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Abstract

Methods such as gas chromatography or liquid chromatography coupled with mass spectrometry are usually used to resolve compounds in essential oil samples. When all overlapped signals must be resolved and identified with high confidence, the use of multivariate curve resolution (MCR) are crucial for the analysis overlapping peaks. However, with the help of MCR, the resolved components were extended to direct similarity matching with reference spectra. Major compounds of essential oil and a total of 40 components were identified. This is a necessity when analyzing highly complex samples; combining MCR techniques with GC-MS produces a powerful tool for the medicinal importance of D. moldavica.

Keywords

Author Keywords: Dracocephalum moldavica, Essential oils, Multivariate curve resolution-alternative least squares; Gas chromatography-mass spectrometry

KeyWords Plus: EVOLVING LATENT PROJECTIONS; ALTERNATING LEAST-SQUARES; 2-WAY MULTICOMPONENT DATA; GC-MS ANALYSIS; LIQUID-CHROMATOGRAPHY; VOLATILE COMPONENTS; CONSTITUENTS; RANK; CHEMOMETRICS; EXTRACTS

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