PHYTOCHEMICAL INVESTIGATION OF ANTIOXIDATIVE COMPONENTS FROM THE MURRAYA LEAVES

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Final Year Project Report Submitted in Partial Fulfillment of the Requirements for the Degree of Bachelor Science (Hons.) Chemistry in the Faculty of Applied Sciences Universiti Teknologi MARA

JANUARY 2017

ABSTRACT

PHYTOCHEMICALS INVESTIGATION OF ANTIOXIDATIVE COMPONENTS FROM THE MURRAYA LEAVES

Murraya koenigii is a plant that contains antioxidant which can acts as beneficial to human. Study about the antioxidative compound in Murraya was done. Crude of the extract was examined to identify the antioxidative compound by qualitative Oualitative result was done by using Thin Laver quantitative. and Chromatography (TLC) analyzed by spraying reagent. Quantitative result was tested by using various concentrations which are 3.125, 6.25, 12.5, 25, 50 and 100 µg / mL and it was analyzed by UV spectrophotometer. The strongest scavenging activity was petroleum ether while the lowest scavenging activity was dichloromethane. Secondary metabolites of Murrava that have been detected were terpenoid which correlated with the presence of antioxidant at Rf value 0.561, 0.622 and 0.917. Secondary metabolites that exhibit positive result of phytochemicals are tannins, alkaloids, flavonoid and terpenoids. Structures that had been obtained from dichloromethane extract were from different Rf. The structures were nonanoic acid, 9 - oxo -, methyl ester, estra - 1, 3, 5 (10) - trien - 17β - ol and oleic acid from R_f 0.561. R_f 0.622 showed structures Hexadecanoic acid, 1 - (hydroxymethyl) - 1, 2 - ethanediyl ester and 1 - phenanthrenecarboxylic acid 1, 2, 3, 4a, 5, 6, 7, 8, 9, 10, 10a - dodecahydro - 1, 4a - dimethyl - 7 - (1 methylethyl) -, methyl ester, $[1R - (1\alpha, 4\alpha\beta, 7\beta, 10\alpha\alpha)]$ -. The structure obtained from R_f 0.917 were butylaldehyde, 4 - benzyloxy - 4 - [2, 2, - dimethyl - 4 dioxolanyl and 2 - piperidione, N - [4 - bromo - n - butyl].

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