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Spectroscopic studies of flavonoids from *ponica granatum*

دراسة طيفية للفلافونويدات في نبات الرمان

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Dedication

To the soul of our fathers...

The source of love and warmth...

To our mothers, the source of care love and sentiments...

To our dearest brothers and sisters with love and respect...

We dedicate this modest work...

Acknowledgments

Praise be to Allah help us to complete this research. Also we wish to extant our sincere gratitude to Sudan university of science and technology and appreciation to my supervisor. Teacher Amin Eldin Issa.

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Abstract

Phytochemical screening of the alcoholic extract of the peels of *Punica granatum* indicated the presence of flavonoids, glycosides and absence of alkaloids and steroids. The flavonoids of *Punica granatum* were investigated due to their medicinal value and relative abundance in this plant species.

The crude product obtained from alcoholic extract was fractionated by thin layer chromatography. Where one flavonoid was obtained in the pure state.

The behavior of this isolated under the UV light as well as its colour reaction indicated that it is isoflavones.

The isoflavones was subjected to spectral studies namely IR and UV studies which confirmed that this phytochemical is isoflavones as indicated by colour reaction and behavior under UV light.

الخلاصة

اجريت اختبارات فيتوكيميائية للمستخلص الكحولي لقشور نبات الرمان حيث اتضح انه يحتوي على فلافونويدات وجلايكوسيدات وعدم احتواءه على قلويدات واسترويدات.

بدأت دراسة تفصيلية للفلافونويدات يحتويها النبات لوفرتها ولاهيتها الطبية. حيث استخلصت من القشور بالكحول ثم استخدمت كروماتوغرافيا الطبقة الرقيقة لفصل الفلافونويدات الموجودة في النبات. وتم فصل مركب واحد من الفلافونويدات في الصورة النقية وأوضح طيف الاشعة فوق البنفسجية والاختبارات اللونية انه ايزو فلافون.

اجريت دراسة طيفية – طيف الاشعة فوق البنفسجية وطيف الاشعة تحت الحمراء لهذا المركب وكدت هذه الاطياف ان المركب عبارة عن ايزو فلافون وهذا تأكيداً لما بينته الاختبارات اللونية والسلوك تحت الاشعة فوق البنفسجية.