

CSEMEGEKUKORICA NÉHÁNY MORFOLÓGIAI TULAJDONSÁGÁNAK ALAKULÁSA GOMBAKOMPOSZT- TRÁGYÁZÁS HATÁSÁRA

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ABSTRACT – Changes in some morphological characteristics of sweetcorn in response to application of spent mushroom compost as fertilizer

In our experiment we studied the application of spent button mushroom compost as organic fertilizer (30 and 60 t/ha) in sweetcorn cultivation on sandy textured brown forest soil. As control, we applied artificial fertilizer doses corresponding to soil test, as well as creating zero control plots with no fertilizer application. We studied the changes in some characteristics typical of the vegetative growth of sweetcorn plants (rate of seed emergence, leaf number, height, number and height of tillers) as well as in parameters indicating the development of the generative parts (number of ears per plant, unhusked and husked ear weight). We also carried out calculations for the per-hectare yield. According to our results, spent mushroom compost can be successfully used in sweetcorn production as organic fertilizer. The application of the 60 t/ha dose seems appropriate on the soil type of the experiment which by itself produced results that were almost as favourable as the application of the fertilization regime. It can be supposed that with the adding of artificial fertilizers (e.g. nitrogen top dressing) to the basal fertilization with mushroom compost further increases can be achieved in the performance of plants. The zero control without fertilization was inferior to the other three treatments showing that originally there was an inadequate supply of nutrients in the soil.

Keywords: sweetcorn, spent mushroom compost, vegetative growth, yield