

عنوان مقاله:

Study of quality, quantity and antioxidant activity of essential oils of two medicinal species of *Artemisia kopetdaghensis* Krasch. and *A. sieberi* Besser

محل انتشار:

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خلاصه مقاله:

Recognition of medicinal plants and their biochemical compounds provides fundamental steps for the optimal use of medicinal combinations and their properties. In this study, the antioxidant activity, quantitative and qualitative of essential oil of *Artemisia kopetdaghensis* and *A. sieberi* Besser in Razo Jarglan rangelands located in North Khorasan province were investigated. The antioxidant capacity was evaluated by DPPH free radicals scavenging assays and the compounds present in the essential oil were studied by Gas Chromatography (GC) and Gas Chromatography/Mass Spectrometry (GC/MS). The results showed that ۳۴ compounds were identified in the essential oils of *Artemisia* species including Camphor with ۱۵.۸۳%, Pinocarveol with ۱۱.۳۷% and Borneol with ۱۱.۳۲% in *A. kopetdaghensis* and Davanone with ۱۸.۰۱%, ۱,۸-Cineol with ۷.۸۵% and Linalool with ۵.۴۳% in *A. sieberi* were the main essential oil compounds in these plants respectively. Essential oil yield percentage was ۰.۹۲% in *A. kopetdaghensis* and ۰.۱۱% in *A. sieberi*. Oxygenated monoterpenes were the most abundant compounds of extracted essential oil which accounted for ۷۱.۴۸% in *A. kopetdaghensis* and ۴۰.۵۹% in *A. sieberi*. Regarding the antioxidant properties, *A. kopetdaghensis* with ۸۳ µg/ml showed more antioxidant capacity than *A. sieberi* in DPPH free radicals scavenging assays. It seemed that *A. kopetdaghensis* had a higher medicinal value due to its essential oil yield and higher antioxidant capacity.

کلمات کلیدی:

Antioxidant potential, *Artemisia*, Free radical, Razo Jarglan, Essential oil
پتانسیل آنتی اکسیدانی، درمنه، رادیکال آزاد، رازو جرگلان، محتوای اسانس

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