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The Survay of Some Morphological Characteristics of *Matricaria recutita* L.(Isfahan Genotype) under Different Levels of Salinity

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Introduction

Matricaria recutita L. is one of the most important medicinal plants. Salinity environmental restrictions on crop production, especially in arid and semi-arid world. *M.recutita* is halophyte. In this study, some morphological characteristics (fresh and dried weight of flowers in three different time periods, stem height, number of flowering branches and flowers) of Isfahan genotype affected different salinity levels were examined.

Materials and Methods

In this experiment, the Isfahan genotype were cultivated in complete randomized block design with three replications and three levels of salinity (control, 6 and 12 ds/m) in Isfahan agriculture research center farm. Plants after full deployment using a combination of salt (NaCl) and municipal water were irrigated. Chamomile flowers were harvested at three different time intervals after their frash weight measured at room temperature (25 ° C) , were dried in the shade and well ventilated, dry weights were measured. The height was measured and number of flowering branches and flowers was counted donor. Data obtained with the use of SAS software, and analysis of variance with Duncan's test at 5% probability level were analyzed.

Results and Discussion

Analysis of variance showed that all traits were significant at the 5% level. The highest and lowest fresh and dry weight of flowers on first, second and third harvest, the salinity levels 6 ds/m and 12 ds/m, control and 12 ds/m, 6 ds/m and control were respectively, but no significant differences were observed between the three levels. Most height was control and 12 ds/m showed the lowest.The most number of flowers and number of flowering branches plant was observed control and lowest salinity level 12 ds/m. According to the results of this study can be used chamomile for cultivation in areas with relatively salty water would recommend, however, is proposed to test higher levels of salinity for the plant.

Keywords: *M.recutita*, Salinity, Fresh and dried weight flowers, Plant height, Number of flowering branches.

References

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