

P-007: ANTIOXIDANT AND VASORELAXATION ACTIVITIES OF CALAMUS QUIQUESETINERVIUS

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Calamus quiquesetinervius Burret (CQ) was used to an anti-hypertensive effective vegetable for aborigines in Taiwan. In our recent pharmacological studies in vivo/in vitro, we found that the ethanolic extracts of stem of CQ possessed significant antioxidant (DPPH) and vasorelaxed effects. Further investigations of antioxidant mechanism using ultraweak chemiluminescence assay, we found that the partitioned ethyl acetate and n-butanol layer showed significant activities on superoxide anion and hydroxyl radical scavenging capacity, while the H₂O layer had inhibitory effect on the generation of secondary lipid peroxidation substances. In extract-induced vasorelaxation levels in endothelium-intact (+E) Sprague-Dawley rat aortic rings, the n-hexane and ethyl acetate layers may induce vasorelaxation with a maximal relaxation of 100% at 120 µg/mL. We also report herein that bioassay-guided fractionations led to several flavonoids, saponins, and polyphenol compounds were isolated and characterized from the ethyl acetate extract of titled plant.