



## **PRODUCTIVE PERFORMANCE OF LAYER CHICKENS FED DIETARY LEVELS OF SORGHUM ICSV400 VARIETY**

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### **ABSTRACT**

The study was conducted to evaluate the reproductive performance of layer chickens fed dietary levels of sorghum ICSV400 variety. Five (5) diets (17% CP) were formulated, in which the sorghum variety ICSV 400 was included at 0, 25, 50, 75 and 100% levels and the diets designated as treatments T1, T2, T3, T4 and T5, respectively. Sorghum was used to replace maize as a dietary energy source. The study used 400 Shika brown points of lay pullets allotted to five (5) treatments which were replicated four (4) times each with 20 birds per replicate in a completely randomized design (CRD). After flushing for seven (7) days using the experimental diets, initial weights of the birds in each replicate were recorded. Records of feed intake, number of eggs laid with egg mass was taken on daily basis. The initial weights of layers were similar statistically and ranged from 1.65-1.74 kg. Daily feed intake (DFI) was significantly ( $P<0.001$ ) affected by the dietary treatments with the values varying between 111.00 and 123.00 g. The feed consumption and number of eggs laid increased with the increase in levels of sorghum variety ICSV400. The highest percent hen day production was observed in birds on diet 5 (100% ICSV400) which was significantly ( $P<0.001$ ) different from the remaining diets. The henhouse percent egg production (HHPP) was also better on diet 5 (100 % ICSV400) and significantly ( $P<0.001$ ) differ with the rest of the four (4) diets. The feed conversion ratio (FCR) was better (1.71) on diet 1 (control) and the lowest on diet 5 (100% ICSV400) which differ significantly ( $P<0.01$ ) among the five (5) treatments. It was concluded that ICSV400 sorghum is suitable and safe as an energy source in layer diets and can completely (100%) replace maize without negative effects on any of the performance parameters. It is recommended that ICSV400 sorghum variety is suitable source of energy in the diets of layer chickens.

**Keyword:** Chicken, Egg, Feed, ICSV400, Layer, Variety.