UNIVERSITI TEKNOLOGI MARA

IDENTIFICATION OF PHYTOCHEMICAL CONSTITUENTS FROM ROOTS OF *PRISMATOMERIS GLABRA*

NORHAMIZAH BINTI ISMAIL

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In the name of Allah, the Most Gracious, the Most Merciful...

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ABSTRACT

Aqueous extract *Prismatomeris glabra* root has been used long time ago in Malaysia because of its advantages. People in Malaysia believe that this plant has ergogenic effect, to maintain wellness and to enhance physical stamina. It has also been used as an aphrodisiac in some population people in Malaysia. Besides that, not much study has been carried out previously in Malaysia for this plant. This plant was selected for this study because of its advantage and its used as traditional folk remedy. Thus, this study is conducted to investigate the chemical constituents from this plan. In order to achieve the objectives, several steps were carried out. First, an appropriate solvent system was selected and used for High Performance Liquid Chromatography technique (HPLC). HPLC was performed on reverse phase chromatography. Detection of compound using HPLC was carried out at 240 nm to visualize the chemical compounds. The compounds of interest were then isolated and purified using an appropriate solvent system consisting of methanol, Acetonitrile and Distilled water. The pure compound(s) obtained undergo several analytical methods to identify the structure. The method used was spectroscopic technique using Nuclear Magnetic Resonance (NMR) through 1H-NMR analysis. 1H-NMR spectrum was run on Bruker Spectrometers at 500 MHz. The structural elucidations were based on the analysis of physical and spectroscopic data but due to insufficient amount of sample obtained, the NMR results were not good. Thus, further studies should be done to elucidate the compounds of this plant.