

## **EFFECT OF STORAGE TIME OF BARLEY ON THE OCCURRENCE OF MYCOTOXINS AFTER ARTIFICIAL INOCULATION (FUSARIUM CULMORUM)**

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### **Abstract**

The samples of barley infected with *Fusarium culmorum* were included in the experiment. Control analysis was carried out after harvest in 2012. In the samples, the following mycotoxins were detected such as Deoxynivalenol; Deoxynivalenol-3-glukosid; 3-acetyl-deoxynivalenol; Zearalenon; Beta-zearalenol; Alternariol; Alternariol-methylether; Enniatin B; Enniatin B1; Enniatin A; Enniatin A1. Barley grain was stored under defined conditions. After one year, barley samples were analyzed again. From detected mycotoxins, deoxynivalenol levels were significantly increased by 29% ( $P < 0.05$ ); DON-3-glucoside by 58% ( $P < 0.05$ ) and zearalenone by 73% ( $P < 0.05$ ). The results show that the stored barley leads to an increase in the concentration of mycotoxins after one year of storage, which has a direct influence on indicators such as fattening or reproductive performance of breeding pigs.

**Key Words:** Mycotoxin, barley, storage