A-23 Effect of aqueous extract of *Salacia reticulata* var. *Diandra* (Celastraceae) on alloxan diabetic rats

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Aqueous extract of the root bark of *Salacia reticulata* var. *Diandra*, Family *Celastraceae* is taken orally to treat Diabetes mellitus. Oral hypoglycaemic activity of the aqueous extract of this plant in normal healthy rats has been reported. Present study was undertaken to evaluate the effect of the extract on glucose homeostasis of alloxan diabetic rats.

An aqueous extract of *Salacia reticulata* (5g/kg) was administered daily via a stomach tube to a group of alloxan diabetic Sprague Dawley rats and a 2nd group of diabetic rats received the same volume of distilled water for a period of approximately 120 days. A third group (n = 6) of healthy normal rats matched for age and sex served as the control group. The body weight, food intake and water intake of animals in the 3 groups were monitored daily. Blood samples were taken for estimation of fasting blood glucose, glucose tolerance and fructosamine after 50, 75 & 120 days of treatment with the extract. Glycated haemoglobin estimation was done on the 120th day.

Chronic administration of *S.reticulata* extract reduced the extent of hyperglycaemia in the alloxan diabetic rats as shown by a significant reduction in fasting blood glucose levels ($p<0.02$), glycated haemoglobin levels ($p<0.05$) and fructosamine levels ($p<0.01$). These changes were also accompanied by a reduction of alloxan induced impairment of body weight gain polydipsia and hyperphagia in the drug treated group.

The data support the traditional belief that *S.reticulata* extract could improve diabetic conditions and the plant extract deserves further consideration as a possible adjunct to conventional anti diabetic treatments.