Microwave-Irradiation Induced Fast Simultaneous Extraction of Methoxylated and Hydroxylated Phenolic Compounds from *Orthosiphon stamineus* Leaves

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Abstract. A combined effect of microwave irradiation and solvent types on the phenolic compounds extraction from *Orthosiphon stamineus* leaves was studied. The effect of as extraction time, the microwave irradiation power and solid to solvent ratio on the extraction yield was studied. Aqueous solvent provides a broader range of polarity than the pure solvent, and hence enabled a simultaneous extraction of both methoxylated and hydroxylated phenolic compounds. It was found that the extraction time of 2 minutes, microwave irradiation power at 300W and 20:1 solvent to solid ratio yielded highest simultaneous extraction of polyphenols (i.e. rosmarinic acid 32.45 mg RA/g DW, sinensetin 261.15 µg Sin/g DW and eupatorin 2.27 mg Eup/g DW). Result from this work may serve as a useful guide to obtain higher yield of polyphenols from *O. stamineus*.