ABSTRACT
THE PROBLEMS ENCOUNTERED IN THE IRRIGATION OF LANDSCAPE OF FETHİYE CİTY CENTER and ALTERNATIVE SOLUTION PROPOSALS

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Thıs research aıms to determine the problems encountered and proposed alternative solutions for the irrigation of the landscape of Fethiye city center. The research took place in four large parks of Fethiye city center. Soil samples were taken from these four parks from 0 – 30 cm, 30 - 60 cm and 60 – 90 cm depth, as well as water samples once every month during four months. Some physical and chemical analyses were made of all these soil and water samples and the results were evaluated. According to the results of the research, it has been seen that the characteristics of the soil of the researched area is sandy-loamy and sandy-clayey-loamy. The pH values of the soil vary between 7,30 – 7,91; EC values between 0,85 – 1,91 dS/m; the field capacity between 9,07 – 39,52 % ; wilting point values between 5,28 – 25,60 % ; bulk density values between 1,23 – 1,81 gr/cm^3. It has been determined that the pH values of the water used in irrigation vary between 7,5 – 8,1 and EC values of the water vary between 0,593 – 2,929 dS/m. When the water samples are evaluated according to US Salinity Laboratory Classification, it has been determined that these four parks are in the category of High Salinity Water and Atatürk Park is in C_2S_1, Uğur Mumcu Park is in C_3S_1, Alpaslan Türkeş Park is in C_3S_1 and Haluk Özsoy Park is in C_3S_1 Irrigation Water Classification. It is thought that the water used in irrigation where the research was done is of low quality; but, on the other hand, because the soil has proper characteristics, no major problem was encountered. In this research, in Haluk Özsoy Park, an infiltration test has been proposed to be taken and at the same time an irrigation system by sprinkling water has to be designed. This proposed irrigation system together with infiltration test has been compared with the existing irrigation system. The results of the research have shown that there is no homogenous irrigation implementation in the exisiting irrigation system and it is necessary to measure the velocity of infiltration in order to determine the hood flow rate and

the distance between hoods. These measurements are very important parameters to obtain the homogenity in irrigation by sprinkling water.