

# EXAMINATION OF THE EFFECT OF CORN SMUT (*USTILAGO MAYDIS*) INFECTION ON PHYSIOLOGICAL PARAMETERS IN A SMALL-SCALE FIELD EXPERIMENT

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Corn smut can infect corn at any stage of its life cycle. The principal symptoms are chlorosis, necrosis, growth inhibition, and the formation of tumours on the plant. It has been estimated that approximately 40% of the yield is lost because of the infection. It is of great importance to implement measures to prevent the infestation of corn smut caused by insect damage or by mechanical means. The objective of this study was to examine the impact of corn smut infection on the physiological parameters of the host plant, including plant height and yield quality. The infection was initiated at the 7-8 phenological phase of the plants. The inoculum was created in a laboratory setting. The infestation was done ninety days after sowing. Two hundred plants were infested. Ten plants were randomly selected from the twenty experimental plots. Four treatments were used: Mycostart Bio (mycorrhiza preparation) 35 kg/ha dose, Mycostart Bio + plant conditioner, Genium (plant conditioner), and Fungicide (Prosaro). Based on the preliminary assessment of the treatments in relation to the control plot, Mycostart Bio + plant conditioner, which includes the mycorrhiza treatment and plant conditioner treatment, seems to have the most promising potential. However, further research is essential to reach a definitive conclusion regarding the efficacy of each intervention.