ANTHRAQUINONE FROM THE ROOT OF MORINDA CITRIFOLIA L.

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ABSTRACT

ANTHRAQUINONE FROM THE ROOT OF MORINDA CITRIFOLIA L.

The experiment was performed on Morinda citrifolia L. root bark, which belongs to the Rubiaceae family originate throughout the humid district. This species have its own medical benefits. Several goals were set for these experiments which are to isolate the chemical constituents from the root of Morinda citrifolia L. and to elucidate the structure of chemical constituents by using spectroscopic analysis. In conjunction to get the pure compounds, a series of column chromatography have been performed by using isocratic mode of elution. Throughout the process of isolation, several percentage of hexane and dichloromethane have been adjusted to promise the purity of the chemical constituents. At the end of the process, the chemical constituents that have successfully identified and isolated are nordamnacanthal, damnacanthal and 1,6-dihydoxy-5-methoxy-2-methyl anthraquinone. To get these compounds the mobile phase that has been used are 85:15, 65:35 and 60:40 of hexane and dichloromethane for nordamnacanthal, damnacanthal and 1,6-dihydoxy-5-methoxy-2-methylanthraquinone respectively. These chemical constituents were recognised by analysed their structures by using 1D NMR, MS technique and evaluation with past studies.