

# Analysis of *Rhioxma Curcumae Aeruginosae* Volatiles by Solid-phase Microextraction with Gas Chromatography-Mass Spectrometry

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In this paper, a headspace solid-phase microextraction (HS-SPME) method was applied to analyse the volatile compounds in a traditional Chinese medicine (TCM), *Rhioxma Curcumae Aeruginosae*. SPME parameters such as fibers, extraction temperature, extraction time and desorption time were investigated. Thirty-five volatile compounds were separated and identified. Relative standard deviations (RSDs) were less than 8.4%, showing that the method has a good reproducibility. The volatile constituents were also analyzed by steam distillation (SD) and thirty-seven compounds were identified. The similar results obtained by the two methods showed that SPME is a good alternative for the analysis of volatile constituents in *Rhioxma Curcumae Aeruginosae* samples and it is a relatively simple, rapid and solvent-free method.

*Key words:* *Rhioxma Curcumae Aeruginosae* Volatiles, Solid-phase Microextraction, Gas Chromatography-Mass Spectrometry