



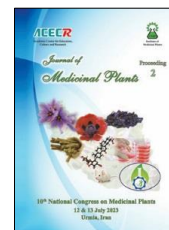
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Effect of mulberry (*Morus alba*) leaf ethanoic extract on electrocardiographic parameters and Cardiac Index (RV/TV) in broilers with experimental ascites.

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ABSTRACT

The object of this study was to evaluate the effect of mulberry (*Morus alba*) leaf ethanoic extract on and electrocardiographic changes and cardiac Index (RV/TV) in the experimentally induced ascitis in broiler chickens using cold stress. 135 one-day-old (Ross308) male broiler chickens were chosen and randomly divided were randomly divided into 3 groups and each group included of 45 chicks with 3 replicates. Chicks were reared for six weeks. The first group was fed with the basal diet as a control, and the second and third groups were fed with basal diet and 0.1% of mulberry leaf ethanoic extract. Temperature was gradually decreased in experimental groups to 30% of the standard program from 2nd week until the end of the rearing period. Mortality caused by ascites were recorded weekly and At the end of 5 and 6 week, 5 chicks from each group were selected and electrocardiography recordings were performed. Also after autopsy right ventricle/total ventricular weight (RV/TV ratio) was measured and recorded. Incidence and mortality of ascites and RV/TV ratio in 0.1% mulberry leaf group (third group) were lower than second group ($P < 0.05$). Heart rate in second group was lower than 0.1% mulberry leaf group and control group. There were significant decreased of S waves and elevation of T wave amplitudes in 0.1% mulberry leaf group compared to the second group. The present study showed that the addition of mulberry leaf ethanoic extract to broiler chickens diet improved electrocardiogram parameters and decreased RV/TV ratio and mortality, so can be effective in preventing ascite syndrome resulted from cold condition.

References

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