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DETERMINATION OF ENVIRONMENTAL FACTORS AND INDICATOR SPECIES AFFECTING THE DISTRIBUTION OF *Origanum onites* L.: A CASE STUDY FROM THE LAKES DISTRICT, TURKEY

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Abstract

Factors influencing the distribution of *Origanum onites* L., (locally known as Turkish oregano) were analyzed on the Lakes District of Turkey, using Two-tailed Wilcoxon's runk sum statistics and Pearson chi-square χ^2 test contained in the SPSS 17.0 package. An inter-specific correlation analysis (ICA) was also applied to determine indicator plant species of *O. onites.* Analyses performed on environmental factors showed that there is a relatively high correlation between the occurance of Turkish oregano and soil texture. Besides, our results showed that species richness plays a key role in plant distribution. According to ICA, *Allium myrianthum* Boiss*., Astragalus prusianus* Boiss., *Centaurea cariensis* Boiss. subsp. *maculiceps* (O.Schwarz) Wagenitz*, Chondrilla juncea* L. var. *juncea* L.*, Leontodon asperima* (Willo) J. Ball and *Putoria calabrica* (L.fil) DC., were found as the most positive indicator plant species, and *Fontanesia philliraeodies* Labill subsp. *philliraeodies, Juniperus communis* L. var. *nana* Syme., were found as the most negative indicator plant species for the distribution of Turkish oregano.

Key words: indicator species, Lakes District, plant distribution, soil texture, Turkish oregano

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