

P43. EXAMINATION OF GRAINS FOR AFLATOXIN

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Give inform about the dangers of aflatoxin and propose a solution toxin development in grain products. Empirical mycotoxins research in grains on a national basis examined, it has been compiled in this study. Aflatoxins are one of the most toxic mycotoxins and they are constitutively carcinogenic seconder metabolite of *A. flavus* ve *A. parasiticus* strains. When the moisture content of the grain 17-19 % range, *A. flavus* development starts. The age, sex, exposure-dose, diet and some health factors affect the degree of toxicity. Aflatoxins are mutagenic, carcinogenic and a teratogenic effect of acute toxicity has been observed in animals and in humans. The liver is the most impressible organ with regard to aflatoxins which toxins affect DNA-RNA synthesis and some metabolic systems.

Grains are not contaminated with mold while they are growing but despite the low water content mature products appear to be contaminated with mold quickly if left on the ground. Even if contaminated molds generates mycotoxin; product moisture content, temperature, processing and relative humidity at storage active for toxin synthesis.

If we consider molds are mostly found in soil, products not directly storage at soil, grains drift away from soil and harvest in time are points to take into consideration. it is recommended that grains in silos storage at under controlled atmospheric conditions with controlling the amount of oxygen, temperature and moisture. Because this conditions lead to the development of mold and products prevent from wetting in harvest at rainy regions. Also should be give weight to toxin analysis (especially aflatoxin analysis) in risky product groups for grains.

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