THE FORMATION OF THE SOIL NUTRITIVE REGIME AND YIELD OF POTATOES PLANTED IN SUMMER

The paper presents the results of the investigation into the three varieties of potatoes—early Tiras, middle Slovianka and Zabava which were planted in summer under drop irrigation. Three backgrounds were used in the research—without fertilizers (control), with $N_{90}P_{90}K_{90}$ on the top of the soil and $N_{45}P_{45}K_{45}$ locally into 0–12 sm soil layer, as well as with the application of modern growth regulators like diazofiton, adaptofiton and agrostimulin during plants budding.

The paper proves that it is expedient to grow different potato varieties which were taken for studies in a two-harvesting crop when planted in summer and under drop irrigation in the South of Ukraine. The tubers yielding capacity is constant and it depends on the background nutrition. Due to the fertilizers and regardless of the dose and methods of their application, the tuber yield increase by 43–45 %. The use of the growth regulators contributes to further increase in yielding capacity. The investigated dose of fertilizers $N_{90}P_{90}K_{90}$ on the top of the soil and $N_{45}P_{45}K_{45}$ locally in 0–12 cm soil layer from the nutritive soil regime and the same level of crop yielding capacity.

**Key words:** potatoes, variety, fertilizers, yield of tubers growth regulators.