Abstract
The efficacy of *Momordica charantia* (MC), *Eugenia jambolana* (EJ), *Tinospora cordifolia* (TC) and *Mucuna pruriens* (MP) was assessed in the prevention of murine alloxan diabetic cataract. Alloxan (120 mg/kg) was used as the diabetogenic agent. While controls and diabetic controls did not receive any plant extract, treated rats received lyophilized aqueous extract of MC and EJ (200 mg/kg p.o.), alcohol extract of TC (400 mg/kg) and MP (200 mg/kg p.o.) every day until 4 months. Serum glucose concentration was assessed and cataracts examined with both the naked eye and through a slit lamp. Of the eight animals in the diabetic control group, four developed cortical cataract (stage IV) by day 90 while the remaining four developed it by day 100. The incidence rate of cataract in MC, EJ, TC and MP treated groups at 120 days was only 0, 0, 1 and 2. Oral feeding of MC, EJ, TC and MP extracts for 1 month produced a fall of 64.33%, 55.62%, 38.01% and 40.17%, respectively, in the serum glucose levels in comparison with the 48 h level. After 2 months of treatment, the respective values were 66.96%, 59.85%, 40.41% and 45.63%. MC and EJ prevented the development of cataract while the protective effect was less with TC and MP along with a significant reduction of plasma glucose levels ($p < 0.001$).