

Title : Rose Flower Extract - A Potential Antidiabetic Agent**Author(s) :** Ms. Priti Sham Patil ^a, Dr. Pratima Arun Tatke ^a, Dr. S.Y.Gabhe ^b**Institution :** ^a C. U Shah College of Pharmacy. S. N. D. T. Women's University, Mumbai, Maharashtra, India
^b Bharati Vidyapeeth Deemed University, Poona College of Pharmacy, Pune, Maharashtra, India**Keywords :** *Rosa damascena, madhumeha, Ayurveda, Rose flowers***Introduction:**

Diabetes mellitus is a major metabolic disorder affecting nearly 10% of the population all over the world. In spite of the introduction of hypoglycemic agents, diabetes and its complications continue to be a major health problem. Since ancient times, patients with type 2 diabetes mellitus have been treated orally by folklore medicinal plants. In the Indian system of medicine (Ayurveda), various plants for the cure of diabetes or 'madhumeha' have been mentioned. Some of these plants have been experimentally evaluated and the active principles have been isolated. However, search for new antidiabetic drugs from plants still continues¹.

Methodology:

The antidiabetic effect of ethanol extract of fresh flower petals of *Rosa damascena* (Rose) was evaluated in streptozotocin (STZ) induced diabetic rats. The ethanol extract was administered to diabetic rats at three dose levels viz. 100mg/kg, 200mg/kg and 400mg/kg of body weight. Glibenclamide (10mg/kg) was used as standard drug. Blood glucose levels and bodyweights of all the rats were measured on 7th, 14th, 21st and 28th day. Biochemical parameters such as serum cholesterol, triglycerides, HDL, Urea, creatinine, total protein, SGOT and SGPT levels were also measured at the end of the study.

Results:

Oral administration of the ethanol extract of Rose flower petals at all the three dose levels caused a statistically significant reduction ($P < 0.001$) in blood glucose levels in diabetic rats. The body weights of rats treated with the extract were found to be improved as compared to diabetic control rats. The altered biochemical parameters associated with diabetes were also improved in rats treated with ethanol extract ($P < 0.001$).

Conclusion:

Rose flower petal extracts possess promising antidiabetic activity in rats. The extract can be used as nutritional supplement and potential antidiabetic agent.

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