



Characterization of polyphenols in *Agastache rugosa* leaves and inflorescences by UPLC–qTOF–MS following FCPC separation.

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The accurate profiling of *Agastache rugosa* phenolic compounds is an indispensable step toward better understanding of the medicinal properties of the species. The applied method based on coupling fast centrifugal partition chromatography and UPLC–qTOF–MS is an alternative and rapid method for the separation and preliminary purification of compounds included in crude extract and can facilitate the detection of minor compounds. Samples were prepared by the extraction of leaves and inflorescences with methanol, dichloromethane, and ethyl acetate. Polyphenolic compounds were separated using fast centrifugal partition chromatography (FCPC) and analyzed by UPLC–qTOF–MS. Rosmarinic acid, chlorogenic acid, and tilianin content were determined in aerial parts during the growth season and in plants of different age. The developed analytical method used in our experiments improved the identification of phenolic compounds and led to the detection of compounds that had not been found in *A. rugosa* previously.

Słowa kluczowe

Agastache rugosa, FCPC, flavone glycosides, phenolic acids, seasonal variation, UPLC–qTOF–MS

Adres publiczny

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