P-120 (190) EFFECT OF BIOLOGICAL FERTILIZERS ON VEGETATIVE CHARACTERISTICS OF SALVIA OFFICINALIS

Leila Pourhosseini, Department of Agriculture, Karaj Branch, Islamic Azad University, Karaj, Iran; Ipourhosseini@gmail.com (Presenting author)

Maryam Ms. Bakan, Department of Horticultural science, Karaj, karaj, Iran; bakan.maryam@yahoo.com

Dr. Pejhman Moradi, Department of Horticultural Science, Saveh, Iran; pjmoradi@gmail.com

Salvia officinalis is a medicinal plant of lamiaceae family that is used in pharmacology, cosmetic industry, aromatic and fragrant aroma of the food. This experiment was performed in order to evaluate the effect of bio fertilizers on vegetative characteristics of salvia. It was carried out in randomized complet block design with there replications. Treatments include nitroxin, biosulfur and super nitroplus alone, (100% of any fertilizer) and also in combination with each other for 50% of nitroxin and 50% biosulfur, 50% nitroxin and 50% super nitroplus and combination of all three fertilizer for 33/3% nitroxin, 33/3% biosulfur, 33/3% super nitroplus and a control treatment without fertilization. Solutions applied for foliar fertilizer. The results indicated that application of mentioned bio fertilizers, either pure or in combination with each other has had a significant effect on improving of salvia growth. Super nitroplus and nitroxin due to the use of the required nitrogen by plants plays an important role in improving vegetative growth. Correlation between the amount of nitrogen (from fertilizers nitroxin and super nitroplus) was positive and significant in all traits. With effect of biologic fertilizers, vegetative growth of salvia quite impressed and height and number of branches has increased significantly.

Keywords: Salvia officinalis, bio fertilizer, nitroxin, biosulfur, super nitroplus