

Conducted biological testing of synthetic heterocyclic compounds: 2-benzyl-3-benzoyl-2-phenylaziridine, 2-benzoyl-3,5-diphenyl-4-chlorofuran and 2-amino-4(1,3-diphenyl-2-chloropropene-1-one-3-yl)-5-phenyl-1,3-thiazole. The objects of the study were the seedlings of spring wheat *Triticum aestivum* L. To assess the physiological activity of test compounds used for comparative analysis of characteristics of seedlings – the length of the lamina and the sheath of the first leaf and the quantitative content of photosynthetic pigments in the plate of the first leaf of experimental and control plants. Based on the study, it was established that the test heterocyclic compounds exert a positive effect on the growth of the first leaf. The exception was plants grown on a solution of 2-benzoyl-3,5-diphenyl-4-chlorofuran (10^{-6} M). At the same time, the effect of the test compounds on the growth of morphological parts of the leaf of the experimental plants was different. The positive effect of the test heterocyclic compounds on the quantitative content of pigments in the plate of the first leaf of test objects was established. A direct relationship between the concentration of solutions and the content of chlorophyll a and chlorophyll b in a leaf of wheat plants was established. It was noted that in all variants of the experiment a decrease in the ratio of the amount of chlorophyll a to chlorophyll b relative to the control values was observed. Analysis of the results leads to the conclusion that the tested synthetic heterocyclic compounds have regulatory activity.