

P-177**Antidiabetic Activity of *Azadirachta Excelsa* Extract on Alloxan Induced Diabetic Rats**

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Diabetes mellitus is affecting many in workforce, thus have a major impact on both individual and national productivity. Plants have always been an exemplary source of herbal drugs which have been investigated all over the world. *Azadirachta excelsa* or sentang traditionally used by Malay as an agent for lowering blood glucose. Thus, the study was designed to evaluate the antidiabetic properties of this plant by measuring the fasting blood glucose level, the percentage of HbA1c and the plasma insulin level. Thirty two *Sprague dawley* rats were divided into four groups which received different treatments. The first and second groups served as positive and negative control were treated with saline respectively while the rats in the third group were received metformin. The fourth group was treated with ethanolic extract of *Azadirachta excelsa* for 14 days. Administration of plant extract was significantly reduced the fasting blood glucose and the concentration of HbA1c in diabetic rats by 72.89% and 6.58% respectively. The plasma insulin in diabetic rats was also significantly increased after treated with plant extract. The present study showed that the ethanolic extract of *Azadirachta excelsa* possess antidiabetic activity by improving the insulin level and consequently improved the level of fasting blood glucose and HbA1c.
