P-069: QUANTITATIVE DETERMINATION OF SHIKIMIC ACID IN VARIOUS PLANT SAMPLES BY REVERSED PHASE HIGH PERFORMANCE LIQUID CHROMATOGRAPHY

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The LC-UV method was developed for the quantitative analysis of shikimic acid in various plant samples. Optimum results were obtained by using a Primesphere NH_2 column, and a mobile phase comprising of 10 mM KH_2PO_4 buffer (pH = 4.7) and methanol. The quantitative results in about 185 plant samples showed variations in the content from 0.05 to 17.3%. Detection of Shikimic acid in various plant samples was based on the retention time and a comparison of UV-spectra with the standard. A mass spectrometry coupled with electrospray ionization (ESI) interface method is described for the identification of shikimic acid in different plant samples. This method involved the use of the $[M - H]^-$ ions of shikimic acid at *m/z* 173 in the negative ion mode with extractive ion monitoring (EIM).