

**The Effect of *Mamordica charantia* L. Powder on
The Status of Antioxidant Superoxide Dismutase
in Liver and Kidney of Diabetic Rats**

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ABSTRACT

The status of antioxidant superoxide dismutase (SOD) was reported decreased in the liver tissues of diabetic experimental Macaca fascicularis. The aim of the study was to observe the effect of pare (Mamordica charantia) on the status of SOD in the liver and kidney of diabetic experimental rats. The SOD was localized using immunohistochemical technique. A total of 20 male Wistar rats were used for this study. They were divided into four groups: (1) negative control group, (2) positive control group (diabetes mellitus group/DM); (3) and (4) groups were DM groups that treated with 5 and 10% pare powder. The DM condition was achieved by alloxan (110 mg/KgBB) induction. Treatment of pare was done for 28 days. The results showed that pare increased the status of antioxidant SOD in the liver and kidney of diabetic experimental rats. The 10% pare powder gave better results than that of 5%. The results suggested that pare powder can be used to increase the status of antioxidant in the oxidative stress condition, such as diabetes mellitus.

Key words : superoxide dismutase, *Mamordica charantia*, diabetes mellitus, liver, kidney, immunohistochemistry