

4th National Congress on Medicinal Plants 12, 13 May 2015 Tehran-Iran



FATTY ACIDS PROFILE OF LALLEMANTIACANESCENSNUTLETS

Kamrani, Anghar, 1," Taghigadeh, Massoudi

¹Biology Department, Shahed University, Tehran, Iran E-mail: kamrani ashahed ac.ir

Lallemantia canescens (L.) Fisch & C.A.Mey, genus comprises herbaceous perennial belongs to the Nepetoideae subfamily of the family Lamiaceae [1]. The family has been charactrized by occurrence of Linolenic, Linoleic and Oleic in the whole plant [2]. For the first time the oil content and fatty acid composition of the nutlets of Leanescens (Lamiaceae) at two localities (East Azarbaijan and Qazvin Provinces) was examined by GC and GC/MS. The major fatty acids were Linolenic (58.3%) and Linoleic (18.9%). The total SFA (saturated fatty acid) composition of studied species is between 5.5-6.1%, while the UFA (unsaturated fatty acid) composition is between 93.6-94.5%. Plants with a high ratio UFA/SFA is desirable for human nutrition [3] and this is characteristics of nutlet oils of the Lamiaceae [2]. In this study, this ratio was found to be between 15.3-17.2%. According the our result, it is clear that the composition of L. canescens nutlet fatty acids from two localities is similar. Therefore, the conservation nature of the nutlet fatty acids profile can be used as chemotaxonomic markers.

References

- Jamzad, Z. Lamiaceae-In Flora of Iran, Research Institute of Forests and Rangelands, Tehran, 2012; Vol.76. pp. 1072.
- [2] Azcan, N.; Ertan, A.; Demiric, B.; Baser, K. H. C. Chem. Nat. Comp., 2004, 40, 218-221
- [3] Guil-Guerrero, J. L., Rodrigues-Garcia, I. Eur. Food. Rev. Technol., 1999, 209, 313-316.