

The Antioxidant Capacities of Ethanolic Extract from Traditional Herbs in Sahatsakhan District, Kalasin Province

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Abstract:

This study was aim to evaluate the antioxidant activities by DPPH[•] and ABTS^{•+} assay and also to determine total phenolic (Folin-Ciocalteu) and flavonoid contents reaction with AlCl₃ of crude extract from traditional herbs Ya-nang-dang (*Bauhinia strychnifolia Craib*), Kha-min-creau (*Arcangelisia flava* (L.) Merr), Khum-peng-ged-chan (*Salacia chinensis* L.), Plao-yai (*Croton oblongifolius* Roxb.) and Ya-sam-khom (*Scleria levis* Retz.). The ethanolic extract of Ya-nang-dang revealed that the highest antioxidant capacity in DPPH radical scavenging activity, total polyphenol and flavonoid contents as IC₅₀ 6.86 mg/L., 528.42 mgGAE/g DW and 168.39 mg QE/g DW, respectively. Kha-min-creau showed the highest scavenging activities in ABTS^{•+} assay as 4.91 mg/L. The results indicated that the traditional herbs are a good natural source of antioxidant compounds for use as supplementary food.

Keywords: Traditional herbs, antioxidant, free radical, DPPH, phenolic compound