

Measurement Nutrients (Phosphorus, Potassium and Sodium) in the Chamomile (Isfahan Genotype) Flowers under Different Levels of Salinity

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Introduction

The scientific name of chamomile *Matricaria recutita*, Asteraceae family, is a halophyte plant. Important and one of the oldest medicinal plants is in the world. Salinity of the soil or water stress in arid and semi-arid main and can severely limit plant growth and yield. Salinity, agriculture is one of the factors that make it difficult for most plants, and is a variety of quantitative and qualitative aspects of plant growth and affect. This study was designed to investigate the content of some nutrients, such as phosphorus, potassium and sodium *Matricaria recutita* was performed under different levels of salinity.

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. To measure the amount of phosphorus, potassium and sodium, chamomile flowers, collected, dried in an oven at 70 °C for 48 h , then pulverized using an electric mill and 1 g of the sample in the furnace temperature of 400 °C for 4 h , and extracts were prepared from the ashes. Emission of elements sodium and potassium Posted by flame photometer and phosphorus was measured using a spectrophotometer. 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 the three elements measured at 5% level of significance. According to the results, the more phosphorus and potassium in the control and the highest level of sodium in 12 ds/m was observed. The results obtained from this plant can be recommended in areas with salty water. Recommended higher salinity also be evaluated.

Keywords: *M. recutita*, NaCl, Sodium, Potassium and Phosphorus.

References

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