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Antifungal activity of lactic acid bacteria and their application for Fusarium mycotoxin reduction in malting wheat grains

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#### ACCEPTED MANUSCRIPT

- Antifungal activity of lactic acid bacteria and their application for Fusarium mycotoxin
- 2 reduction in malting wheat grains

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### 17 ABSTRACT

- 18 This study mainly focuses on finding a strategy for reduction of *Fusarium* mycotoxin in
- malting wheat grains, predominantly used in the production of beverages and certain baked
- 20 goods. The effect of treatment with lactic acid bacteria (LAB) on deoxynivalenol (DON),
- zearalenone (ZEN), T-2 and HT-2 toxins contained in malting wheat grains was studied.
- Additionally, the impact of bio-treatment with bio-products based on cheese whey permeate
- 23 previously fermented with LAB on microbial contamination and germination capacity of
- 24 grains was studied. Treatment with Lactobacillus sakei KTU05-6, Pediococcus acidilactici
- 25 KTU05-7, and *Pediococcus pentosaceus* KTU05-8, KTU05-09, and KTU05-10 strains

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