

**BIOFERTILIZERS AND THEIR ROLE IN SUSTAINABLE AGRICULTURE AND
THEIR EFFECTS ON ENVIRONMENT**

Elnaz moghimi*, lila akbari

*irrigation and drainage field from Islamic Azad university of Ferdos**E.mail address : Elnaz_quaker@yahoo.com***INTRODUCTION**

In recent decades production of agricultural products was mainly relied on consumption of chemical substances which led to environmental problems. As a reason of population growth and increasing demand for food products, consumption of chemical fertilizers in order to increase production in the area unit has been strongly enhanced. It causes a lot of inappropriate consequences include: pollution and destruction of water and soil sources and threatening the health of human and other organisms. Therefore, nowadays usage of Biofertilizers with the origin of bacteria, fungus, alga and ... has been considered in the whole world especially in agriculture.

MATERIALS AND METHODS

Biofertilizers refer to fertilizers containing one or more species of terricolous organisms which are offered on appropriate preservatives. Biofertilizers as microbial inoculants are a composition which increase the efficiency of one or more required ingredients of plant and also enhance the absorbency of nutrients in the soil by plant. Nowadays, Biofertilizers are used in different forms and formulas for various agricultural productions like grains, vegetables, industrial plants, garden and green house plants.

Biofertilizers are divided into two groups and several types like bacterial, fungal, ree, molecular nitrogen stabilizers and microorganisms which convert organic waste to composite. These fertilizers have a lot of economical fertilizers, for example: They cause maintaining and developing the soil fertility, increased nutrient absorption, preventing the pollution of soil and ground water and surface water resources, reduction in consumption of chemical fertilizers as much as 30%, preventing the diseases emanated by consuming the contaminated products, conservation of environment and preventing it from destruction, production of healthy products and causing sustainable balance in production of agricultural products. These Biofertilizers can ensure physical health in consumers.

RESULTS AND DISCUSSION

So we can conclude that in order to achieve sustainable development in agriculture and gaining the goals and predicted policies, using the Biofertilizers is a suitable solution. The aim of doing this research on Biofertilizers is increasing the knowledge of farmers and researchers through a glance at different types of Biofertilizers and their position in Iran and their role in sustainable agriculture and in nutrition and health of society by pointing at their advantages and disadvantages and their important role in environment. In addition we hope that by planning and giving proposals, we can make a progress in agricultural knowledge and increase production of healthy products.

Key words : Biofertilizers, environment, sustainable, agriculture, nutrition, health

References :

- 1.Akhavan,Zarnegar.1391.Using Biofertilizers in management of soil Fertility in organic agriculture.National congress and organic agriculture.Ardebil.Iran.
- 2.Heidarzade,Zahra.Autumn 1389.Importance of stabilizing the Biofertilizers in sustainable agriculture (master thesis), relevant professor : DR Rahnama.
- 3.Rahmani,Hamid reza. Winter 1389. Biofertilizers and their role in sustainable agriculture and production of healthy products. The first congress about fertilizer challenges in Iran.Tehran.



The 1st International Conference on New Ideas in Agriculture
Islamic Azad University Khorasgan Branch
26-27 Jan. 2014, Isfahan, Iran

