

DETERMINATION OF OCHRATOXIN A IN HEN PLASMA BY HPLC

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Abstract. Mycotoxin ochratoxin A causes kidney and liver damage and is carcinogenic to some animals. The determination of ochratoxin A in blood plasma is a new method of analyses in Lithuania. The purpose of our work was to master the method of determination of ochratoxin A in blood plasma by an HPLC and to apply the experience in Lithuania. Laying hens were used as models of experimental ochratoxicosis. A known amount of pure ochratoxin A was used to contaminate hens. The results showed that it was possible to determine ochratoxin A in plasma after 48 hours when the daily dose of it was from 0,071 mg/hen. The productivity difference between affected and nonaffected hens was compared. The results showed that toxin decreased both the total amount and weight of eggs ($p < 0,001$). We are going to apply this analytical experience in Lithuanian laboratories.

Keywords: ochratoxin A, plasma, hens, HPLC.