



Biological protection of the main cereals against fungal specific diseases

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Winter wheat (cv. Ebi) and spring barley (cv. Akcent, Tolar) were used as a model cereals. We compared the effects of 3 Czech biopreparations - Supresivit (based on *Trichoderma harzianum*), Polyversum (based on *Pythium oligandrum*) and Ibefungin (based on *Bacillus subtilis*) applied as the seed treatment, the spray on the plants and like the mixture with mineral fertilizers (NPK, ammonium sulphate). We evaluated the influence of treatments on plant health, yield characteristics and the compounds of soil mycoflora. The increasing of the yield about 3-5% (spring barley, winter wheat). This increasing was caused by depression of soil-borne phytopathogenic fungi. The number of fungi on plant rests were also influenced. No effect was observed on smuts and rusts. The influence of different soil preparation on composition of the soil mycoflora and the influence on quantity of the pathogenic genera *Fusarium*, *Drechslera* and others was found. In the variant with direct drilling into the mulch the biggest number of the genus *Fusarium* was detected.