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Phenolic contents and antioxidant capacities of Thai-Makham Pom (*Phyllanthus emblica* L.) aqueous extracts

泰国余甘子水提物中总酚含量及抗氧化活性

Key words: Total phenolic content, Antioxidant activity, *Phyllanthus emblica* L., Traditional medicinal plant

关键词：余甘子；总酚含量；抗氧化能力；传统药用植物

• ***The Phyllanthus emblica*** **(PE) L. (also called "Makham Pom" in Thai) is a traditional medicinal plant that has been used in many Asian countries including Thailand. Focusing on the fruit, it has been demonstrated that the fruits of PE are rich in phenolics and posses antioxidant activities.**

• **Although many parts of the PE trees have been believed to posses various medicinal activities, the scientific demonstration of the amount of the total phenolic content and antioxidant activity of particular PE leave, branch, and bark aqueous extracts is still limited.**

• **To gain basic medicinal data of PE before treating in research animals or humans for future clinical trials, this study attempted to primarily demonstrate the total phenolics and *in vitro* antioxidant activity of different part aqueous extracts of Thai *P. emplica*.**

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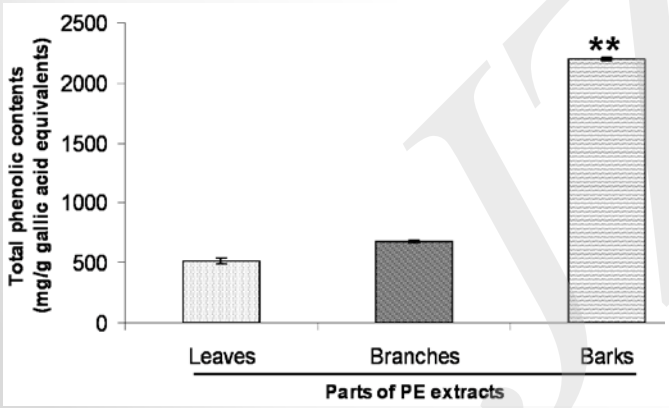
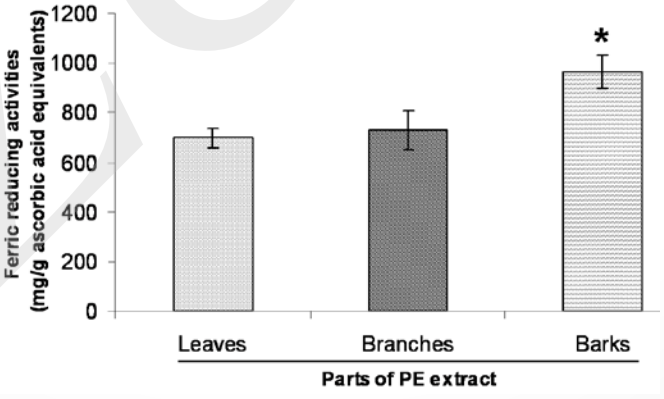
PE leaves, branches, or barks extract

Determination of 1) the amount of the TPC using a Folin–Ciocalteu reagent method. 2) the antioxidant activity using 1, 1-diphenyl-2 picrylhydrazyl radical scavenging and ferric reducing antioxidant power methods.





Antioxidant activities using the DPPH radical method

Standard/ *part of PE* extracts	IC_{50} (µg/ ml)
Ascorbic acid	8.06 ± 0.01
Leaves	7.72 ± 0.25
Branches	6.92 ± 0.22
Barks	6.54 ± 0.27