EFFICACY OF FUNGICIDES FOR THE CONTROL OF FUSARIUM HEAD BLIGHT IN WHEAT: COOPERATIVE TRIALS RESULTS - 2014 CROP SEASON

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Wheat scab, caused by the fungus *Gibberella zeae*, is one of the most important diseases of this cereal. In favorable weather conditions, the fungus can cause large reductions in yield. Furthermore, there may be mycotoxin accumulation in grain being Deoxynivalenol (DON) the most common and extremely toxic to humans and animals. To control the disease is recommended integrated management, including the use of less susceptible cultivars, crop rotation, choice of appropriate time and place, and fungicide application. To identify the most effective fungicides for control of this disease, a network of experiments with standardized protocol was started in 2011 in different regions of Rio Grande do Sul and Parana. In 2014, experiments were carried out in Cruz Alta-RS, Passo Fundo-RS, Giruá-RS, Agua Santa-RS, Londrina-PR, Guarapuava-PR and Ponta Grossa-PR.-We evaluated the efficacy of fungicides in reducing disease, mycotoxin content and reducing the loss in grain yield. The experimental design was randomized blocks, with eight treatments with different fungicides (T1 to T8) and 4 repetitions. Analyzing all the experiments, the best values for grain yield were obtained by T3 - trifloxystrobin + prothioconazole (two locations), T5 - propiconazole (three locations) and T8 - pyraclostrobin + metconazole (1 site). The lowest values in incidence/disease-severity were obtained in T3 (3 places), T5 (3 locations), T8 (3 locations). The lowest values in accumulation of DON were obtained in T6 – propiconazole + carbendazim (3 places) and T8 (2 locations). Other product reviews did not get highlights. We conclude that, although the results have been varied according to the location of the experiment, the active ingredients trifloxystrobin + prothioconazole, pyraclostrobin + metconazole, propiconazole and propiconazole + carbendazim, were most often highlighted in control of FHB, in reducing accumulation of DON and reducing loss caused by the disease in grain yield in wheat.

Keywords: wheat; scab; fungicides; control