

CAUSATIVE AGENTS OF ROOT ROT IN WINTER WHEAT

Galina LUPASCU^{1*}, Nicolae CRISTEA¹, Nadejda MIHNEA¹

e-mail: galina.lupascu@sti.usm.md

Abstract

Knowledge of the composition of fungal species that cause root rot in common wheat is of great importance for the development of correct protection measures and serves as methodological support in pathogen resistance screening systems. In our research, 14 fungal species involved in the development of the disease in 2024 under the conditions of the Republic of Moldova were recorded. An increase in the frequency of the fungi *Fusarium culmorum* (24%) and *F. equiseti* (31.8%) was reported. Cluster analysis demonstrated the important role of the variety in the frequency of fungal spread. It was found that one of the most widespread causative agents of root rot – *Fusarium oxysporum* can cause both inhibition and stimulation of plant growth, as well as a change in the spectrum of phenotypic classes in segregating F₂ populations. The orientation of the crossing of the parents when creating F₁ wheat hybrids significantly influences the reaction of plants to the pathogen, but also their variability in terms of growth and development traits.

Keywords: wheat, fungi, root rot, variability.
