

Antioxidant and xanthine oxidase inhibitory activities of persicaria hydropiper.

ABSTRACT

Five different polarity fractions of methanolic extract from *Persicaria hydropiper*, which are consumed as vegetables, were evaluated for its total phenolic content, and antioxidant activities by 1,1-diphenyl-2-picrylhydrazyl radical scavenging, ferric thiocyanate, and xanthine oxidase inhibition assays. Particularly, higher phenolic content was exhibited by butanol and ethyl acetate fractions with the values of 224.38 and 68.95 mg GAE/100 g dry extract, respectively. Both butanol and ethyl acetate fractions exhibited higher 1,1-diphenyl-2-picrylhydrazyl radical scavenging activity with IC₅₀ values of 28.61 and 25.55 µg/ml. Meanwhile, both fractions also were shown to inhibit xanthine oxidase activity compared to other fractions with IC₅₀ values of 28.72 and 165.25 µg/ml. As for the ferric thiocyanate method, all the fractions except hexane fraction showed similar activity against lipid peroxidation and were comparable to butylated hydroxyl toluene, with percentage of inhibition from 95 to 98%.

Keyword: *Persicaria hydropiper*; Antioxidant activity; 1,1-Diphenyl-2-picrylhydrazyl (DPPH); Ferric thiocyanate (FTC); Xanthine oxidase.