

Effect of thyme (*Zataria multiflora*) extract and probiotic (Broilact) feeding on IGF-I, IGF-II and IGF- I R gene expression of liver in broiler chickens

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ABSTRACT:

This study aimed to investigate the effect of *Z. multiflora* extract and probiotic (Broilact) feeding on IGF-I, IGF-II and IGF- I R gene expression of liver in broiler chickens. Therefore, Insulin like Growth Factor- 1 (IGF- I), Insulin like Growth Factor- 2 (IGF- II) and IGF- I receptors gene expression were measured and found improved. One hundred and eight one-day old Ross male broiler by were randomly allocated in three groups viz: control group (CTRL), group supplemented with *Zataria multiflora* extract (Thy) and probiotic feed (Pro) group. Each group had three replicates of 12 broilers. The birds received a corn- soybean based diet. IGF- I, IGF- II and IGF- I R gene expression were determined in liver. The results of this study showed that the amount of thyme extract used in this experiment has no effect on thyroid hormones concentrations. At the 42nd day of age IGF- I and IGF- II gene expressions in liver have not significantly changed in treatments ($P>0.05$). IGF- I R gene expression in Pro birds significantly increased when compared with CTRL and Thy birds ($P<0.05$).

Keywords:

IGF- I gene expression, Probiotic, Thyme extract, Broiler.