



EFFECTS OF URTICA DIOICA AND RHUS CORIARIA ON DIABETIC NEPHROPATHY, LIVER DAMAGE AND DYSLIPIDEMIA

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ABSTRACT

Extracts of *Urticadioica* (L) (UD) and *Rhuscoriaria* (L) (RC) have been reported to have some antidiabetic properties. This study investigated the effects of UD and RC water extracts and their 1:1 (w/w) combination on diabetic nephropathy, damage of liver and some metabolic parameters. Streptozotocine-induced diabetic rats were received UD, RC and their combination at a final dose of 100 mg/kg by oral gavage. And 24 rats were used for this study. The glomerular space and interstitial inflammation were histologically examined and the serum levels of creatinine and Urea were assessed. Histological activity index of liver, some liver function related enzymes; blood glucose and lipid profile were assessed as well as. After five weeks of treatment, UD extract remedied the interstitial inflammation. The creatinine and Urea levels of serum were seen to be decreased by UD and the UD/RC mixture. In addition, RC had a remarkable healing effect on glomerular space. Disturbed liver histological activity index was recovered by UD administration and the augmented liver function related enzymes such as alkaline phosphatase and alanine aminotransferase were obviously decreased by the UD/RC mixture. All plant extracts especially the UD/RC mixture reduced the serum levels of glucose. The UD was the best treatment on the deregulated levels of triglycerides and low density lipoprotein cholesterol. The UD/RC mixture was the most efficient treatment on the elevated levels of total cholesterol as well as. All analyses were performed using the SPSS software (SPSS version 16, Chicago, IL, USA). $P < 0.05$ was considered statistically significant. This study revealed that UD, RC and their combination had considerable healing effects against diabetic nephropathy, liver damage and dyslipidemia.

Biography – Alireza Abdolhosseinzadeh is the researcher in Department of Microbiology, Zanjan Branch, Islamic Azad University, Zanjan, Iran. He is interested in Agriculture sciences Research and farming technology



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