CONSERVATION TILLAGE IN FABA BEAN CULTIVATION: WEED SEED BANK

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The current agricultural system aims to reduce tillage intensity through the use of innovative tillage technologies. Faba beans are particularly sensitive to weed competition, so detailed research is needed due to the lack of experimental data on the effects of different tillage technologies on weed seed bank content. For this reason in Vytautas Magnus University, Agriculture Academy (Lithuania), five contrasting tillage system were tested: deep and shallow mouldboard ploughing, deep cultivation-subsoiling, shallow cultivation-disking and no-tillage. The experimental data of 2016–2018 is discussed. Sampling was performed at the end of the growing season of faba bean (BBCH 75–79). Samples were taken from the 0–15 and 15–25 cm soil layers.

Investigations concluded, that the insignificantly highest weed seed bank was found in the disked and no-tilled plots. The weed seed bank was almost evenly distributed between the two soil layers.

Key words: conservation tillage, soil layers, weed seed bank, Vicia faba L.