ID-053-OP

Evaluation of Hypoglycaemic Activity of the Tuberous Root Powder of *Asparagus racemosus* willdon Wistar Albino Rats

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Diabetes mellitus is a metabolic disorder characterized by hyperglycemia due to defects in insulin secretion, action or both. As per the signs and symptoms the disease *Neerizhivu* in *Meganeer* can be correlated with Diabetes mellitus in Modern Medicine according to the Siddha texts. *Asparagus racemosus* will possesses diverse number of pharmacological activities including anti-diabetic, antioxidant and free radical scavenging activity, anti-cholinesterase action and anti-inflammatory property. Despite the limited scientific validity in the presence of literacy evidence for its anti-diabetic action the present research was designed to assess the hypoglycaemic activity of the tuberous root powder of *Asparagus racemosus* via an Experimental Animal study. Two doses (40mg/kg and 80mg/kg) were administered orally for a period of 14 days to 24 Alloxan induced diabetic rats. Significant blood glucose level lowering effect was seen in the test group which received 80mg/kg with an overall therapeutic effectiveness of 72%. Hypoglycaemic activity of the group which received 40mg/kg was 67%. The mean differences of the blood glucose lowering effect of the groups were in the order of Standard>Test 2>Test1>Control. Hence, the plant exhibits a dose dependent hypoglycaemic activity.Based on the results the hypoglycaemic activity of *Asparagus racemosus* was scientifically and therapeutically proved as per the traditional Siddha literature and the potential to develop an anti-diabetic medicinal preparation for Diabetes mellitusis being revealed.

Key Words: *Asparagus racemosus*, Diabetes mellitus, Hypoglycaemic, *Neerizhivu.*