

## **Abstract**

To evaluate The effects of silicon and nanobiomic spraying on yield and yield components of Sweet pepper (*Capsicum annuum* L.), The experiment was conducted as a factorial based on complete randomized block design with three replications. The first factor silicon spraying of three levels 0, 1 and 2 and the second factor nanobiomic spraying of three levels 0, 1 and 2 ha. Each plot consisted of 4 planting lines 3 m long and the distance between 75 cm lines and 35 cm planting row. operation in early April planting was done at a level equivalent to 324 square meters. Analysis of variance (ANOVA) showed that the interaction of silicon and nanobiomic Analysis of variance showed that All traits except fruit was significant. and length of fruits Simply spray the silicon spraying and the simple effect of nanobiomic fission was analyzed. the highest plant (109.33 cm), stem diameter(17.26 mm), Plant weight (1.580kg), number of fruits per plant (16.66), Single fruit weight (100.06 g), Yield per plant (1440.9 g), Total yield (36.02 T/h), Fruit diameter (61.33 mm), Nitrogen concentration (0.1592 percentage of dry matter), Phosphorus concentration (0.0558 percentage of dry matter) and highest concentration of potassium (6.27 percentage of dry matter) In the conditions of foliar application of 2 mm silicon spraying and foliar application of 2 liters per hectare of nanobiomics spraying. Also the highest amounts of chlorophyll a, chlorophyll b, total chlorophyll and carotenoid (Respectively 0.751, 2, 2.51 and 9.77 mg / g fresh weight) In 2 mm silicone spraying conditions and no nanobiomic spraying was observed. In general, in order to achieve maximum performance and quantitative and qualitative performance components, Application of 2 mm silicone spraying and foliar application and 2 liters' ha-1 nanobiomic foliar application is recommended for the cultivation of bell pepper in the area.

**Keywords:** Stress, Silicone, Capsicum, Nano fertilizer, Total fruit weight



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**The effects of silicon and nanobiomic  
spraying on yield and yield components  
of Sweet pepper (*Capsicum annuum* L.)**

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