

## Effect of using water extract of nettle leaves (*Urtica dioica*) on some immunological and blood traits of broiler

**Authors:**

Ahmed AK Al-Salihi,  
Mousa A Hassan and  
Jassim KM Al-Gharawi

**Institution:**

Agriculture college,  
Al-Muthanna University,  
Iraq.

**Corresponding author:**

Ahmed AK Al-Salihi

**ABSTRACT:**

The present study aimed at showing the effect of using water extract of Nettle leaves (*Urtica dioica*) on some immunological and blood traits of broiler. 240 chicken broiler (Ross 308) were used at one day aged and 43 g mean weight. They were randomly distributed in four treatments with 60 chick per treatment having three replicates for each. Experimental treatments included: First treatment T<sub>1</sub> Control treatment without any addition of plant extract, the other treatments (T<sub>2</sub>, T<sub>3</sub> and T<sub>4</sub>) were added to the water extract of nettle leaves with three concentrations (10, 15, 20 ml/l) in the drinking water, respectively. The results of this study showed significant improvement ( $P \leq 0.05$ ) in the immunological traits (Delayed Type Hypersensitivity test (DTH), Enzyme Linked Immunosorbent Assay (ELISA), relative weight of fabricia and fabricia index) and blood Traits (red blood cells, white blood cells, Packed Cell Volume (PCV), hemoglobin concentration and Heterophil/Lymphocyte ratio (H/L) for water extraction of the nettle leaf groups and compared with the control treatment.

**Keywords:**

Immunological, Blood traits, Nettle leaves, Water extracts, Broiler.