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EVALUATION OF JUJUBE (ZIZIPHUSJUJUBAMILL.) ECOTYPES BASED ON MORPHOLOGICAL AND PHYSICOCHEMICAL CHARACTERISTICS IN SOUTHERN KHORASAN PROVINCE OF IRAN

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Jujube (Ziziphus jujuba Mill.) fruit is one of the important medicinal plant in Iran. It is one of the world's most nutritious plants rich in vitamin C, minerals and amino acids (Li etal., 2007; Boora and Bal., 2008) and contains various types of bio-active substances such astriterpenic acid, volatileoil, glycosides, saponins and flavonoids that have wide pharmacological effects on humans (Al Zhao et al., 2008). In this study 13 different ecotypes of Ziziphusjujuba Mill. were collected from different regions of southern khorasan province of Iran and their morphological (stem annual growth, thorn length, leaf length, leaf width petiole length, fruit length, fruit width, fruit weight, stone length, stone width, flesh/stone ratio) and physicochemical characteristics (humidity percent, vitamin C content, pH and total soluble solid (TSS) were evaluated between years 2008-2011. The results of this study showed significantly differences between ecotypes from different regions. Different evaluated traits of Z23and Z19 ecotypes were significantly different from the other ecotypes; this result was corroborated by cluster analysis. The ecotypes were separated according to their geographic origin. So it can be concluded that the climate effects is very important for existence of qualitative and quantitative characteristics of jujube.