversion rate and decreased the growth of chickens. However, the mentioned enzyme supplement improved calcium and phosphorus utilization. Our results showed that addition of not dehulled rape cake to the diet increased utilization of total phosphorus and calcium on 2.8% and 3.0% ( $p>0.05$ ) and addition of dehulled rape cake on 18.3% and 9.6% ( $p>0.05$ ) compared to the controls, respectively. Further, addition of synthetic phytase to the diet along with a low amounts of nonphytate phosphorus in not dehulled rape cake increased amount of phosphorus in the *tibia* on 0.8% ( $p>0.05$ ) and in group with dehulled rape cake on 1.1% ( $p>0.05$ ), respectively.

**Keywords:** Phytase enzyme preparation, dehulled and not dehulled rape cake, broiler chickens, productivity.