

الجمهورية الجزائرية الديمقراطية الشعبية وزارة التعليم العالي والبحث العلمي جامعة قاصدي مرباح ورقلة كلية علوم المادة قسم الكيمياء



Phytochemical study of desert plant

P-ID 34

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ABSTRACT:

الملخص:

The present study indicates that the studied plant contains a group of compounds through the preliminary detection of chemical compounds (in the table below).

we hope to separate some of these compounds in the coming days.

Keywords: preliminary detection, separate.

أشارت الدراسة الحالية إلى أن النبتة المدروسة تحتوي على مجموعة من المركبات من خلال عمل الكشف الأولي للمركبات الكيميائية (في الجدول أدناه). ونحن نطمح إلى فصل بعض هذه المركبات.

الكلمات المفتاحية: الكشف الأولي, الفصل.

General introduction:

The World Health Organization estimates that plant extracts or their active ingredients are used in traditional medicine by more than 80% of the world's population Over 50% of all modern clinical drugs are products of natural origin and natural products play an important role in drug development programs in the pharmaceutical industry. Many researchers around the world have studied the effects of herbal extracts in microorganisms [1].

Flavonoid:

Introduction:

Flavonoids are a group of plant secondary metabolites characterized by a diphenylpropane structure. [2] In 1930 a new substance was isolated from oranges. At that time it was believed to be a member of a new class of vitamins and was designated as vitamin P. Later on it became clear that this substance was a flavonoid (rutin) and till now more than 4000 varieties of flavonoids have been identified[3] To date, about 6000 flavonoid compounds have been isolated and identified, and many are common in higher plants [4]

Definition:

Flavonoids contain C15 atoms in their basic nucleus and C15 atoms composed of two aromatic rings linked through a heterocyclic pyrane ring. All flavonoids share the basic C6-C3-C6 Structural skeleton[5_4] consisting of two aromatic C6 rings (A and B) and a heterocyclic ring (C) that contains one oxygen atom. They can be subdivided into six subclasses[5_3]

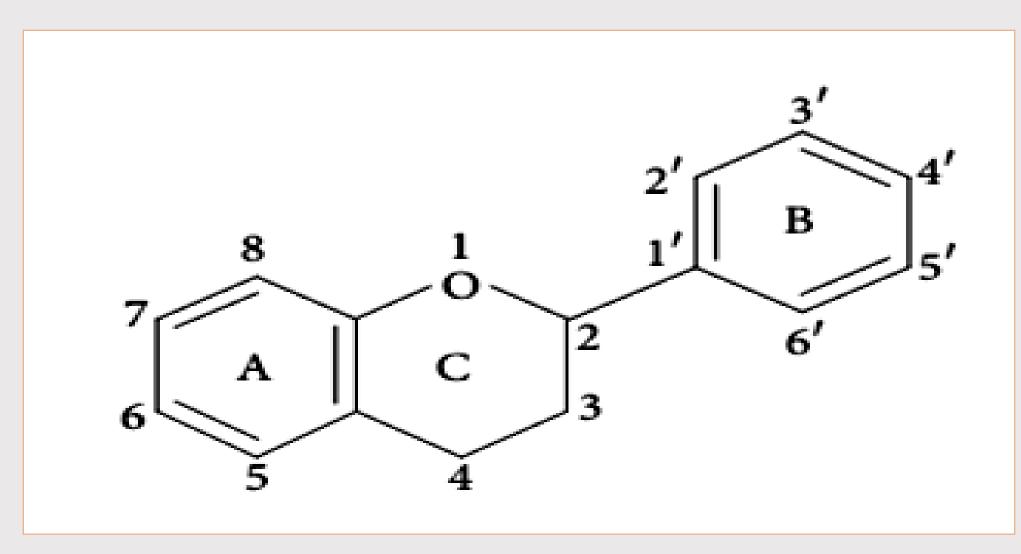


Figure 1: Basic flavonoid structure[5]

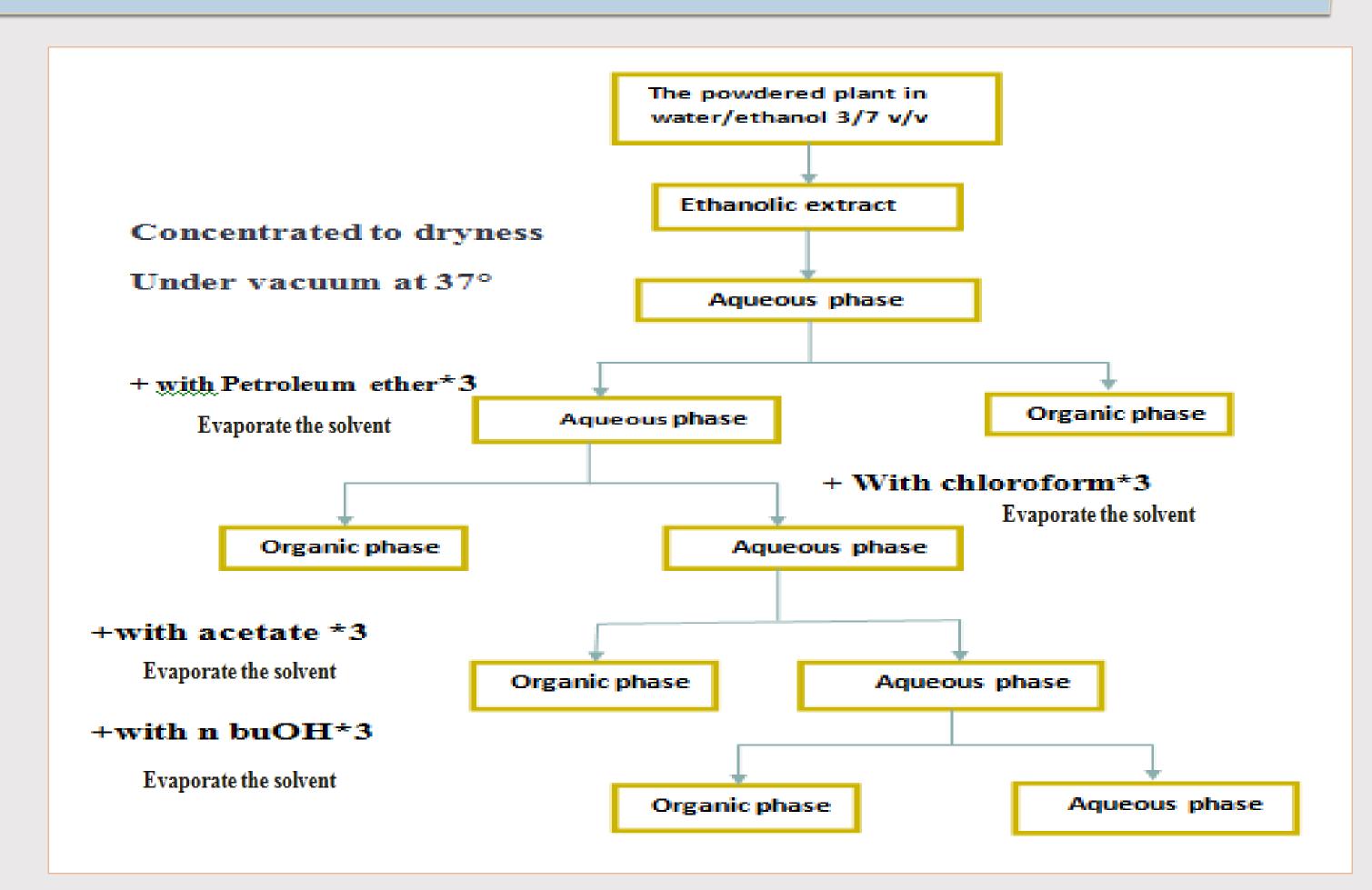


Figure 2: Extraction of flavonoid

The summary of the preliminary tests of the chemical families:

We used 1ml or 2ml of ethanolic extract

Table 1: the preliminary detection of chemical compounds

THE FAMILY	METHODS OF DETECTION	Results
PHENOLS	Add drops of FeCl ₃ with a concentration (5%)	+++
Flavonoïds	chip of Mg + drops of HCl	++
Saponins	Add water and Strongly stirring	+++
Terpèns	Add 2 ml CHCl ₃ + drops of H ₂ SO ₄	+++
STEROIDS	Add 2 ml	++
TANINS	Add 2 ml HCl (concentrated) 1%	+
CARBOHYDRA	A Add drops of reagent Fehling (A+B) with heating	++
TE		
ALKALOIDS	Add 1 ml of Dragedrouf Wagner reagent	++
COMARINS	Add 3 ml NaOH (10%)	++
PROTEINS	Add 5 drops NaOH (10%) + 5 drops CUSO ₄ (1%)	

THE FIFTH DAY OF THE MASTERS

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