Cassava (Manihot esculenta) peel meal supplemented with cashew nut (Anacardium occidentales) reject meal diets: Effect on performance and egg qualities of egg-type chicken



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Abstract

This study was conducted to determine the effect of cassava (Manihot esculenta) peel meal supplemented with cashew nut (Anacardium occidentales) reject meal diet on the performance and egg qualities of egg-type chicken. A total of two hundred and eighty-eight, twenty-two weeks old Yaafa brown hens were used in the experiment and divided into 12 treatments with 3 replications of 8 birds each maintained in a battery cage. The hens were at this age 10% in lay. The hens were fed diets containing 3 levels of Cassava Peel Meal (CPM) at 0, 10 and 20% each supplemented with 4 levels of Cashew Nut reject Meal (CNM) at 0, 10, 20 and 30% in a 3 x 4 factorial arrangement. The final weight decreased with increasing CPM inclusion while the weight gain, feed intake, protein intake and cost of feed consumed increased as CPM inclusion in the diets increased from 0 to 20%. The hen-day egg production decreased with increased in the CPM inclusion in the diets. On the other hands, increase in CNM inclusion levels from 0 to 30% resulted in an increase in the egg shape index and hen-day egg production but consequently reduced the egg length and albumen weight. The interaction of 10 % CPM and 20 % CNM resulted in the highest hen-day egg production. It could be recommended that for improved performance and enhanced egg qualities, supplementation of 10 % CPM with up to 30 % CNM in the diets of egg-type chicken should be adopted. However, for a comparably higher HDP, 10 %CPM and 20 %CNM inclusion in the dies was adequate.

Keywords: cashew nut reject, cassava peel, performance, egg quality, hen-day egg production, eggtype chicken