

THE NUMBERS OF PANCREATIC BETA CELL WHITE RATS (*Rattus norvegicus*) WITH DIABETES MELLITUS THAT TREATED BY INFUSION MANGOSTEEN PEEL (*Garcinia mangostana L*)

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ABSTRACT

The aim of this research was to investigate the number of pancreatic beta cell white rats (*Rattus norvegicus*) with diabetes mellitus that treated by mangosteen peel infusion (*Garcinia mangostana L*). Twenty seven white rats with 140-150 gram weight were divided in to nine groups. Treatment group including P1, P2, P3, P4, P5, and P6. K+ for positive control and K- for negative control. The group injected with 200 mg/Kg BB of aloxan by intraperitoneal and treated by mangosteen peel concentration 50%, 25%, 12,5%, 6,25%, 3,125%, and 1,5625%. After a week adaptation K+, PO, P1, P2, P3, P4, P5 and P6 group were injected by aloxan for five days and then treated with mangosteen peel infusion except K- . K+ treated by glibenclamide. All white rats were euthanazid by ether for data collection. The number of pancreatic beta cell white rats were analyzed with Anova and Duncan. This research showed there were significantly different ($p < 0,05$) between groups. It was proved that P6 showed the closest normal number of pancreatic beta cell white rats.

Keyword : hyperglycemia, mangosteen peel, antioxidants, oxidative stress.