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THE IMPACT OF GRAFTED SEEDLINGS ON THE YIELD AND FRUIT QUALITY OF PEPPER SOMBORKA CULTIVAR (*CAPSICUM ANNUUM* L.) UNDER COMMON OPEN FIELD CONDITIONS

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Abstract

The grafting of vegetables, in addition to the effect of increasing resistance to biotic and abiotic stresses, has been proven to have an effect on increasing the yield and quality of produced products. The pepper cultivar Somborka was the object of the study since the market demands are high for its taste and nutritional value. The study's objective was to evaluate grafted seedlings' effects on yield and fruit quality of pepper (*Capsicum annuum* L.), Somborka cultivar under common open field conditions.

The experiment was carried out at an open field farm located in Skenderaj municipality of Kosovo. Pepper grafted seedlings (GS) in two different rootstocks (Rokal and Fortama F1) and non-grafted seedlings (NG) were applied for the pepper cultivar Somborka. The effects of grafted seedlings on yield (kg/variant) the number of fruits (fruits/variant), mesocarp thickness (mm), and fruit weight (gr) were estimated under common open field conditions.

The results of the experimental data revealed that the application of the grafted seedlings (GS) recorded significantly the highest yield, more fruits per plant, and the mesocarp thickness was higher compared with non-grafted (NG). No significant differences exist between the two applied pepper rootstocks on estimated parameters.

These results confirm that using grafting techniques in pepper crops is a good strategy to have a higher yield and better quality. The obtained results emphasize the positive effect of grafting peppers on the average production compared with nongrafted plants.

Key words: *Peppers, Grafting, Yield, Mesocarp, Non-grafted.*