

# **AFFECTS OF METAL COMPOUNDS CONTAINING IRON (Fe), COPPER (Cu), ZINC (Zn) AND SELENIUM (Se) ON GROWTH ABILITY OF LV BROILER CHICKEN**

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## **Summary**

The study was conducted to determine the affect of metal compounds containing Iron (Fe), Copper (Cu), Zinc (Zn) and Selenium (Se) in feed ration on the growth ability of LV broiler chickens at 4 different levels (15, 20, 25 and 30%). The experiment was carried out with 900 chicks of one day old. Chicks were randomly divided into six groups to compare, each group of 50 chicks, the experiment was repeated three times. The groups of experimental chickens has been care, feeding and veterinary prevent disease the same, differing only in the level of iron, copper, zinc and selenium in the feed ration. Group I (Control 1) chickens was used base feed ration (basic ration) mixed with trace elements (Fe: 80 mg/kg, Cu: 8 mg/kg, Zn: 40 mg/kg and Se: 0.15 mg/kg) as recommended by the NRC (1994). Group II (Control 2) chickens fed with basic feed ration mixed with trace elements (Fe: 70 mg kg, Cu: 12 mg/kg, Zn: 30 mg/kg and Se: 0.18 mg/kg) as recommended by Bayer company. Four experimental groups (group III, group IV, group V and group VI) were fed with basic feed ration mixed with trace elements (Fe, Zn, Cu and Se) at level 15, 20 25 and 30% compared to feed ration of group I (Control 1). Research results show that: When broiler chickens use of metal compounds containing Fe, Cu, Zn and Se in the form of super dispersions at level of 15, 20, 25 and 30%, as recommended by the NRC (1994) did not affect the survival rate of chickens ( $P>0.05$ ). LV broiler chickens weight at 12 weeks of age using metal complex containing Fe, Cu, Zn and Se was only with 15, 20, 25 and 30% as recommended by NRC (1994) is higher than the use of inorganic minerals ( $P<0.05$ ), Specifically as follows: Weight of experimental LV broiler chickens in group I (Control 1), group II (Control 2), group III (15%), group IV (20%), group V (25%) and group VI (30%) corresponding were 2,064.42; 2,149.49; 2,072.56; 2,115.76; 2,121.52 and 2,249.90 g/chick. The group using metal compounds containing Fe, Cu, Zn and Se in the form of super dispersions in the feed ration at level 30% as recommended by the NRC (1994) were of highest weigh (2,249.90 g/chick) and average absolute value of period 1 - 12 week was the highest (26.29 g/chick/day).

**Keywords:** *Broiler chicken, Fe, Cu, Zn, Se, metal compounds, growth ability.*