

TESTING THE BIOLOGICAL EFFICIENCY OF SOME NEW PHYTOSANITARY PRODUCTS TO COMBAT WINTER WHEAT DISEASES

Bivol Alexei^{1,2}, Badarau Sergiu¹, Cîrlig Natalia³, Iurcu-Străistaru Elena³

¹*Technical University of Moldova*

²*Moldova State University, Institute of Zoology*

³*Moldova State University, "Alexandru Ciubotaru" National Botanical Garden
(Institute)*

E-mail: iurcuelenastraistaru@gmail.com

Winter wheat hosts one of the bakery food source with estimative and bioenergetic potential, which in recent years tends to occupy more and more extensive areas, and in order to obtain stable major harvests it is necessary to know the etiological components of the parasitic microflora. It is a disease-sensitive crop, especially during the period of seed germination until the formation of the first pair of leaves. That's why the aim and objectives presented in this work focus on the research-testing of new fungicides effective in combating the complex of invasive diseases. The purpose of the work are phytopathological research related to the state testing of new preparations with fungicidal action in combating the most dangerous diseases affecting the autumn wheat crop in the Republic of Moldova. We made a test program of presentation of the phytopathological aspects regarding the diseases specific to the winter wheat crop and determination the frequency of the degree of attack and the intensity of the attack of the main infectious diseases for fungicidal preparations: Binazol 300, SC, Lot no. 6, WG and F2024-azodiph, SC. The respective results was developed, using the methodological and experimental methods and materials accumulated on the basis of participation in the subject of the scientific project on the state testing of new fungicides. Investigations on the research of the mode of action of remedies with fungicidal action on the winter wheat crop focused on the determination of the indicator system, the calculation frequency and intensity of the attack, and subsequently the biological efficiency was determined. In the case of preparations with fungicidal action Binazol 300, SC in combating powdery mildew-Erysiphe graminis, brown rust-Puccinia recondita, septoria-Septoria tritici and helminthsporiosis -Dreschlera tritici-repentis, Lot no. 6, WG against powdery mildew-Erysiphe graminis and helminthsporiosis-Dreschlera tritici-repentis and F-2024-azodif, SC in combating powdery mildew-Erysiphe graminis, brown rust-Puccinia recondita, septoriosis-Septoria tritici and helminthsporiosis- Pyrenophora tritici-repentis. Following the analysis regarding the efficiency of these preparations, we conclude that the tested new preparations are recommended for approval against tested agents, in the following doses and tested variants: Binazol 300 SC - 1.0 l/ha, F2024-azodif - 0.7 l/ha, Lot no. 6, WG - 0.2 kg/ha, with the administration of two treatments in one vegetation period.

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