MainPage
About College
Files
Researches
Courses
Favorite Links
Our Contacts

Research Details :

Research Title : *Chemotaxonomical and palynological study of senna senna l. (fabaceae) growing in the valleys and the mountains of makkah al-mukarramah*

دراسة التصنيف الكيميائي وحبوب اللقاح لنبات السنا سنا (الفصيلة القرنية) النامي في وديان وعلى جبال مكة المكرمة

Descriptipn : In the present study, the role of the phenolic compounds and the pollen grains as differential diagnosis of Senna senna plants grow in the valleys and on the mountains of Makkah Al-Mukarramah was demonstrated. Since Senna is a member of the anthracene group of purgatives, its active principles being derivatives of anthraquinone, the present work aimed to investigating its phenolic compounds that have medicinal significance. Flavonoids were classified according to their chemical structure to three groups: O-Flavonols included Quercetin, Rutin (Quercetin-3-rutinoside), Isoquercitrin (Quercetin-3-glucoside), Quercetrin (Quercetin-3-rhamnoside) and Kaempfherol. O-Flavones were represented by Apigenin. It was accompanied by its C-Flavone, Vitexin. Both hydrolysable and condensed tannins were detected. Three phenolic acids were detected. 2,3-dihydroxybenzoic acid, Protocatechuic acid (3,4-dihydroxybenzoic acid) and Gentisic acid (2,5-dihydroxybenzoic acid). Phloroglucinol, (-)-Epicatechin and (+)-Catechin; the precursor of condensed tannins and the flavan desivative were also detected. Generally the pollen grains of the studied taxa of the genus Senna growing in the vallyes and on the mountains of Makkah Al-Mukarramah are radically symmetrical, isopolar, tricolporate and triangular trilobed with fossulate sculpture. The chemotaxonomical and palynological studies of the studied taxa of the genus Senna are not inagreement except for the flowers. Therefore further details of the flavonoid constituents and their distribution especially of those which are less wide spread, are to be studied because as understanding of their chemical properties will be helpful in the interpretation of their chemotaxonomical properties of Senna senna plants.

Research Type : Master

Research Year : 2007

Publisher : King Abdulaziz University

Supervisor : أ.د.عائشة محمد علي خوجلي ، د.فرج عبدالله آل خير الله الغامدي

Added Date : Tuesday, June 10, 2008

Researchers :