عنوان مقاله:

Chemical profile of the essential oil from Chaerophyllum Khorossanicum czerniak. ex schischk of Iran

محل انتشار:

نشریه آسیایی شیمی سبز, دوره 6, شماره 3 (سال: 1401)

تعداد صفحات اصل مقاله: 9

نویسندگان:

Majid Halimi Khalilabad - Department of Chemistry, Kosar University of Bojnord, Bojnord, Iran

Ali Firoznia - Department of Chemistry, Islamic Azad University, Bojnord, Iran

Masomeh Taghavi - Department of Chemistry, Islamic Azad University, Bojnord, Iran

Mohabat Nadaf - Department of Biology, Payame Noor University, P.O. BOX ۱۹۳۹۵-۴۶۹۷ Tehran, Iran

خلاصه مقاله:

The aim of this study is to determine the chemical composition of essential oils of Chaerophyllum khorassanicum belonging to the Apiaceae family for the first time. Identification of essential oils is necessary, for food, cosmetics- health industry, and medicinal uses. The plant was collected at the flowering stage of Khorassan Razavi Province in Iran, Farizi Village. The shoot parts of the specimen were dried in the laboratory and crushed to particles. The essential oils were obtained by hydro-distillation using Clevenger and analyzed by GC-MS. Fifty-one components were identified in Chaerophyllum khorassanicum essential oils which accounted for ۹۷.۲% of the essence. The major chemical category of the volatile compounds were the monoterpene hydrocarbons (۶۵.۵%), followed by oxygenated monoterpenes (۲۴.۵%). In particular, the main components were limonene ۳۲.۱%, methyl eugenol ۱۶.۲%, and β-Ocimene ۱۵.۶%. In conclusion, monoterpene hydrocarbons are characteristic and represent excellent chemotaxonomical markers for Chaerophyllum khorassanicum.

کلمات کلیدی:

Chaerophyllum khorossanicum Czerniak. ex Schischk Essential Oil Limonene Methyl Eugeno β, Ocimene