

JOINT EVENT

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**Utilization of garlic, tiger nut, amaranthus and baobab leaves as nutraceuticals to boost Nera black performance and egg quality****Ari M M, Idahor K O, Mohammed M S, Ehiedu B N, Ogah D M and Adgidzi E A**  
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**Introduction:** Herbs with bioactive potencies could be used as feed additives in order to achieve optimum laying capacity in avian species. Hence fresh garlic bulbs, tiger nut, amaranthus and baobab leaves were processed into powder and added to 100 kg commercial feed at a rate of 0.5, 2.0, 2.0, 2.0 kg respectively designated as D2, D3, D4 and D5 with D1 purely commercial feed as Control.

**Methodology & Theoretical Orientation:** Two hundred and fifty Nera black layers at 22 weeks old were randomly allotted to the treatments, each had 48 layers with two replicates of 24 housed individually in battery cages and were fed the diets Ad libitum. Feed intake, weight gain, feed conversion ratio (FCR), hen day production, egg weight, eggshell thickness, Haugh unit, albumen and yolk pH were monitored.

**Results:** There were significant differences ( $P < 0.05$ ) in all the parameters measured except, eggshell thickness that ranged from 6.7 mm in D2 to 7.1 mm in Control. Highest feed intake (4.37 kg) was recorded in D4, slightly followed by D5 (4.25 kg) and the least value (3.66 kg) was recorded in D3. Layers in D5 gained more weight (1.9 g) compared to 1.33 g observed in D3. Feed conversion ratio values ranged from 1.23 in Control to 1.4 in D4, hen day production (16.8% to 20.7%) and egg weight value did not differ statistically ( $P > 0.05$ ) among D2, D3, D4, D5 (47.7 to 49.9 g) but were statistically higher than 43.9 g recorded in Control. Haugh unit, albumen and yolk pH values were statistically inferior ( $P < 0.05$ ) in Control.

**Conclusions:** All the parameter values recorded were within the normal range reported in healthy layers thus, garlic bulbs, tiger nuts, amaranthus and baobab leaves maybe used as nutraceuticals to boost Nera black performance and egg quality.

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