ABSTRACT

Pharmacological Effect of Ethanol Extract, Methanol Fraction, Methanol III Fraction, and Myricitrin of *Syzygium polyanthum* (Wight) Walp Leaves on Decreasing Blood Glucose Level in Streptozotocin-Induced Diabetic Mice

The aim of this study was to know the activity of ethanol extract, methanol fraction, methanol III fraction and myricitrin from *Syzygium polyanthum* (Wight) Walp leaves on the effect in decreasing blood glucose level in streptozotocin (STZ) diabetic mice. Thirty mice were divided into 6 group i.e ethanol extract, methanol fraction, methanol III fraction, myricitrin, positive control and negative control. Streptozotocin was given for 5 days of 56 mg/kg BW by i.p once daily. The ethanol extract, methanol fraction, methanol III fraction and myricitrin given orally in 6th day to 21st day after streptozotocin inducing. Ethanol extract, methanol extract, and methanol III fraction of 50 mg/kg BW once daily and 0.26 mg/20 g BW once daily for myricitrin. Decreasing glucose levels were calculated from the 7th day to 21st day. The data were analyzed by Anova Two Way and LSD tests. There were a significance differences (p = 0.003) between methanol III fraction and negative control. But, there was no significance difference between ethanol extract, methanol fraction, myricitrin and negative control. The result of this study showed that methanol III fraction of *Syzygium polyanthum* (Wight) Walp leaves decreased glucose level of streptozotocin diabetic mice at 50 mg/kg BW once daily, while ethanol extract, methanol fraction, and myricitrin did not decrease glucose level of streptozotocin diabetic mice mice.

Keyword : *Syzygium polyanthum*, mice, streptozotocin