

عنوان مقاله:

DETERMINATION OF CHEMOTAXONOMIC INDICES OF ARTEMISIA SIEBERI BESSER BASED ON ENVIRONMENTAL PARAMETERS IN IRAN

محل انتشار:

مجله گیاه شناسی ایران، دوره 18، شماره 1 (سال: 1394)

تعداد صفحات اصل مقاله: 9

نویسندگان:

Mina Rabie - Assistant Professor/Natural Resources and Environmental Engineering Department, Payame Noor University, ۱۹۳۹۵-۴۶۹۷ Tehran, I. R. of Iran

Younes Asri - Associate Professor/Research Institute of Forests and Rangelands, P. O. Box ۱۳۱۸۵-۱۱۶ Tehran

Behnam Hamzehee - Membership of scientific board/Research Institute of Forests and Rangelands, P. O. Box ۱۳۱۸۵-۱۱۶ Tehran

Adel Jalili - Professor/ Research Institute of Forests and Rangelands, P. O. Box ۱۳۱۸۵-۱۱۶ Tehran

Fatemeh Sefidkon - Professor/Research Institute of Forests and Rangelands, P. O. Box ۱۳۱۸۵-۱۱۶ Tehran

خلاصه مقاله:

Artemisia sieberi Besser is the most common species in Iran. In this research, yield and chemical composition of the essential oil of A. sieberi are studied from ۳۴ populations in Semi-arid, Arid and Hyper-arid climate conditions. Also, plant seeds were collected from nature and planted in homogeneity condition of farm. The essential oils of harvested plants (including natural and farms plants) were isolated. The components of oils were identified by GC and GC-MS. T-student test showed significant difference between average of oil yields in both natural and farm plants. Correlation between yields of essential oil in natural habitats with ecological factors showed that days of precipitation, nitrogen, carbon and phosphor of soil were the most effective parameters in quantity of yields. Among chemical components, camphene, ۱, ۸-cineole, trans-thujone, camphor, borneol didn't have significant difference between natural and farm plants. The results showed that chemical components of essential oil in A. sieberi can be valuable for recognizing of the species as chemotaxonomic indices. Also PCA analysis revealed that camphor, cis-thujone and trans-thujone are principal chemical components for separating of A. sieberi climatic groups.

کلمات کلیدی:

Artemisia sieberi, Chemotaxonomy, Environmental parameters, essential oil, PCA, T-student, Iran

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1856345>



