

Simultaneous analysis of 15 mycotoxins, and 120 pesticides in crude extracts of grains by LC/MS/MS

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Multicomponent methods for the detection of different compound groups such as mycotoxins or pesticides have been established and are widely used to analyze a broad range of food or feed. However, there is a continuing demand to test for a larger number of compounds of different classes in shorter times. Typically, mycotoxins and pesticides require different sample preparations so a simplified sample preparation, based on a simple extraction with a mix of Acetonitrile and water, was used to analyze the two compound classes simultaneously. Before injection the extracts were simply diluted. A method was developed for over 130 compounds using two separate injections in each polarity matching the high throughput requirements. In this poster the LC/MS/MS method in Multiple Reaction Monitoring (MRM) detects all mycotoxins with Limits of Quantitation (LOQ) between 0.3µg/kg and 10µg/kg. The LOQ for pesticides was found to be 10ug/kg and less.