عنوان مقاله:

Chemical composition and antioxidant activities of the essential oil and methanol extract of Hymenocrater longiflorus Benth., of Iran

محل انتشار:

دومین کنفرانس بین المللی توسعه پایدار، راهکارها و چالش ها با محوریت کشاورزی ، منابع طبیعی، محیط زیست و گردشگری (سال: 1394)

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خلاصه مقاله:

Hymenocrater is an important genus of Lamiaceae family. Hymenocrater longiflorus Benth is one of species in this genus and this plant is endemic to Iran and it is growingwildly in the west of Iran. In this study, Chemical composition and antioxidant activities of the essential oil and methanol extracts of Hymenocrater longiflorus Benth wereevaluated with 2,2 ′ -diphenyl-1-picrylhydrazyl (DPPH) radical scavenging tests. The Yield of essential oil and methanolic extract were 0.5%v/w and 12%w/w to dried herb. About 34 compounds of the oil were determined. GC/MS analyses revealed that themajor compounds of the oil were Hedycaryol (21.85%), α-Cadinol (19.98%), Germacrene D (5.53%), α-Terpineol (4.96%), Eudesmol<7-Epi-> (4.95%), β-Bourbonene (4.25%),Caryophyllene oxide (4.15%), Geijerene (4.01%), Caryophyllene (2.92%), Sabinene(2.51%), 1,8-Cineole (2.46%), δ-Amorphene (2.42%), δ-Cadinene (2.18%) and α-Pinene (2.08%). All essential oil and extracts had inhibitory activity on DPPH radicals with concentration-dependent manner. Antioxidant activity of all essential oil and extracts were lower than the butylated hydroxytoluene (BHT). The results indicated the aerial parts of this plant are a potential source of natural antioxidants.

کلمات کلیدی:

Essential oil, Antioxidant, Hymenocrater longiflorus Benth

لینک ثابت مقاله در پایگاه سیویلیکا: