



503

**COMPARATIVE ECOLOGICAL STUDIES OF FOUR LALLEMANTIA
(LAMIACEAE) SPECIES GROWING WILD IN IRAN**

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Lallemantia Fisch & C.A.Mey. is a small genus belonging to Lamiaceae family. The genus *Lallemantia* is distributed in Afghanistan, Iraq, Turkey, Caucasia, Afghanistan, Pakistan and Europe. All species (*L. royleana*, *L. iberica*, *L. poltata* and *L. canescens*) grow naturally in Iran [1]. The only *L. canescens* is perennial. Several species (*L. royleana* and *L. iberica*) are used in folk medicine as antiseptics, astringents and spasmolytics [2]. Detail information on ecological properties of *Lallemantia* species has not been studied. Ecological investigation included altitudinal and soil properties (texture and pH) analysis of habitat. The results obtained from ecological studies are showing that *L. canescens* has been determined to grow in higher altitude (2400- 3000) on sand soil with pH 6.9-7.1 and EC with 300-500 μ s. *L. poltata* is characterized by loamy sand habitat with 7.0-7.2 and EC 450-500 μ s in lower altitude than the *L. canescens* (Average 2400). *L. iberica* and *L. royleana* are growing on loam-sandy loam with more alkaline (7.7-7.8) and saline (700-900 μ s) than the others. Finally, PCA analysis show that EC, Sand and Clay as First component and Altitude as Second components are main ecological factors that are responsible to *Lallemantia* habitat differentiation.

References

- [1] Jamzad, Z. *Lamiaceae-In Flora of Iran*, Research Institute of Forests and Rangelands, Tehran, 2012; Vol.76, pp. 1072.
- [2] Samadi, S.; Masoud Khayamiand, M.; Hasanzadeh Goorut Tappe, A. *Pakistan Journal of Nutrition, Asian Network for Scientific Information*. 2007, 6 (4), 387-390.