

E2-46 Preliminary biochemical investigations on the oral hypoglycaemic activity of *Salacia reticulata*

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The possible oral hypoglycaemic activity of an aqueous extract of *Salacia reticulata* root bark was investigated using normal, healthy and Streptozotocin induced (25 and 40 mg/kg body weight) diabetic Sprague-Dawley rats as animal models. Oral administration of the aqueous extract of *S. reticulata* (1ml/100g body weight) to normal healthy Sprague-Dawley rats did not significantly reduce the fasting blood glucose concentrations. However, the extract significantly ($p < 0.05$) improved the ability to tolerate an external glucose load, when administered 30 min prior to an oral glucose load.

Oral administration of the aqueous extract of *S. reticulata* did not show any significant effect, either acute or cumulative on the ability to tolerate an external glucose load in Streptozotocin (25 and 40 mg/kg body weight) induced diabetic

rats. The glycosylated haemoglobin concentrations at the end of the experimental period were significantly elevated in both the extract - treated and the untreated diabetic groups and there were no significant differences between the two groups.

The aqueous extract of *S.reticulata* root bark failed to reduce fasting blood glucose levels but significantly improved the ability to tolerate an external glucose load in normal rats. The extract was ineffective as an oral hypoglycaemic agent in Streptozotocin induced diabetic rats at the dosages administered in the present investigation.

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