

Abstract

Plant growth is affected by various factors. Environmental factors usually influence plant growth rather directly. Among these factors, water is the most essential. In this study, factors under experiment include four levels of nano-fertilizers particular to vegetables (not using b4, daily solution spray b1, every other day b2, every two other days b3) and three levels dryness tension (irrigation in 90 percent, 75 percent and 60 percent of farming capacity). During the growth period, after the plant grows and the tension is enforced, 6 notes were taken. The results of variance analysis show that the height of the plant, number of lateral branches, number of leaves and length of the root are significant in the 5 and 1% level which indicate positive effect of nano-fertilizers on these parts. Moreover, this fertilizer was able to enhance properties such as performance, volume of the root, length of the root, height of the bush and number of lateral branches and number of the leaves in comparison with the sample under dry tension condition. In general, applying nano-fertilizer particular to vegetables designed according to nano-chelating technology helps improve growth properties, performance of the shoots, and quality of basil.

Key words: Basil, nano fertilizers, growth characteristics, performance



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**Effect of nano-fertilizer for vegetables and
herbs, designed by Nanochylytyng technology
on growth, dry matter and nutrient uptake of
Basil under drought stress**

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