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Antidiabetic activity of aqueous extract of *Ruta montana L.* in streptozotocin-induced-diabetic rats

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The aim of the present study was to evaluate antidiabetic activity of aqueous extract of *Ruta montana L.* in streptozotocin induced diabetic rats. Diabetes mellitus was induced in rats by single intraperitoneal injection of streptozotocin (STZ, 50 mg/kg body weight). After STZ induction, the hyperglycemic rats were treated with aqueous extract orally at the dose 250 mg/kg body weight daily for 15 days. Insulin (6 U.I/kg) was used as reference drug. The control group was administered with distilled water for the same duration. The fasting blood glucose levels were measured on every 5th day during the 15 day treatment. The results showed that oral administration of aqueous extract at the dose of 250 mg/kg body weight decreased blood sugar level in 5 to 15 days of treatment. The antidiabetic effect of aqueous extract was found to be comparable to that the effect exerted by the reference drug, insulin at the dose of 6 U.I/kg. blood sugar level in rats treated by aqueous extract was 2.41 ± 0.05 , 1.32 ± 0.36 , 1.10 ± 0.12 and 0.98 ± 0.04 mg/dl at the 1, 5, 10 and 15 days respectively and in rats treated by insulin was 2.25 ± 1.30 , 1.04 ± 0.33 , 1.19 ± 0.45 , 0.48 ± 0.15 mg/dl at the 1, 5, 10 and 15 days respectively.

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