

## عنوان مقاله:

Effects of Magnetic Irrigation on Soil Moisture

## محل انتشار:

دومین کنفرانس دوسالانه بین المللی نفت، گاز و پتروشیمی (سال: 1397)

تعداد صفحات اصل مقاله: 7

## نویسندگان:

Yasin Ghasemi - *Khormoj Shahid Beheshti High School, Bushehr, Iran*

Amineh Hasanzadeh - *Young researchers and Elite Club, Bushehr Unit, Islamic Azad University, Bushehr, Iran*

Ciamak Fallah - *National Elites Foundation, Iran*

Naser Jamali hajjani - *Education of Bushehr province, Bushehr, Iran*

## خلاصه مقاله:

Iran is a country located in the global arid and semi-arid regions with the diminished water resources. However, vast investments have been made in the agricultural sector based on the development pivot and many efforts have been made to have full exploitation potential of water resources in the production cycle. On the other hand, Iran encounters with the periods of drought and water crisis at the present situation. Therefore, some key roles are defined for the effective supply-demand management and the modern and efficient methodologies have been practiced to increase the available water resources utilization. A new method is related to the application of the magnetized water treatment technology. Also, some studies are necessary to be carried out in this field because of the key role of the agricultural sector in state water crisis due to high water consumption. The aim of the present research focuses on the effect of the magnetized treatment of water irrigation to minimize the soil moisture loss and increase water infiltration. The designed treatments were carried out in two contrasting sets. The obtained results indicated that the treated soil sample irrigated with the magnetized water had a slower trend of moisture loss compared to the control sample irrigated with the normal water. The significant difference was found between the treated and control soil samples about the moisture loss. The treated soil samples irrigated with the magnetized water showed higher maintained moisture content. The second experimental set determined the higher levels of infiltration in three soil samples treated with the magnetized water compared to the control soil samples. Therefore, it can be concluded that the irrigation with the magnetized water in the agricultural sector can result in the decreased water loss and higher water infiltration in soil as a complementary and replaceable irrigation procedure indicated higher qualitative and quantitative water utilization

## کلمات کلیدی:

magnetized water, water, agriculture

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1041230>



