

DETERMINATION OF CAPSAICIN IN DIFFERENT TYPES OF  
CHILIES CAPSICUM ANNUUM USING SOLID PHASE  
MICROEXTRACTION (SPME) AND GAS CHROMATOGRAPHY  
MASS SPECTROMETRY DETECTOR (GC-MSD)

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AND GAS CHROMATOGRAPHY MASS  
SPECTROMETRY DETECTOR (GC-MSD)**

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## ABSTRACT

### DETERMINATION OF CAPSAICIN IN DIFFERENT TYPES OF CHILIES (*Capsicum Annuum*) USING SOLID PHASE MICROEXTRACTION (SPME) AND GAS CHROMATOGRAPHY MASS SPECTROMETRY DETECTOR (GC-MSD)

Determination of capsaicin in different types of chilies (*Capsicum Annuum*) were extracted by method of solid phase microextraction (SPME) and then analyzed by gas chromatography with mass spectrometry detector (GC-MSD). The optimizations of SPME were carried out in order to enhance the fiber performance and obtain high amount of capsaicin extracted. It was found that the optimum SPME conditions were at 50°C extraction temperature and 30 min extraction time. The direct immersion of SPME was applied to extract capsaicin from chilies. The result showed that *Capsicum annuum* var chili padi has the relatively highest concentration of capsaicin. This was followed by *Capsicum annuum* var chili kulai and *Capsicum annuum* var chili merah besar.