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ACCEPTED MANUSCRIPT

Determination of garlic phenolic compounds using supercritical fluid extraction coupled to supercritical fluid chromatography/tandem mass spectrometry

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GRAPHICAL ABSTRACT



1. A rapid, simple and environment-friendly off-line SFE-SFC-MS/MS method was established for determination of nine phenolic compounds in garlic.

2. A response surface methodology (RSM) was used for optimization of SFE parameters.

3. 0.1 mM oxalic acid and 1 mM ammonium formate in methanol were chosen as the most suitable modifiers in SFC-MS/MS.

4. The method achieved its successful application on garlic samples from four origins.

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