

**INFLUENCE (THIO) SEMICARBAZONES
2,4-DIARYLBICYCLO [3.3.1] NON-2-EN-9-ONES
ON GROWTH OF *TRITICUM AESTIVUM* L. SEEDLING**

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Biological testing of synthetic compounds – (thio) semicarbazones 2,4-diaryl-bicyclo [3.3.1] non-2-en-9-ones, differing in the nature of aryl substituents and N-nucleophile, was carried out. The compounds under study were obtained at the Department of Organic and Bioorganic Chemistry of the Institute of Chemistry of the Saratov National Research State University. The object of the study was seedlings of spring soft wheat *Triticum aestivum* L. of the Saratovskaya 36 variety. To assess the physiological activity of the tested compounds, we used a valuable analysis of the morphometric parameters of growth and development of the root system and shoot of the test and control plants. The study of the physiological activity of (thio) semicarbazones 2,4-diaryl-bicyclo [3.3.1] non-2-en-9-ones showed that the germination energy of the seeds in the control and in all variants of the experiment does not have significant differences. The index of root-supply of experimental plants exceeds the control values. The tested compounds have a stimulating effect on the growth of the root system of plants. The exception was semicarbazone 2,4-diphenylbicyclo [3.3.1] non-2-en-9-one at a concentration of 10^{-6} M and thiosemicarbazone 2-(4'-chlorophenyl)-4-phenylbicyclo[3.3.1]non-2-en-9-one. It has been established that compounds, differing in the character of aryl substituents and N-nucleophile, have a different effect on the growth of the aerial part of plants. The relationship between the concentrations of solutions and their effect on growth is established.

Key words: carbocyclic compounds, growth regulators, biotesting, plant growth and development, soft wheat.

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