THIN LAYER CHROMATOGRAPHY OF FUSARIOTOXINS DEOXYNIVALENOL (DON) AND T-2 TOXIN

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Summary. Thin layer chromatography is a widely applied method of mycotoxin analysis in feedingstuffs. It is not expensive and complicated, the tests are used when there is no possibility to do a precise quantitative analysis. According to the kind of mycotoxins, the analysis could be quantitative, self-quantitative and qualitative. The aim of our work was to determine the concentration of trichothecene deoxynivalenol (DON) and T-2 toxin in feedingstuffs using thin layer chromatography by means of the method offered by Romer Labs. Twenty eight samples of feeds and raw materials were investigated, mycotoxins were determined in five of them. The highest concentrations of mycotoxins were determined in wheat and barley. Positive for fusariotoxins chemical and biological toxicity tests and negative TLC of DON and T-2 toxin could be caused by the existence of other fusariotoxins like zearalenone, nivalenol, diacetoxyscirpenol etc.

Keywords: thin layer chromatography, fusariotoxins, deoxynivalenol, T-2 toxin.