

Abstract:

Due to the large population of sheep in the world, sheeps are considered as a suitable livestock for breeding. Medicinal plants like *Prosopis farcta* have a wide ranges of antioxidants. In this study, effect of *Prosopis farcta* fruits powder on oxidative stress and some blood biochemical parameters in sheep was investigated. Twenty Baluchi sheep (Fifteen in the treatment group, Five in the control group) were studied in four groups of five each. At First day, blood sample was taken from jugular vein from each group, Then the powder of the *Prosopis farcta* was fed to treatment groups 1, 2 and 3, respectively, with doses of 1000 mg / kg, 2000 mg / kg and 3000 mg / kg, the same blood sample were taken on days 14 and 28 from jugular vein. Serum samples were collected and, the amount of some biochemical parameters of blood such as cholesterol, triglyceride, VLDL, HDL and total antioxidant capacity (TAC), as well as malondialdehyde (MDA) as oxidative stress index were measured. In the groups that received powdered fruit of the plant *Prosopis Farcta*, the decrease in the amount of malondialdehyde (MDA), LDL, VLDL and increase total antioxidant capacity (TAC), in Comparison with control group Was meaningful. In additon, the amount of HDL, cholesterol, triglyceride, and biochemical parameters (Ca, Mg and P) , as well as liver enzymes (AST, ALT) was not changed significantly. The results of this study indicate the antioxidant effect of fruit powder *Prosopis Farcta* in the sheep.

Keywords: Sheep, *Prosopis Farcta*, Oxidative Stress, Biochemical Parameters



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Effect of *prosopis farcta* fruits powder on oxidative stress and some blood biochemical parameters in sheep

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