



Research article

Antioxidant activity and α -glucosidase inhibition effect of water extract of *Saurauia vulcani* Korth leaves

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Key words: Antioxidant, *Saurauia vulcani* korth, enzyme α -glucosidase, total phenol, total flavonoid.

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Abstract

Objective: *Saurauia vulcani*, Korth leaves contain several compounds such as polyphenols which have activity as the antioxidant. This plant is used traditionally in the treatment of diabetes mellitus and wound healing. **Methods:** *Saurauia vulcani*, Korth leaves powder was extracted by infusion method with water as solvent. This aim of this study was to determine the total content of phenol and flavonoid, antioxidant activity in DPPH method and activity of the α -glucosidase enzyme inhibition of water extract of *Saurauia vulcani* Korth leaf. **Result:** The results were shown that water extract has a total phenol content of 96.75 ± 0.02 mg/g GAE, a total flavonoid content of 39.50 ± 0.02 mg/g QE, antioxidant activity with DPPH method has an IC_{50} value 22.918 ± 1.32 μ g/mL and the highest activity inhibition with IC_{50} value 75.56 ± 1.07 μ g/mL. **Conclusion:** Based on the results obtained that the water extract leaves of *Saurauia vulcani* has a total phenol content, a total flavonoid content, antioxidant activity with DPPH method and inhibition of enzyme activity α -glucosidase giving synergistic effect.