Influence of grass mulch application on tubers size and yield of ware potatoes

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The aim of the experiment was to investigate the effect of grass mulch and the term of its application on the yield and quality of potatoes and weed biomass under organic system. The experiment with 2 varieties of early

potatoes (Finka and Katka), 2 row spacings (28 000 and 38 000 tubers per hectare) and 2 terms of grass mulch application (after planting and after second hoeing) was carried out in the Czech Republic in 2008. Results showed that the yield was influenced mostly by mulching (55.9 %), then by variety (39.2 %) and by growth structure (4.9 %). The highest yield was reached in the variant with grass mulch applicated after planting. The yield of this variant increased statistically about 9.3 t/ha in comparison with control variant (bare soil). Results of the weed control showed a positive effect of grass mulch on weed biomass, where the lowest weed biomass was found out in variant with grass mulch applicated after planting (weed biomass was lower by 67.6 % in comparison with the control variant – bare soil).