

MANDARAH MALE CHICKS PRODUCTIVE PERFORMANCE AND ORGANS WEIGHT AS AFFECTED BY USING VARIOUS ROUTES OF SYNBIOTICS TREATMENTS

I. M. Youssef¹, A.M.² Abdel-Ghany, E.G. Ahmed² and S.M. Mahmoud¹

1- Department of Poultry Breeding, Animal Production Research Institute, Agriculture Research Center, Egypt, 2- Department of Animal Production and Fisheries, College of Agriculture, Suez Canal University, Egypt

Current study was conducted to investigate the effects of using various routes of Synbiotics administrations on productive performance and organs weights of developed Mandarah Male chicks. A Two hundred and ten one-days old male chicks of the indigenous Mandarah strain were assigned randomly into seven treatments (three replicates/treatment each of 10 chicks; 30 chicks/treatment). All groups were kept under the same conditions as regard to managerial; feeding a grower diet containing 19.23% crude protein, 2850 Kcal/kg Metabolize energy (ME) and 3.20% crude fiber and veterinary-health- and vaccination-program- procedures. Feed and water were offered *ad libitum*.

Route and dosage of the one-time Synbiotics' treatments to One-day old chicks were as follow:

- 1- Basal diet chicks with no treatment (control; G1-no treatment);
- 2- Spraying with 0.25 ml Synbiotics (containing 5×10^7 CFU-G2-single dose);
- 3- Spraying With 0.50 ml Synbiotics (containing 5×10^8 CFU-G3-double dose);
- 4- Drinking water with 0.25 ml Synbiotics (containing 5×10^7 CFU-G4-single dose);
- 5- Drinking water with 0.50 ml Synbiotics (containing 5×10^8 CFU-G5-double dose);
- 6- Mouth drops with 0.25 ml Synbiotics (containing 5×10^7 CFU-G6-single dose) and
- 7- Mouth drops with 0.50 ml Synbiotics (containing 5×10^8 CFU-G7-double dose).

At 16th week of age three birds from each treatment (this gives rise to a total of 21 birds) were slaughtered to determine carcass characteristics and relative weight (g) of lymphoid organs. Results indicated that body weight, feed intake and feed conversion ratio were significantly improved ($P \leq 0.01$) and highest/best values when using Synbiotics in drinking water (G4-single dose) compared with the control and other treated groups. However, carcass and Lymphoid organs (g) were not affected by treatments ($P \geq 0.05$). Nevertheless, the chickens administered by 0.25 ml Synbiotics via mouth/oral drops (G6) showed a significant increase ($P \leq 0.05$) in spleen weight than that of the control (G1-no treatment) and other treated groups.