# ANALYSIS OF VOLATILE COMPOUNDS FROM ROSE (*Rosa hybrida*) FLOWER USING SOLID PHASE MICROEXTRACTION (SPME) AND GAS CHROMATOGRAPHY WITH MASS SELECTIVE DETECTOR (GC-MSD)

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## ABSTRACT

**ANALYSIS OF VOLATILE COMPOUNDS FROM ROSE *(Rosa hybrida.)* FLOWER USING SOLID PHASE MICROEXTRACTION (SPME) AND GAS CHROMATOGRAPHY WITH MASS SELECTIVE DETECTOR (GC-MSD)**

A method for the identification of volatile compounds from rose (*Rosa Hybrida.*) flower using solid phase microextraction (SPME) and gas chromatography with mass selective detector (GC-MSD) was developed. SPME fiber coated with 85μm polydimethylsiloxane was used in this study. The effect of important SPME parameters such as extraction time, extraction temperature and desorption time on the amount of compounds extracted were studied. Optimum conditions for SPME technique were 55 minutes extraction time, 55 °C extraction temperature and desorption time of 120 seconds. Using the optimized conditions, the profile of volatile compounds from roses at different stages of maturity was studied. SPME method was found to be solventless, rapid and simple method in studying the profile of volatile compounds from roses.