## عنوان مقاله:

Comparative Study on Essential Oils of Lavandula officinalis L. from Three Different Sites with Different Methods of Distillation

## محل انتشار:

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## خلاصه مقاله:

Lavandula angustifolia Mill. syn. Lavandula officinalis Chaix was commonly known as lavender is a species of the genus Lavandula from Lamiaceae family is among the top ۱۰ pharmaceutical plant. Lavender species are grown worldwide primarily for their essential oils, which are used in the food processing, aromatherapy products, cosmetics and perfumes. The purpose of this study was to investigate the essential oils composition of lavender (Lavandula officinalis L.) cultivated in ۳ provinces, Esfehan, Tehran, and Alburzprovincein Iran. This research examines it has been done on effects of different methods of distillation and habitat conditions on quantity and quality of oil of Lavandula officinalis flowering top plants cultivated in three regions were collected and after drying at room temperature in shadow. Esstential oils were extracted with three methods of distillation (water, steam and water and steam). Thirty compounds were identified in the essential oils, respectively. Components of essential oils from the Lavandula officinalis L. were determined using gas chromatography (GC) and Gas Chromatography- Mass Spectrometry (GC-MS). The important components in the Kashan area from Isfahan provincewere۱,۳,۸-p-menthatriene (۳۷.۷ upto ۳۹.۸%), γ- terpinene (۱۷.۱ upto ۱۹%), Linalyl formate (۱۳.۱ upto ۱۵.۰۸%), oil yield were ۸.۵۴ upto ۱۰.۰۳%, respectively. The important components in the Alburzprovince were ,۳,۸-p-menthatriene (۳۱.۷ upto ۳۴.۲%), γ- terpinene (۲۴.۲ upto ۲۶.۴%), Linalyl formate (۱۱.۸ upto ۱۴%), oil yield were ۵.۵ upto ۶.۱۲%, respectively. The important components in the Tehran province were ۱,۳,۸-p- menthatriene (۳۲.۵ upto ۳۴.۱%), γ- terpinene (۲۵ upto ۲۹.۸%), Linalyl formate (۷.۸ upto ۹%), oil yield were ۱۰.۲۶ upto ۱۲.۱۳%, espectively.

## کلمات کلیدی:

Lavandula officinalis, essential oil, Cultivated, Distillation, Gas chromatography