

Antihyperglycemic Effect *Premna serratifolia L.* in Attenuating Postprandial Hyperglycemia in Healthy Subjects When Consumed Simultaneously with Glucose

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Abstract

It is claimed that the leaves of *Premna serratifolia L.* can control the high blood sugar of diabetic patients. The purpose of this study was to explore the antihyperglycemic effect of these leaves among healthy subjects. Glucose tolerance test was used on thirty healthy students selected by purposive sampling. The first experiment was done for the control and the second for the treatment. For each experiment, the subjects fasted for 8-10 hours in the evening prior to each experiment. For the control group, the subjects were first checked for fasting blood glucose, then given the standard 75 g of food grade D-glucose monohydrate. Blood glucose was checked at 30, 60, 90 and 120 minutes postprandial. The same protocol was done for the treatment experiment except that the glucose was consumed with gel of blenderized 100g *Premna serratifolia L.* leaves. Statistical analysis showed that blood glucose was not changed significantly at 30 min ($p = 0.585$), but was attenuated significantly at 60 min ($p = 0.017$), 90 min ($p = 0.001$), and 120 min ($p = 0.000$). It was concluded that gel of *Premna serratifolia L.* leaves can be used to attenuate postprandial hyperglycemia. It is recommended that the same study be done on diabetic patients.

Keywords: *green cincau, Premna serratifolia L., antihyperglycemia, postprandial blood glucose*