Effect of optimum level of phytase supplementation in de-oiled rice bran, rice bran and wheat bran based rations on the performance of Japanese quails

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An experiment was conducted to study the Effect of optimum level of phytase supplementation in de-oiled rice bran (DORB), rice bran (RB) and wheat bran (WB) based rations on the performance of Japanese quails. Seven hundred day old straight run Japanese quail chicks were randomly allotted to 7 experimental groups with 5 replicates each containing twenty chicks. The experimental groups included control (T1) having 0.5% available phosphorus (P) and 0.2% available P containing (T2-T7) DORB, RB and WB based diets with 0 and optimum levels of phytase. Phytase supplemented at optimum level of 100, 100, 100, 350, 300 IU/kg of maize, soya, DORB, rice bran and wheat bran in rations respectively. Growth performance parameters viz., body weight, weight gain, feed intake and feed efficiency were observed to be better in DORB, RB and WB based diets with optimum phytase groups (T3, T5 and T7) compared to their respective 0 level phytase supplemented groups (T2, T4 and T6), whereas control diet (T1) fed group also performed similar to phytase supplemented groups. There was no significant difference in livability per cent between treatment groups. Based on the above findings it can be concluded that through supplementation of optimum level of phytase in Japanese quail rations, the available phosphorus level can be reduced to 0.2 per cent without affecting the overall performance of birds.