Effects of sundried sweet potato (Ipomoea batatas) whole tuber meal on dressed carcass weight, hematology and spermatozoa quality of commercial cocks

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There is paucity of information on utilization of sweet potato in feeding cockerels/cocks hence, this study examined the carcass weight, hematology and spermatozoa quality of commercial cocks fed graded levels of sundried sweet potato whole tuber meal (SSPWTM). Twenty cocks at 10 months old weighing about 2.5 kg were randomly allotted five per treatment designated as: D1 (0.0%), D2 (10%), D3 (15%) and D4 (20%). After 10 weeks of feeding, semen samples were collected by massage technique for semen pH, active motile and live spermatozoa evaluations. Blood samples were collected by severing the jugular vein for hematological evaluation and the dressed carcass was weighed to obtain carcass weight. Results indicated no statistical differences (P>0.05) in live and dressed carcass weights, hemoglobin and platelet values among the treatments. Total relative testes volume, semen pH, active motile and live spermatozoa values differed significantly (P<0.05) among the treatments. Live weight value was highest (2.64±0.06 kg) in D2 followed by D4 (2.6±0.06 kg), D1 (2.58±0.06 kg) and D3 (2.56±0.05 kg). Dressed carcass weight value was highest in D1 and D2 with 2.3±0.06 kg followed by D4 (2.28±0.04 kg) and D3 (2.26±0.05 kg). Similar trend was observed in hemoglobin whereas, semen pH value was highest (8.66±0.18) in D3 followed by D4 (8.28±0.38), D1 (8.22±0.41) and D2 (6.98±0.52). Active motile spermatozoa values were 93.2±1.28%, 92.4±1.5%, 81.2±0.58% and 61.8±0.44% in D1, D4, D2 and D3 respectively. Live spermatozoa values were 94.4±1.5% (D1), 84.8±0.86% (D2), 84.2±3.17% (D4) and 71.6±5.1% (D3). Since the observed values were similar to those given in normal cocks, SSPWTM could be utilized at 20% or more inclusion level in cocks nutrition.

Biography
Idahor Kingsley Omogiade is a Registered Animal Scientist with a License (RAS 000206) to practice as a Lecturer, Researcher and Consultant. At the moment, he is running a PhD program at the University of Ibadan, Nigeria. He is an active Member of several professional associations and a Reviewer to several reputable journals. His focus is on Animal Physiological and Bioclimatological studies. He has published 35 peer-reviewed articles in renowned journals and presented 30 papers at scientific conferences of which one earned him “Best Poster Presentation Award” at Jeju, South Korea.

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