

## OPPORTUNITIES OF GENETIC POTENTIAL OF CROSS HYBRO-G BROILER CHICKS USING DIFFERENTLY ENRICHED FEED

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**Abstract.** Four (4) treatment groups were formed in 2001 with cross Hybro-G day-old broilerchicks. Each group comprised 26 males and 26 females. Chicks of the first (control) group were fed basic feed, for the second group basic feed was enriched by an enzyme Kenzyme W dry (1 kg/t), chicks in the third group received feed enriched by the antibiotics flavomycin (5 g/t) and for group 4 feed acidifier Bolifor FA 2000 (10 kg/t) was added. The duration of the study was 7 weeks. Liveability of broilerchicks among the treatment groups showed no statistically true ( $p>0.05$ ) variations and it was the following: group 1 – 96.9%, group 2 – 96.0%, group 3 – 100% and group 4 – 95.7%. Using the mentioned additives live weight of group 2 chicks at the end was 9% more (♂ 2699 g, ♀ 2459 g), using flavomycin – 11.9 % more (♂ 2654 g, ♀ 2641 g), but using acidifier - 3.9% more (♂ 2513 g, ♀ 2394 g) than in the control group (♂ 2463 g, ♀ 2269g).

Assessing broiler productivity according to the productivity index we got the following results: group 1 – 227.3; group 2 – 279.2; group 3 – 300.2 and group 4 – 252.7. On the average each broilerchick consumed the following amount of the compound fodder: group 1 – 4.89 kg; group 2 – 4.61 kg; group 3 – 4.69 kg and group 4 – 4.70 kg.

Taking broilermeat, liver and blood analyses true ( $p>0.05$ ) differences were not found within the figures among the groups. Analysing amount of breast muscles (% from live weight) we got the following figures: group 1: ♂♂ - 15.6%; ♀♀ - 18.3 %; group 2: ♂♂ - 15.2 %; ♀♀ - 15.2 %; group 3: ♂♂ - 17.1 %; ♀♀ - 19.0 %; group 4: ♂♂ - 16.6 %; ♀♀ 16.5 %. Assessing full value of broilermeat we measured two amino acids describing meat qualities – tryptophan and oxyprolin in muscles. If the proportion of the mentioned amino acids is higher, value of meat is higher too. The proportion of these amino acids was as follows: group 1 – 2.65; group 2 – 2.58; group 3 – 3.13 and group 4 – 2.42.

**Keywords:** broilers, feed, enzyme, antibiotics, feed acidifiers.