

CHANGES IN GREEN WEIGHT PRODUCTION AND IN SOIL NUTRIENT SUPPLYING CAPACITY IN CASE OF ORGANIC AND NPK FERTILIZED ONION CULTIVATIONS

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Abstract. *In our comparative greenhouse experiment we examined the effect of EM-1 microbial yield enhancing vaccine, an organic cow manure and an NPK fertilizer on the nutrient supplying capacity of the soil. The test plant was onion (*Allium cepa* L.) and the applied soil was humic sandy soil. The wet and dry matter production and the element content of plant samples were also determined, from which the element uptake was calculated. We also determined the amount of readily available nutrients in the soils of several treatments. The 0.01M CaCl₂ soluble K, Mg, Mn, NO₃⁻-N, NH₄⁺-N, organic-N, total-N contents, pH of soil, and the AL soluble P₂O₅, K₂O, Ca, Mg of soil also were determined. The increasing effect of NPK fertilizer on the yield was greater than that of organic manure and EM-1 + straw. The green mass production of NPK fertilized plants were withdrawn from most of the soil nutrient. In the growing season the soil pH reduced as an effect of NPK fertilizers, which can cause problems in further cultivations. Organic fertilization had a positive effect on the mineralization of nutrients in the soil.*

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