

Utjecaj lokaliteta i sustava gnojidbe na prinos i sastavnice prinosa salate

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Sažetak

Konvencionalna proizvodnja povrća odlikuje se visokim prinosima, ali uz značajnu primjenu agrokemikalija koje mogu imati negativne efekte kako na zdravlje potrošača tako i na okoliš. Zato se istražuju alternativni sustavi proizvodnje povrća pa je cilj i ovog rada utvrditi utjecaj različitih sustava gnojidbe i proizvodnih uvjeta na prinos i sastavnice prinosa salate.

U pokusu postavljenom po slučajnom bloknom rasporedu u četiri ponavljanja, tijekom 2010. praćen je ostvareni prinos salate pri različitim sustavima gnojidbe (750 kg ha⁻¹ NPK 7:14:21 i 300 kgha⁻¹ KAN-a u dvije prihrane, 500 kgha⁻¹ NPK 7:14:21 i 150 kgha⁻¹ KAN-a u prihrani te 5 tha⁻¹ kompostiranog pilećeg gnoja) i na dva lokaliteta (Križevci i Velika Kladuša). Na 10 prosječnih biljaka utvrđena je masa, promjer i visina glavice, te izračunat prinos.

Na osnovi kemijskih analiza tla u Križevcima je utvrđena kisela reakcija, slaba humoznost i dobra opskrbljenost fosforom i kalijem, dok je tlo u Velikoj Kladuši neutralne reakcije, slabo humozno, slabo opskrbljeno fosforom, a bogato kalijem. Analiza varijance pokazuje statistički opravdan (P<0,01) utjecaj svih promatranih čimbenika, kao i njihovih interakcija na prinos, masu, visinu i promjer biljke. Na lokalitetu Križevci svi parametri bili su u prosjeku za 60% veći nego u Velikoj Kladuši, dok su najviše vrijednosti dobivene najjačom mineralnom gnojidbom za 14% veće od dobivenih samo organskom gnojidbom.

Rezultati preliminarnih istraživanja ukazuju na jači utjecaj lokaliteta na prinos i sastavnice prinosa salate nego gnojidba.

Ključne riječi: salata, lokalitet, sustav gnojidbe, prinos, sastavnice prinosa

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Influence of location and fertilization system on the yield and yield components of lettuce

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Abstract

Conventional vegetable production is characterized by high yield, but with significant use of agrochemicals, which may have adverse effects on human health and the environment. That is the main reason for exploring alternative systems of vegetable production, and the aim of this study was to determine the impact of different systems of fertilization and production conditions on the yield and yield components of lettuce.

During 2010, in randomized block design and with four repetitions was set to monitor the effect of different fertilization systems on the lettuce yield (750 kg ha^{-1} NPK 7:14:21 and 300 kg ha^{-1} KAN-in two applications, 500 kg ha^{-1} NPK 7: 14:21 and 150 kg ha^{-1} KAN and 5 t ha^{-1} of composted chicken manure). The experiment was set on two sites (Križevci and Velika Kladuša). During the harvest 10 average plants were used to establish weight, height and diameter of the head and to calculate the market yield.

Chemical analysis of the soil in Križevci site established acidic reaction, low humus content and a good supply of phosphorus and potassium, while the soil in Velika Kladuša had neutral reaction, low humus content, low phosphorus content, but was well supplied with potassium. Analysis of variance showed statistically significant ($P < 0.01$) effect of the considered factors and their interactions on yield, weight, height and diameter of the plant. At the site in Križevci all parameters were on average 60% higher than in Velika Kladuša. The highest values were obtained by applying the highest mineral fertilizers and these were for 14% higher than the lowest values, which were obtained by using only organic fertilizers.

Results of the preliminary studies suggest that the site has a stronger impact on yield and yield elements of lettuce than does fertilization.

Key words: lettuce, location, system of fertilization, yield, yield components

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