## VPLYV VČELIEHO PEĽU VO VÝŽIVE BROJLEROV NA TVORBU DROBOV A ABDOMINÁLNEHO TUKU

## THE EFFECT OF BEE POLLEN AS SUPLEMMENTAL DIET ON THE BROILER'S SECONDARY PARTS (GIBLETS) AND ABDOMINAL FAT

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The present study was aimed to achieve the effect of the bee pollen extract on broiler's Ross 308 chickens secondary part weights (giblets) such as [liver weight (g), gizzard weight (g), heart weight (g), neck weight (g) and abdominal fat weight (g)]. The present experiment was implemental at Slovak University of Agriculture in Nitra Department of Animal Products Evaluation and Processing faculty of biotechnology and food sciences of Animal Products Evaluation and Processing. The experiment enrolled 90 chickens in one day old, which were divided into 3 groups control group, E1 and E2 groups (n=30). The chickens have been bred in a cage conditions. Each cage was equipped with feed dispenser and water intake was ensured ad *libitum* through a self feed-pump. The temperature was controlled during the fattening period and it was 33 °C at the first day and every week was reduced about 2 °C the end temperature was 23 °C. The lighting during the feeding period was continuous. Each group was fed by same starter complete feed mixture (CFM) HYD-01 (loose structure) from 1<sup>st</sup> day to 21<sup>st</sup> day of their age, and from the 22<sup>nd</sup> to 42<sup>nd</sup> days of their age, chickens were fed by a complete feed mixture (CFM) HYD-02 (loose structure), in all investigated groups of experiments, to the experiment (E1 and E2 groups) were added bee pollen extract (group E1 – 400 mg. kg<sup>-1</sup> bee pollen extract and group  $E2 - 800 \text{ mg.kg}^{-1}$  bee pollen extract) into broiler feed mixture, for 42 days. At the end of the experiment the findings shown than the liver weight in the control group  $(50.30\pm7.29 \text{ g})$ was higher compared to experimental groups E1 (42.99±7.22 g) and E2 (42.50±5.93 g) and there were found significant differences ( $P \le 0.05$ ) between control group and E1, E2 groups. The gizzard weight was higher in control (33.48±6.11g) compared to E1 (30.52±4.10 g) and E2  $(32.63\pm5.66 \text{ g})$  and there were no significant differences (P>0.05) between groups. The heart weight was lower in the control group (10.12±1.77 g) compared to E1 (10.36±1.30 g) E2  $(10.26\pm1.72 \text{ g})$  and there were no significant differences (P $\ge$ 0.05) between groups. The neck weight was higher in E1 (86.08±12.81g) than control group (80.05±8.46 g) and E2  $(78.36\pm12.81g)$  and there were no significant differences (P $\ge$ 0.05) between groups. Further, the abdominal fat in the control group  $(6.06\pm1.92 \text{ g})$  was higher compared to E1  $(5.32\pm1.68 \text{ g})$  and E2 (5.20 $\pm$ 1.64 g) and there were no significant differences (P $\ge$ 0.05) between groups. From the present study, we conclude that the bee pollen extract in dose 800 mg.kg<sup>-1</sup> has

From the present study, we conclude that the bee pollen extract in dose 800 mg.kg<sup>-1</sup> has decreased the liver weight, heart weight, gizzard weight, neck weight and abdominal fat weight, except bee pollen in dose 400 mg.kg<sup>-1</sup> has increased weight of the heart weight and neck height.

Keywords: bee pollen extract, broiler Ross 308, giblet weights, abdominal fat weight

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