ABSTRACT

To study the efficacy of *Celosia argentea* root (ethanolic extract) in streptozotocin induced diabetic rats. Glucose lowering effect and anti-diabetic activity studied using glucose tolerance test in normal rats and streptozotocin induced diabetic rats respectively. The various parameters studied included fasting serum glucose levels, cholesterol levels, protein levels, total lipids levels, urea levels, liver glycogen content and body weight in diabetic and normal rats. When different extracts were tested, ethanolic extract was found to lower the levels of glucose in glucose fed rats. Treatment with ethanolic extract at two levels showed significant increase in liver glycogen, protein and significant decrease in serum glucose levels. The urea, cholesterol, and total lipids were also significantly reduced upon treatment with the extract thus potent anti-diabeticproperty of the plant. *Celosia argentea* has a significant anti-diabetic activity. The ethanolic extract of is very promising to develop standardized phytomedicine for diabetes mellitus.

Key words

Anti-diabetic activity**,** *Celosia argentea***,** Streptozotocin