The present work is pharmacological evaluation of *Sesbania sesban* and *Adenanthera pavonina* Linn. extracts in the treatment of stz-induced diabetes mellitus and its complications like nephropathy and neuropathy in rats.

*Sesbania sesban* leaves aqueous extract (SSLAE) and *Adenanthera pavonina* seed aqueous extract (APSAE) was found to be safe to use in animals and showed no mortality up to 5000mg/kg and 2000 mg/kg b.wt. respectively. Therefore 250, 500 mg/kg of SSLAE and 50,100 and 200mg/kg doses of APSAE were selected for all in-vivo experiments.

In subacute toxicity study, repeated administration of SSLAE and APSAE at 250, 500,1000 and 50,100 and 200 mg/kg respectively up to 14 days produced significant increase (p<0.05) in body weight of rats without any clinical signs of toxicity and death.

In acute hypoglycaemic study, administration of single dose of SSLAE and APSAE at 250, 500 and 50,100 and 200 mg/kg respectively showed no any significant effect on normoglycaemic rats.

In subacute antihyperglycaemic study, repeated administration of SSLAE and APSAE at 250, 500 and 50,100 and 200 mg/kg respectively up to 30 days showed significant (p<0.01) antihyperglycaemic activity in stz-induced diabetes in rats.

Similarly repeated administration of SSLAE and APSAE at 250, 500 and 50,100 and 200 mg/kg respectively up to 12 weeks showed significant (p<0.01) nephroprotective and neuroprotective activities in stz-induced diabetes in rats.

The present study has confirmed that the sub acute administration of *Sesbania sesban* and *Adenanthera pavonina* extracts reduced hyperglycemia of stz-induced diabetic rats. The observed antihyperglycaemic action may have been in part due to protection of β cells against the cytotoxic action of stz.

**Future Scope**