## ADVANCED VARIETIES OF SOY AND ELEMENTS OF THEIR AGROTECHNICS

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The article is devoted to the results of three-year research on the refinement and adjustment of zonal seeding rates and methods of sowing early-maturing soybean varieties Slavia, Chara and Olympia, selection of the "Federal Scientific Center" All-Russian Research Institute of Oilseeds named after V.S. Pustovoit ". The research results made it possible to establish that an increase in the seeding rate of soybean seeds from 450 to 650 thousand seeds / ha leads to a decrease in the total mass of seeds from one plant. So, in Slavia, the mass of seeds decreases by 28.3%, in Chara by 31.8% and in Olympia by 52.4%, and grain yield in parallel with this fact increases by 13.3 and 5.9% in varieties of Slavia and Chara, respectively, in the Olympia variety - decreases by 3.8%. The maximum productivity of soybeans was obtained at a seeding rate of 650 thousand seeds / ha only in the Slavia variety - 2.21 t / ha, and in the Chara (2.04 t / ha) and Olympia (2.28 t / ha) varieties the highest the value was noted at a seeding rate of 550 thousand pieces / ha. With regard to the results of the study on the influence of the methods of sowing soybean seeds, a certain tendency was noted for an increase in the parameters of the height of the whole plant and the attachment of the lower pod on the plant with the ordinary method. According to the second method of sowing - placement of seeds in a wide-row method, when significantly better parameters of the elements of the structure of the crop are formed, an increase in the number of productive branches and nodes on one plant, the total number of beans and the mass of seeds was noted.

**Keywords:** soybean, variety, seeding rate, sowing method, attachment height of the lower bean, number of beans, grain weight, crop structure, yield.

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