TIN-LAYER CHROMATOGRAPHY METHOD WITH SOLID-PHASE EXTRACTION ON MYCOTOXIN DETERMINATION IN FOOD AND AGRICULTURE PRODUCTS

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The tin-layer chromatography method to quantitative determination of mycotoxin in foods and agriculture products is offered. A limit of determination of aflatoxin B₁, deoxynivalenol, zearalenon, T-2 toxin, aflatoxin M₁ and patuline are: 0,0025; 0,35; 0,5; 0,05; 0,00025 and 0,025 ppm, respectively.

The corresponding technique of analysis include following steps:
• preparation of material to be investigate for the analysis and solid-phase extraction of mycotoxins;
• deposition of solutions of an extract and calibration solutions on chromatographic plate;
• eluation and revealing of plate;
• identification of determining mycotoxin till values \( R_f \);
• graduation and quantitative determination.

Method proposed is simple and can be ensured with the appropriate equipment: densitometer "SORBFIL", chromatographic chamber, plates, sprayer.