
THE INFLUENCE OF TREATMENTS WITH VARIOUS PHYTOSANITARY PRODUCTS (FUNGICIDES) ON THE ATTACK OF SOME PHYTOPATHOGENIC FUNGI ON WHEAT HARVEST – GLOSA VARIETY - IN 2021 PEDOCLIMATIC CONDITIONS OF THE EASTERN BARAGAN

Eugen VELICHI¹

e-mail: eugen_velichi@yahoo.com

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 7 variants (6 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), EVALIA (azoxystrobin 250 g/l), EVOLUS (prochloraz 320 g/l, + tebuconazole 160 g/l, + proquinazid 40 g/l). The treatment variants were the following: V1 – NATIVO PRO 325 SL 0.70 L/HA, 1 treatment applied at straw's extension (22nd April 2021) + 1 treatment applied at the beginning of kernel's filling (7th June 2021), V2 – EVALIA 1.00 L/HA, 1 treatment applied at straw's extension (22nd April 2021) + 1 treatment applied at the beginning of kernel's filling (7th June 2021), V3 – EVOLUS 0.75 L/HA 1 treatment applied at straw's extension (22nd April 2021), 1 treatment applied at the beginning of kernel's filling (7th June 2021), V4 – NATIVO PRO 325 SL 0.70 L/HA, 1 treatment applied at earing – blooming (23rd May 2021), V5 - EVALIA 1.00 L./HA 1 treatment applied at earing – blooming (23rd May 2021), V6 - EVOLUS 0.75 L/HA 1 treatment applied at earing – blooming (23rd May 2021), V7 – untreated control variant. The experiment was placed in Latin square; the 7 variants being placed in 7 repetitions. The year 2021 was rainy in May and June. This has led to obtaining very good wheat yields, but also to the appearance of pathogens' attacks (e.g. *Septoria* sp) which prefer such weather conditions. Among the pathogens monitored, the highest attacks had been produced by fungi of the *Septoria* sp. genus which produce, in wheat, diseases known as septoriosis. *Puccinia recondita* f.sp. *tritici* producing brown rust in wheat, has generated less attacks. The fungi attack of the *Blumeria (Erysiphe)* genus producing mildew was sporadic. For this study, the first two leaves located under the ear has been analyzed. These observations has led to the conclusion that all of the 6 treatment variants showed degrees of attack (D.A%) of *Septoria* sp. fungi, but the attack was lower than in the untreated control variant. The yields of the variants were as follows: V1: 7.259 to/ha, V2: 7.327 to/ha, V3: 7.344 to/ha, V4: 7.310 to/ha, V5: 7.225 to/ha, V6: 7.174 to/ha and V7: 6.919 to/ha.

Key words: *Puccinia* spp., *Septoria* spp., latin square