

Soil management and severity of Fusarium head blight of wheat

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Abstract

Soil tillage practices involving various depth, intensity, and different methods of loosening the soil and treatment with plant residues have changed significantly in recent years and have spread also due to technical advance. Diseases that can be potentially of importance in relation to the soil management practice are Fusarium head blight. In current study four tillage practices were set-up: (i) conventional tillage, (ii) no tillage, (iii) no tillage + mulch and (iv) minimum tillage. Our experiments did not demonstrate an increased demand for protection against Fusarium head blight, foot diseases and take-all in the given variants but individual years were important factor. Level of mycotoxins permitted in cereal grains is limited, and in the case of the mycotoxin DON, in particular, it is 1,250 µg.kg⁻¹. That limit was not exceeded in any of the examined samples. The highest value measured during experiment was 106.2 μg.kg⁻¹.

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