Seasonal Changes of Myrtle Essential Oil Composition

R. Mirzaee^a, Sh. Najafian^{b*} and V. Rowshan¹

There are many medicinal plants that could be found in fields, hill sides, and specific natural habitats. *Myrtus communis* is one of the most valuable medicinal plants that widely extended in Iran. In this research, we studied the changes in the essential oil yield and chemical composition of Myrtle during 2013 to 2014 seasons. Samples of plants were collected from the Mian Jangal Fasa area. Essential oils were obtained by hydro distillation and were analyzed by GC and GC/MS. The highest and the lowest essential oil yields were found in autumn (1.28%) and winter (0.41%), respectively. Major compounds were 1,8-cineol (22.9% in summer), -Pinene (25.5% in spring), Limonene (26.8% in winter) and Linalool (18.5% in summer).

Keywords: Seasonal variation, *Myrtus communis* L, -Pinene, Linalool, Limonene, 1,8-cineol.

^{1.} M.Sc. student, Department of Agricultural Management, College of Agriculture, Shiraz Branch, Islamic Azad University, Associate Professor of Agriculture, Department of Agriculture, Payame Noor University, Tehran and Assistant Professor of Agriculture, Department of Natural Resources, Fars Agriculture and Natural Resources, Research and Education Center, AREEO, Shiraz, Iran, respectively.

^{*}Corresponding Author, E-mail: (sh.najafian@pnu.ac.ir).