

**P-51 (146)****MULTIVARIATE ANALYSIS OF FICUS RELIGIOSA GENOTYPES IN IRAN USING MORPHOLOGICAL VARIABLES**

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*Ficus religiosa* L. is one of the most popular species in Moraceae family that known as a multipurpose forest tree due to its medicinal, ornamental, and religious value. *Ficus religiosa* as an important tree in South Asia, and it possesses various common name such as Peepal, Bodhi, Bo tree, and Asvattha. Furthermore, this species as a traditional tree is broadly planted as a roadside tree, and it plays an important role as a medicinal tree in various diseases such as asthma, stomatitis, diabetes, inflammations, glandular swelling disorders, and wound healing. Since *Ficus religiosa* is characterized as a subtropical tree, it fully grew in southern parts of Iran. The morphological variation of 72 individuals of *Ficus religiosa* from six southern parts of Iran was investigated based on multivariate analysis. Our results indicated that the highest tree, leaves, and petiole length, as well as leaves width, were observed in Kish and Qeshm genotypes and also Chabahar genotype had the lowest petiole length. Results of simple correlation analysis showed the existence of significant positive and negative correlations among some important parameters. The highest correlation was observed between leaves, tree, and petiole length. Populations were clustered in 4 groups. The Kish and Qeshm genotypes were closely related with each other and differentiated from Chabahar genotype. The whole dataset was subjected to Principle Compound Analysis (PCA). PCA showed that the first two factor components explained 84.51% of the variation and the first-factor component had the positive relationship with leaves, tree, and petiole length.

**Keywords:** *Ficus religiosa*; Quantitative character; Genetic resources; Correlation coefficients; Principle compound analysis; Cluster