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In Vitro Antioxidant Capacity of Acetone Extracts from Leaves and Flowers of *Achillea grandifolia*

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ABSTRACT

The aim of this study was to examine for the first time the antioxidant capacity of acetone extracts from Achillea grandifolia flowers and leaves using cupric reducing antioxidant capacity (CUPRAC), DPPH (2,2-diphenyl-1-picrylhydrazyl) radical scavenging activity methods. Also, total phenolic contents of acetone extracts were determined as catechin equivalent. The acetone extract from A. grandifolia flowers showed higher amount of total phenolic contents (12.78 ± 0.60 µg CE 100 µg extract^{-1}) than leaves extract (5.50 ± 0.14 µg CE 100 µg extract^{-1}). The flowers extract exhibited stronger DPPH radical scavenging activity (IC_{50} = 0.23 ± 0.02 mg/mL) than BHT (IC_{50} = 0.37 ± 0.01 mg/mL) and leaves extract (IC_{50} = 0.97 ± 0.02 mg mL^{-1}). Therefore, the flowers extract of A. grandifolia may be a worthy natural antioxidant source and to be applicable in both medicine and the food industry.

Keywords: Antioxidant capacity, *A. grandifolia*, CUPRAC, DPPH.