THE INFLUENCE OF TREATMENTS WITH VARIOUS PHYTOSANITARY PRODUCTS (FUNGICIDES) ON THE ATTACK OF SOME PHYTOPATHOGENIC FUNGI ON WHEAT HARVEST – GLOSA VARIETY - IN 2022 PEDOCLIMATIC CONDITIONS OF THE EASTERN BARAGAN

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Abstract

This study aims at monitoring the dynamics of the occurrence and evolution of the attack of some pathogens to Glosa Romanian wheat variety, among which we mention: Puccinia recondita f. sp. tritici (sin. Puccinia triticina) which produces wheat's brown rust and Septoria sp. which produces wheat's brown leaf spotting (septoriosis). Also, the influence of applying these fungicides on the harvest, as compared to the untreated control variant, has been monitored. One experiment with 5 variants (4 variants with phytosanitary treatment, plus one control variant not treated) was taken into consideration for this study, for which the following phytosanitary products were used, as follows: NATIVO PRO 325 SL (prothioconazole 175 g/l + trifloxystrobin 150 g/l) and EVALIA (azoxystrobin 250 g/l). The treatment variants were the following: V1 – NATIVO PRO 0.6 l/ha, 1 treatment applied on 20th April + 1 treatment applied on 23rd May, V2 – EVALIA 1.00 l/ha, 1 treatment applied on 20th April + 1 treatment applied on 23rd May, V3 – NATIVO PRO 0.7 I/ha, 1 treatment applied on 13th May; V4 - EVALIA 1.00 I/ha, 1 treatment applied on 13th May and V5 - Untreated Control Variant. The experiment was placed in Latin square, the 5 variants being placed in 5 repetitions. The year 2022 was very dry, especially in March, April and May. The experiment received two waterings with norms of 800 m²/ha/watering in the spring of the year 2022. These waterings led to good wheat yields. We emphasize that the experiment also received, in the autumn of the year 2021, a sprout watering with a norm of 400 m²/ha. Even though three waterings were applied, the attacks of the pathogens that frequently cause foliar diseases in wheat were very low, even in the untreated control variant. This led to very uniform yields in the variants studied. Basically, there were no significant yield differences between the untreated control variant and the variants that were treated with fungicides. The yields of the variants were as follows: V1 - 9.914 to/ha, V2 - 10.668 to/ha, V3 - 10.376 to/ha, V4 - 9.649 to/ha, V5 (untreated control variant) – 10.200 to/ha.

Key words: Puccinia spp, Septoria spp, latin square