

Abstract

Evaporation in hydrology and water resources engineering, including important issues which are of interest to many researchers. Increase the concentration of salts and water quality as well. Controlling evaporation from water surfaces is an important breakthrough in water conservation, Usually no need for new facilities Water stored without delays from a facility, Is available in many cases, reduction of evaporation is far cheaper to collect and Store the same amount of water from other sources. For this purpose, an experiment in a completely randomized design and With the use of magnetic nanoparticles Fe_2O_3 and Fe_3O_4 and Jojoba oil plant with 4 treatments 3 repetitions that plots designated concentration of nanoparticles, After the initial test run (0.5 cc Fe_2O_3 0.02 and 5.0 cc Fe_3O_4 0.2 g), Certain desired concentration of jojoba oil (0.5 cc) and Water is also used as control. Initial testing for 7 days and the final test for 35 days, Taking into account the standards in standard evaporation pan class A and plastic pan was used. After measuring daily evaporation rate, Data software Spss 19 with Duncan at 5% level were analyzed, The results showed that there was no significant difference between treatments in the pan so that the highest concentration of 0.02 Fe_2O_3 reduce evaporation by 25.4% and In plastic tubs 0.2 Fe_3O_4 treatment to a greater extent (32.6 percent) to reduce evaporation.

Keywords: Jojoba Oil, Magnetic Nanoparticles, Reduce Evaporation, Tanks



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**The Use Of Magnetic Nanoparticles In Reducing
Evaporation From Reservoirs In Small Scale**

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