

## The use of a mixture of essential oils in meat broiler diets and its effect on physiological and textile characteristics

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**ABSTRACT:**

This study was conducted in the poultry Farm of Animal production Department, College of Agriculture, University of Baghdad, the previous site in Abu Ghraib for the period from 1.10.2017 to 11.11.2017. This study demonstrates the effect of using a mixture of essential oils in broiler diets and some physiological and histological traits. A total of 375 unsexed Ross 308 one day old use was in this experiment. Birds were distributed randomly on five treatment and three replicates per treatment, each replicates containing 25 chicks (75 chick/treatment). Treatments were as follows: Treatment (T<sub>1</sub>) control group (without any supplement of oil mixture (essential oils) and T<sub>2</sub>, T<sub>3</sub>, T<sub>4</sub> and T<sub>5</sub> included the addition of (black seed oil, cumin oil, parsley oil, anise oil and grape seed oil) oil mixture (0.25, 0.50, 0.75 and 1%) respectively. The results showed there were no significant difference in the concentration of glucose and the value of peroxide, while the superiority of the total protein for the public of treatment T<sub>2</sub> and the superiority of the cholesterol ratio for the treatment of the fifth T<sub>5</sub> was also observed to have a significant superiority in favor of treatment T<sub>3</sub> in T<sub>4</sub> Triglycerides and HDL while T<sub>5</sub> was superior to LDL and T<sub>1</sub> was treated in VLDL ratio. And a significant superiority (P<0.05) in the villi length and crypt depth were seen for the ileum and jejunum partial.

**Keywords:**

Partial substitution, Mixture of aromatic oils, Villi length, Crypt depth.