

# INFLUENCE OF SOWING NORM AND ROW OF ROW ROWS ON SOYBEAN YIELD IN CONDITIONS OF WESTERN FOREST STEPPE

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**Abstract.** Among agricultural crops, soybean acreage is growing most dynamically. This is due to the universality of its purpose - food, feed, technical.

Along with the increase in sown areas, the range of soybean varieties is expanding, which in the context of climate change necessitates the search for new and improvement of existing technological methods of growing this crop. One of the ways to increase the yield of soybean grain is to optimize the parameters of its sowing - the sowing rate and the distance between rows.

The aim of the research was to identify the influence of seed sowing rate and row spacing on soybean yield in the Western Forest-Steppe. Methods. Field - laying and conducting field experiments, observation - focusing on the processes of growth, development and formation of soybean grain productivity, analogy - comparisons between variants of the experiment.

The research was conducted in the collection and research field of a separate division of the National University of Life and Environmental Sciences of Ukraine "Zalishchyk Agrarian College named after E. Khraplyvy" during 2015-2017. Sowing of soybean seeds (500, 600, 700, 800 thousand / ha of similar seeds).

Soil and climatic conditions are typical for the research area.

Results. According to the results of three-year research it is established that in the conditions of the Western Forest-Steppe the optimal sowing rate of soybean seeds of early-ripening varieties is 700 thousand / ha of similar seeds, and the distance between rows is 30 cm. The combination of these parameters provides a soybean yield of 2.97 t / ha.

Changing the sowing rate of seeds in the direction of increase or decrease has a negative effect on the yield of soybean grain, causing its decrease compared to the option, which sows 700 thousand / ha of similar seeds.

Narrowing between rows (row sowing method - 15 cm) or expanding them to 45 cm (wide row sowing method) also causes a decrease in soybean grain productivity.

**Keywords:** legumes, row spacing, number of sown seeds, grain productivity