## STUDIES ON THE ISOLATION AND HYPOGLYGEMIG EFFECT OF AN ORALLY ACTIVE PRINCIPLE FROM BANYAN TREE BARK (*Ficus bengalensis*)

## B. VENKANNA BABU, K. M. PRABHU AND P. SURYANARAYANA MURTHY Department of Biochemistry, University of Medical Sciences, Shahdara, Delhi-110032.

Different solvent extracts of the banyan tree bark were tried by the conventional methods of lowering of fasting blood glucose (FBG) in diabetic rabbits with FBG levels above 250 mg/ dl called as severely diabetic rabbits. The results were inconsistent. However the same extracts were assessed for hypoglycemic effect by the prevention of elevation of blood glucose level in oral glucose tolerance test (GTT) in a new type of rabbits called alloxan recovered (AR) rabbits which displayed nearly normal FBG but impaired glucose tolerance. Some of these extracts showed consistent activity. One highly potent hypoglycemic principal was isolated from the acetone extract of the bark by acid chromatography and preparative thin layer chromatography. With a single dose of 15mg/kg there was considerable improvement in GTT pattern in AR rabbits and fall (33%) in FBG in severely diabetic rabbits (With FBG above 400 mg/dL). The mode of action of this compound seem to be both pancreatic (increasing release of glucose induced insulin) and extra pancreatic. This compound seems to be more potent than tolbutamide (300 mg/kg).