Antioxidant Activities of Three Dihydrochalcone Glucosides from Leaves of Lithocarpus pachyphyllus

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In vitro antioxidant activities of three sweet dihydrochalcone glucosides from the leaves of Lithocarpus pachyphyllus (Kurz) Rehd. (Fagaceae), trilobatin 2"-acetate (1), phloridzin (2) and trilobatin (3), were investigated. The IC₅₀ (50% inhibitory concentration) values for compounds **1–3** of lipid peroxidation in rat liver homogenate were 261, 28, 88 μ M, respectively. Compounds **1–3** increased superoxide dismutase (SOD) activity with EC₅₀ (50% effective concentration) values of 575, 167, 128 μ M, and glutathione peroxidase (GSH-Px) activity with EC₅₀ values of 717, 347, 129 μ M, respectively, and showed only weak DPPH (1,1-diplenyl-2-picryllydrazyl) radical scavenging activity

diphenyl-2-picrylhydrazyl) radical scavenging activity. Key words: Antioxidant Activities, Lithocarpus pachyphyllus, Sweet Dihydrochalcone Glucosides