

Abstract

Medicinal plants from far away has a special place in the treatment of patient and provision of drugs - undoubtedly can be stated when the man knows the patient he was familiar with the medicinal plants. The Aromatic Plants are partial of Medicinal Plants that because of aromatic compounds are distinct of other species. The Considering of the economic and therapeutic importance of medicinal and industrial plants and develop attitudes of treatment plants in the world and knowledge composition, and determination of the qualitative and quantitative composition of the essential oil influenced by various environmental factors is of utmost importance. *Salvia hydrangea* is the genus of the *Salvia* and belongs to the *Lamiaceae* which grows like dense piles in the heights of 2000-1100 meters above sea level. Aerial part of the plant extract has anti-inflammatory and antispasmodic and carminative and sedative effects and diabetic patients of flowers traditionally be used to treat colds. The purpose of this study is to analyze and identify substances in the essential oil of this plant in habitat Hezarjarib behshahr and Kiasar and effect of environmental factors on the quality and quantity of oil. The essential oil of the aerial parts of the flowering stage took water distillation and identification of compounds in the essential oil was performed by GC and GC/MS. The data analyzed by SPSS and treatment means compared by Duncan test and the correlation between oil yields and soil to essential oil of plant *Salvia hydrangea* was calculated by Pearson's correlation coefficient. The results of this study showed that the oil yields, total number and percentage composition of essential oil of the *Salvia hydrangea* is various in different habitat and different places. So that the utmost amount of yields oil was in the height level 2000 of Hezarjarib behshahr. too The correlation between yield and soil chemical components of essential oil composition in different places and habitat was various. According to these results and compare major oil composition were observed that different in the components of the essential oil of *Salvia hydrangea* can be influenced by edaphic and topographic factors.

Keywords: Medical Plant, Essential Oil, *Salvia hydrangea* L., Altitude, Kiasar, Hezarjarib Behshahr.



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