

**Phytochemical Study of the Flavonoids
of
*Zizyphus spina christi***

A Thesis Submitted to the Sudan University
of Science and Technology for
M. Sc. Degree in Chemistry

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DEDICATION

To the soul of my mother

To my father

To my sister and brothers

To all friends who helped me

Kawther

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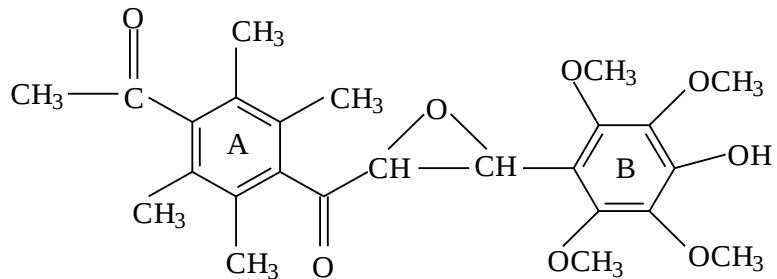
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ABSTRACT

Phytocmemical screening of the alcoholic extract of the leaves of *Zizyphus spina christi* indicated the presence of flavonoids and tannins. The flavonoids of *Zizyphus spina christi* were investigated and the crude product obtained from the alcoholic extract was subjected to thin-layer chromatography, which indicated the presence of a single flavonoid-flavonoid I, which was isolated in the pure state. The behaviour of flavonoid

I under UV light, and its colour reactions indicated that it is an epoxychalcone.

The epoxychalcone was subjected to spectral studies and the following structure was proposed on the basis of its UV, IR, ^1H NMR and mass spectra.



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لقد أوضحت الاختبارات التي أجريت على المستخلص الكحولي لاوراق نبات السدر وجود الفلافونيدات والتنينات. وقد درست فلافونيدات نبات السدر، حيث اذضاع الناتج الخام للمستخلص الكحولي للفصل الكرومومتوغرافي حيث اتضحت وجود فلافونيد واحد فلافونيد 1 وقد تم فصله بصورة ذقىه.

وقد اتضحت من التفاعلات اللونيه للفلافونيد 1 وسلوكه تحت الضوء فوق البنفسجي انه عباره عن ابوكسى جالكون.

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