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Effect of Bio-algeen S-90 and Megagreen Application in Winter Production of Lettuce

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Lettuce production in winter period (November to February) on the northern Adriatic coast, especially in a cold greenhouse, requires longer cultivation and is characterised, among other things, by lower weight of the lettuce head. Application of Bio-algeen S-90 in these conditions has shown a significant positive effect on the growth and yield of winter lettuce. Traditional cultivar 'Four season' was tested, which was produced for the fresh market during winter period. The production of winter lettuce lasted for 13 weeks (December 5-March 13). Double watering at the cultivation start with 1.0% Bio-algeen S-90 increased plant height by 61.5% compared to the control treatment, and by 0.37% compared to the Megagreen application. Equally, the lettuce treated with Bio-algeen S-90 yielded a significantly higher leaf number compared to the control treatment (increase by 47.7%). The difference in leaf number between Bioalgeen and Megagreen applications was on average 7.14% and was not significantly confirmed. The head weight of lettuce in Bio-algeen S-90 treatment was by 30.28% and 25.04% higher than in the control and Megagreen treatments, respectively. Statistically proven, double foliar application of 0.3% Megagreen solution had a positive effect on the weight of lettuce head compared to the control treatment. Applied biostimulator and micronutrient did not influence the quality parameter tested in this experiment. Vitamin C content, dry matter content, pH value of lettuce juice as well as mineral content (N, P, K) between tested treatments were not significantly different.

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